

2020

CHILDREN'S TV PROGRAMMING COMMERCIAL CERTIFICATION

KING 5 ("Station") certifies that all 12-and-under children's TV programs carried during 2020 on its primary and multicast channels were formatted so that, as a matter of standard policy and practice, the programs would not exceed the "commercial matter" time limits of 573.670(a) of the FCC's rules:

Weekdays: 12 minutes in any clock-hour children's programming (6 minutes in a stand-alone half-hour program);

Weekends: 10.5 minutes in any clock-hour children's programming (5.25 minutes in a stand-alone half-hour program).

Programming promos, with certain exceptions, count as commercial matter.

Program Titles: Listing all network and/or non-network children's programming with a target audience of 12-and under carried on primary and/or multicast channels.

Quarter 1: None☒	Quarter 2 None☒	Quarter 3 None☒	Quarter 4 None☒
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5.	5.
6.	6.	6.	6.
7.	7.	7.	7.
8.	8.	8.	8.

1. Station certifies that there were not any time periods during the year in which the "commercial matter" time limits stated above were exceeded during 12-and-under children's programming.

☒ Yes

☐ No; If no, provide details of each such instance in Annex A.

2. Station certifies that, during the year, it has complied with the commercial requirements of 573.670(b), (c) & (d) of the FCC's rules regarding the display of Internet website addresses during 12-and-under children's programming.

☒ Yes

☐ No; If no, provide details of each such instance in Annex B.

I hereby state, under penalty of perjury, that the foregoing is true, correct and complete to the best of my knowledge, information and belief.

Signature



Date: January 21, 2021

Michael P. Loranger
Manager of Programming
KING 5, KONG

KING TV (KING 5)

EDUCATIONAL/INFORMATIONAL PROGRAMMING

FOR CHILDREN BETWEEN THE AGES OF 13 – 16 YEARS OLD

FIRST QUARTER 2020

KING 5.1 (KING 5)

Earth Odyssey with Dylan Dreyer
Earth Odyssey with Dylan Dreyer
Consumer 101
A New Leaf

JAN. 4 – MARCH 29, 2020

Primary Time Period

Saturdays at 3:30P
Saturdays at 4:00P
Sundays at 3:30P
Sunday's at 4:00P

Primary Age Range

13-16 years of age
13-16 years of age
13-16 years of age
13-16 years of age

SECOND QUARTER 2020

KING 5.1 (KING 5)

Earth Odyssey with Dylan Dreyer
Earth Odyssey with Dylan Dreyer
Consumer 101
Roots Less Traveled

APRIL 4 – JUNE 28, 2020

Primary Time Period

Saturdays at 3:30P
Saturdays at 4:00P
Sundays at 3:30P
Sundays at 4:00P

Primary Age Range

13-16 years of age
13-16 years of age
13-16 years of age
13-16 years of age

THIRD QUARTER 2020

KING 5.1 (KING 5)

Earth Odyssey with Dylan Dreyer
Earth Odyssey with Dylan Dreyer
Roots Less Traveled
Consumer 101

JULY 4 – SEPT. 27, 2020

Primary Time Period

Saturdays at 3:30P
Saturdays at 4:00P
Saturdays at 4:30P
Sundays at 3:30P

Primary Age Range

13-16 years of age
13-16 years of age
13-16 years of age
13-16 years of age

FOURTH QUARTER 2020

KING 5.1 (KING 5)

Earth Odyssey with Dylan Dreyer
Earth Odyssey with Dylan Dreyer
A New Leaf
The Voyager with Josh Garcia

OCT. 3 – DEC. 27, 2020

Primary Time Period

Saturdays at 3:30P
Saturdays at 4:00P
Saturdays at 4:30P
Sundays at 3:30P

Primary Age Range

13-16 years of age
13-16 years of age
13-16 years of age
13-16 years of age

JUSTICE NETWORK - KING 5.2 (January 1 – July 26, 2020)
TRUE CRIME NETWORK – KING 5.2 (July 27 – December 31, 2020)

EDUCATIONAL/INFORMATIONAL PROGRAMMING

FOR CHILDREN BETWEEN THE AGES OF 13 – 16 YEARS OLD

FIRST – FOURTH QUARTERS 2020	JAN. 5 – DEC. 27, 2020	
KING 5.2 (Justice / True Crime)	Primary Time Period	Primary Age Range
Animal Rescue Heroes	Sundays at 7:00A	13-16 years of age
Animal Rescue Heroes	Sundays at 7:30A	13-16 years of age
Dog Tales, Family Edition	Sundays at 8:00A	13-16 years of age
Dog Tales, Family Edition	Sundays at 8:30A	13-16 years of age
Dog Tales, Family Edition	Sundays at 9:00A	13-16 years of age
Dog Tales, Family Edition	Sundays at 9:30A	13-16 years of age

*** “Justice Network” changed its name to “True Crime Network” as of July 27, 2020.**

QUEST NETWORK (KING 5.3)

EDUCATIONAL/INFORMATIONAL PROGRAMMING

FOR CHILDREN BETWEEN THE AGES OF 13 – 16 YEARS OLD

FIRST QUARTER 2020

January 4, 2020 Only

KING 5.3 (Quest Network)

Primary Time Period

Primary Age Range

Whaddyado

Saturday's at 7:00A

13-16 years of age

Whaddyado

Saturday's at 7:30A

13-16 years of age

Dogs with Jobs

Saturday's at 8:00A

13-16 years of age

Dogs with Jobs

Saturday's at 8:30A

13-16 years of age

Dogs with Jobs

Saturday's at 9:00A

13-16 years of age

Dogs with Jobs

Saturday's at 9:30A

13-16 years of age

FIRST - FOURTH QUARTERS 2020

January 11 – December 26, 2020

KING 5.3 (Quest Network)

Primary Time Period

Primary Age Range

Dogs with Jobs

Saturdays at 7:00A

13-16 years of age

Dogs with Jobs

Saturdays at 7:30A

13-16 years of age

Note Regarding FCC's Video Description Rules: The programs supplied in **The More You Know** block are video-described to provide a better viewing experience for blind or visually impaired children.

1st QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
January 1, 2020 – March 31, 2020

In the 1st Quarter of 2020, NBC will continue airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the four shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. There are no current plans to change the lineup from the previous quarter, and there will continue to be two half hours of *Earth Odyssey with Dylan Dreyer*.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

CONSUMER 101

Consumer 101 is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Hosted by Jack Rico with the help of experts and scientists from the Consumer Reports labs and testing facilities, Consumer 101 will give viewers a behind-the-scenes look into the science used to test every kind of product—from the obscure, to the fascinating, to the everyday. Each week, audiences will discover more about the surprising intricacy of product testing, learn more efficient ways to get the most out of everyday items, as well as catch a glimpse into a unique career path in the fields of science and technology. Consumer 101 is an empowering series aimed at giving teens the tools they need to make smarter choices as consumers, exploring the how, where, when, and why we spend our resources so we can all make educated decisions when it counts.

A NEW LEAF

A New Leaf is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Hosted by Daisy Fuentes, A New Leaf will follow everyday people on the cusp of key life inflection points, using family history, genealogy, and sometimes DNA analysis to help guide them on their journey of self discovery. Along the way, viewers will learn about different cultures as our featured guest uncovers new information about their family's heritage. Each week,

A New Leaf will teach viewers the importance of appreciating and understanding their family history in order to make important decisions to enact positive changes in their lives.

2nd QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
April 1, 2020 – June 30, 2020

In the 2nd Quarter of 2020, NBC will continue airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the six shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. New series *Roots Less Traveled* will be replacing *A New Leaf* at the beginning of the 2nd Quarter. There will continue to be two half hours of *Earth Odyssey with Dylan Dreyer*.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

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ROOTS LESS TRAVELED

Roots Less Traveled is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Roots Less Traveled follows two family members, often from different generations, as they gain a newfound understanding and respect for each other on their quest to learn more about their family history. Each week on Roots Less Traveled, a new pair will set out on an adventure to solve a mystery in their family tree. From rumors of a relative who sailed on the Titanic, to stories of homesteaders forging a new path for future generations, our duo discovers the truth behind the tales that have been passed down in their family, while our viewers learn the personal stories behind notable historical moments. Viewers will be taken on a literal journey to unique places around the globe, learning more about the culture and history of these significant locations and events that happened there. Throughout this experience, we will witness these family members grow closer as they gain wisdom not only about themselves, but also about how their past has helped shape their present.

“CORE PROGRAMMING”

**PROGRAMMING FURNISHED BY THE NBC NETWORK THAT IS SPECIFICALLY
DESIGNED TO SERVE THE EDUCATIONAL AND INFORMATIONAL NEEDS OF CHILDREN
16 AND UNDER
[AGE TARGET 13-16]
January 1, 2020 – March 31, 2020**

Airdate: 1/4/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ANDES [EDD211]

Today on Earth Odyssey, host Dylan Dreyer takes us to the peak of South America to the Andes Mountains. Despite steep slopes, frequent earthquakes, and centuries of heavy rain, the remains of ancient cities survive in the Andes. The climate fuels rapid plant growth and most of the ancient remains have long been reclaimed by nature. First, we'll visit the remains of an ancient city known as Machu Picchu, the lost city of the Incas. We'll discover that Machu Picchu is made up of more than one-hundred and fifty buildings including baths, houses, temples, and sanctuaries. Research has shown that a complex balance existed between the Incas and the world around them. Next, we'll visit with modern-day descendants of the Incas, the Quechuan people. We'll learn that their ability to survive at this high altitude is primarily due to their reliance on livestock. We'll discover how the llama is of critical importance to the Quechuan people. The llama is one of the oldest domesticated animals and provides food, clothing, and transport to the Quechuan people. Finally, we'll meet one of the top predators of the Andes, the puma. Due to the presence of a large food source, pumas are more common in the Andes than anywhere else in their range. We'll also discover that pumas have excellent night vision that helps them locate prey in the darkness.

[Educational Message: The Andes is a mountain range of incredible diversity, it forms South America's backbone, and contains some of the most hostile habitats on Earth. But on every slope, at every altitude, life has found a way to exist.]

Airdate: 1/4/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PHILIPPINES REVISITED [EDD212]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Philippines where we find some of the most fascinating wildlife in the animal kingdom. The Philippines are a chain of tropical islands in the Western Pacific Ocean and is home to some of the world's most exotic wildlife. First up, we'll learn about one of the most complex ecosystems in the Philippines, mangrove forests. Where saltwater meets freshwater, it creates a unique and unforgiving environment. Here we'll discover that mangroves can absorb and contain more carbon from the atmosphere than terrestrial forests. We'll also learn that mangroves contribute to ocean acidification, which in turn can help prevent coral bleaching. Here we'll follow a group of locals from this region and witness as they forage for food and supplies in the mangrove forests. Next, we'll travel to another mangrove forest on the island of Bohol. Here we'll watch a troop of long-tailed macaques as they navigate the twisted mangroves in search of food. We'll discover that long-tailed macaques, who spend most of their time in trees, can leap over sixteen feet at a time. Long-tailed macaques are primarily frugivorous, which means their diet consists mainly of fruit. Finally, we'll learn more about the various insects that inhabit the Philippines. Here we'll witness the behavior of fireflies under the cover of night. We'll learn that despite their name, fireflies are actually a type of beetle. We'll discover that the flash of light emitted by fireflies occurs due to a chemical reaction inside the fly's body.

[Educational Message: The Philippines are home to some of the rarest animals on Earth, as well as some of the most unusual. Since these ancient islands have been left largely isolated and undisturbed, unique and fascinating species have been able to flourish uninterrupted. When spending time in nature, we should always practice Leave No Trace and do our best to limit our impact on the environment.]

Airdate: 1/4/2020

Time:

Duration: 30:00

CONSUMER 101

SOUND CHECK [CNR206]

Host Jack Rico and the experts at the testing labs show us how car tires are tested on ice, teach us about new technology with headphones, and explain how to get the most out of your vacuum cleaner. First up, we'll be joining the auto experts on an ice hockey rink to perform tire testing and evaluate how well various types of tires stop on ice. We learn that using an indoor ice rink for this test provides a controlled setting for testers to accurately measure the performance of different tires. Here we'll discover the unique differences between all-season tires, winter tires, and summer tires. Next, we'll learn what to look for when purchasing a new pair of headphones. New technology has introduced a wide variety of different types of headphones. We'll join an expert to learn how headphones are scientifically tested and measured. We'll get tips on how to choose the best headphones depending on your lifestyle. Finally, we'll learn about the scientific testing that goes into assessing the capabilities of vacuum cleaners. We'll discover how testers experiment with vacuum cleaners by simulating different sized particles of debris that may be found in your home. Here we learn how consistency is important to testing and that all vacuum cleaners need to clean the same amount of debris to accurately compare various models. After putting the vacuum cleaners through their paces, we learn that it's important to choose the right model for your cleanup needs.

[Educational Message: In this episode, we learned why it's important to have the proper tires on your car depending on the driving conditions. We discovered that winter tires provide much greater stopping ability than all-season tires in icy conditions. Always be sure your car is maintained and suitable for driving in any condition.]

Airdate: 1/4/2020

Time:

Duration: 30:00

A NEW LEAF

A FAMILY LOSS [ANL106]

Today on A New Leaf, after the sudden loss of his mother, Craig Victor vowed to learn more about his family tree, for himself and his siblings. With the help of host Daisy Fuentes, Craig starts digging into his family history. He soon discovers several things about his ancestors that he didn't know, and can't wait to share them with his family. As Craig embarks on his journey to discover more about his past, he would like to know more about his parents' relatives and their family's journey to America. Craig soon discovers that his family on his mother's side were in the garment business in New York City during the early 1900's. Inspired by this revelation, Craig visits a working textile factory to learn more about what life was like for garment workers during that time. Craig discovers that early textile factories were unventilated and extremely hot due to the large machinery, which lead to the term "sweatshop." However, after a tragic fire that became one of the deadliest workplace disasters in history, new reforms and regulations would change the industry and create safer work environments for Americans. Moved by these fascinating historical facts of his family's past, Craig now has the information he needs to share with his siblings.

[Educational Message: Connecting with your family past can help ground you in the present. After losing both of his parents, Craig was determined to fill in the gaps of his history and learn more about his family tree. By discovering the fascinating details of his past ancestors, Craig is now able to share this information with his siblings. This experience will help provide a new outlook on life and strengthen his bond with his siblings.]

Airdate: 1/11/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

BEST OF: SOUTH AMERICA [EDD213]

Today on Earth Odyssey, host Dylan Dreyer takes us back to South America to explore more of this fascinating part of the globe. South America is home to a vibrant and fertile ecosystem supported by the Amazon and Orinoco Rivers. First, we learn that the Orinoco River curls around the Northeast corner of South America, draining more than three hundred and eighty thousand square miles of Venezuela, Colombia, and Brazil. At the river's mouth, the Orinoco Delta stretches three hundred miles along the coast of Northeast Venezuela. We'll also discover that the wet and dry seasons of the Orinoco River's climate are controlled by the north to south migration of trade winds. Next, we visit the Amazon which covers three million square miles of South America. Today, sixty percent of the Amazon lies in Brazil, while the remaining forty percent is spread across eight more countries. This vast rainforest straddles the equator making it permanently hot and wet, the ideal conditions for creating and maintaining life. Here we'll meet a group of red howler monkeys that call the Brazilian Amazon home. Weighing in as one of the heaviest monkeys in the forest, we'll witness how these animals have adapted to a life in the trees. Finally, we'll meet the only people to have made the Orinoco Delta their permanent home. Known as the "canoe people,"

the Warao have chosen a precarious way of life on the Orinoco. Here we'll learn how these people have designed and constructed their homes to withstand the twice daily floods that occur. However, we'll discover that these riverside homes are not permanent. When the support timbers rot or food becomes scarce, the nomadic Warao people will seek out a new home.

[Educational Message: The many long-time locals of the Orinoco give back to the river as much as they receive, continuing a tradition as old and beneficial as the river itself. The Orinoco River holds many of the spectacular natural wonders we know today. We must all do our part to protect and preserve nature.]

Airdate: 1/11/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

BEST OF: ISLANDS [EDD214]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of our favorite islands from around the world. First up, we'll journey back to Malaysia. Malaysia is one of seventeen countries identified as megadiverse, meaning these countries harbor the majority of Earth's species. First up we'll meet a group of proboscis monkeys and learn more about their jungle habitat. We'll discover that proboscis monkeys are named for their noses, where "proboscis" means a long, flexible snout. Next, we'll travel back to Thailand. Thailand was previously known as "Siam" from the 12th century until it was renamed "Thailand" in 1939. Surrounded by four countries, and between two seas, Thailand is a melting pot for wildlife across the region. Here we'll meet a predator that sits at the top of the food chain, the Indochinese tiger. We'll learn that Thailand is thought to contain one of the largest populations of these cats in the world. We'll discover that with their powerful, long hind legs, tigers can jump distances up to thirty feet. Finally, back in Malaysia, we'll meet one of the most endangered animals in the world. Found only in Malaysia and Indonesia, the orangutan is one of our closest cousins sharing over 97% of their DNA with humans. We'll discover that orangutans can naturally live up to around forty years old in the wild and over sixty years in captivity.

[Educational Message: The orangutan and the other amazing animals we learned about make up the diversity that gives Malaysia one of the most fascinating pallets of wildlife in the world. We must do our part to protect the natural world around us for future generations to come.]

Airdate: 1/11/2020

Time:

Duration: 30:00

CONSUMER 101

LAWN AND ORDER [CNR207]

Host Jack Rico and the experts at the testing labs teach us how to properly care for your lawn, give two teens a driving lesson, and show us how to keep your WIFI router secure. First up, we'll meet with an expert to learn the best way to properly care for your lawn. We'll learn that you shouldn't cut your grass too short by never cutting more than a third of your lawn's height. We discover that longer grass promotes deeper roots and shades the soil, preventing the water from evaporating too quickly. Also, we learn to always keep your lawn mower blade sharpened as a clean cut prevents stress on the lawn. Next, we'll visit the auto test track where we'll join two teens getting a crash course on driving safety school. Today, these teens will be driving on a closed course to learn more about various maneuvers and car safety features. We'll discover how the antilock braking system, or ABS, works and how best to apply brakes if a sudden stop is necessary.

These teens will also learn how to properly brake while steering and perform various avoidance maneuvers. Finally, we'll learn about how wireless routers work and how we can protect our personal information from potential hackers. We'll discover three ways we can protect our router, such as updating firmware to the latest version, changing passwords, and disabling remote access.

[Educational Message: It's important to protect your personal information when using WIFI routers and other technology. Avoid scammers by changing your passwords frequently and updating your firmware. Technology is a useful and convenient tool in our modern age, but it's vital that you use caution and protect yourself in the process.]

Airdate: 1/11/2020

Time:

Duration: 30:00

A NEW LEAF

A FAMILY REUNION [ANL107]

Today on A New Leaf, Lauren and her husband have given their young sons a real connection to their dad's Trinidadian roots, but Lauren wants them to know her family history, too. With help from host Daisy Fuentes, Lauren can finally clear up the mystery surrounding her great-grandfather's adoption, and discover a surprising heritage, which amazes generations young and old at her family reunion. As Lauren begins her journey of discovery, she would like to know more details about her great-grandfather, as well as her potential Native American or Mexican roots. After diving deep in her family history, Lauren discovers that her great-grandfather was actually from New Mexico. Once living as part of the Genizaros community, Lauren confirms her great-grandfather was of Spanish and Native American descent. Moved by this revelation, Lauren visits a historian to learn more about her connection to the Genizaros community. We'll discover that historians estimate that Genizaros accounted for as much as one-third of New Mexico's population in the late 18th century. Lauren will learn that her great-grandfather and other relatives were likely sheep herders. Here Lauren will get a glimpse into the past and learn more about daily life during that time.

[Educational Message: By discovering more about our past we can connect more with the present. Lauren sought to find out more about her roots so that she could share it with her family. A better understanding of your past can help you form stronger bonds with your family in the present.]

Airdate: 1/18/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THE HIMALAYAS [EDD215]

Today on Earth Odyssey, host Dylan Dreyer takes us to Asia where we visit the highest peaks in the world, the Himalayas. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. First up, we'll meet the elusive snow leopard living in the mountains of the Himalayas. We'll discover how snow leopards have excellent nocturnal vision and that most of their kills occur during either dusk or dawn. Like many of the big cats, the snow leopard is a powerful ambush predator preferring the element of surprise when hunting. Next, we'll travel to the Ladakh region of the Himalayas, an area covering roughly forty-five thousand square miles including the Ladakh Mountain Range. Here we'll meet with the nomadic Changpa tribe and witness how they survive in this most unforgiving environment. Also, we'll witness how these nomadic herders care for and protect their livestock from the elements and predators. We'll learn how out of

the several types of herding, nomadic herding is considered the oldest known form. Finally, we'll visit the high-elevation lakes of the Himalayas. Here we'll learn that there are roughly nineteen known major rivers that help drain the snow melt from the Himalayas region. Located at over sixteen-thousand feet in elevation, we'll discover that Tilicho Lake of Nepal is considered one of the highest lakes in the world.

[Educational Message: The Himalayas are a hostile wilderness that challenge all who venture to their snowy slopes. But these mammoth mountains also have a positive effect on the climate, supporting the lives of an endless number of creatures, including one of the largest populations of people on the planet. Despite the harsh climate and treacherous landscape, this epic mountain range sustains life for animals and people who are born to thrive in the most dangerous parts of the world.]

Airdate: 1/18/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PATAGONIA REVISITED [EDD216]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Patagonia region of South America. Stretching south from the Rio Colorado, Patagonia covers more than three-hundred thousand square miles of Argentina and Chile. Patagonia is home to one of the world's largest deserts and yet billions of gallons of freshwater are locked into the ice of its vast glacier fields. Here we'll learn that scientists believe that Patagonia's Perito Moreno glacier is nearly eighteen-thousand years old. First up, we'll travel to the Northeast coast of Patagonia to visit a colony of sea lions. While sea lions can "walk" within minutes of birth, they are typically not great swimmers until they are a few months old. Here we'll witness how sea lions evade attacks from orca whales on the shores of Patagonia's beaches. Next, we'll witness an armadillo as it seeks out a new mate. We'll learn that the word "armadillo" comes from the Spanish word which translates to "little armored one." We'll also discover that despite their poor eyesight, armadillos have a very keen sense of smell. Finally, we'll visit a colony of Patagonian conures that make their home on the seaside. We'll learn that conures are considered New World parrots, which means they originated in the Western Hemisphere. Here we'll witness how these colorful birds use their beaks to carve out burrows in the sandstone cliff sides. We'll discover that this stretch of cliffside is home to the largest colony of conures in the world.

[Educational Message: Patagonia is one of South America's last great wildernesses, making it one of the most fascinating regions in the world. The low plains, high mountains, and icy glaciers give this land the diversity it needs to be home to a variety of fascinating animals. The ability to adapt to one's environment is critical to ensure survival.]

Airdate: 1/18/2020

Time:

Duration: 30:00

CONSUMER 101

DIGITAL TRAPS [CNR209]

Host Jack Rico and the experts at the testing labs teach us the differences between drivetrains, show us how to avoid online privacy traps, and teach us the science behind audio speaker testing. First up, we'll join an auto expert on the test track to learn about drivetrains and how they differ from one another. We'll learn that a drivetrain is how you get the power in your car from the engine to the wheels. We'll discover that there are four types of drivetrains including front-wheel drive, rear-wheel drive, all-wheel drive, and four-wheel

drive. We'll learn that front-wheel drive is the most common and has the best combination of fuel economy and traction. Here we'll witness how these various drivetrains perform and handle a variety of maneuvers on the test track. Next, we'll meet with a privacy expert to learn how we can protect ourselves from hackers and scammers online. We'll discover that some hackers use a tactic called "phishing" in order to lure their victims. These "phishing" emails are designed to mimic official email accounts and websites, tricking people into giving up their passwords, credit card numbers, and other personal information. We'll learn that you should always confirm the legitimacy of these email accounts and websites before giving away any personal information. Finally, we'll meet with an electronics expert to learn more about the technology and testing behind audio speakers. We'll witness how microphones are used in a controlled environment to scientifically measure the quality of various speaker systems. We'll learn about how experts measure the depth, width, height, and layers of sound emitted from speakers. We'll also discover the differences between Bluetooth, WIFI, and smart speakers and how to find the best speaker for your needs.

[Educational Message: In this episode, we learned the importance of protecting your online privacy. Hackers and scammers are improving their techniques each day and it's important we stay ahead of them. We must always use online apps and websites responsibly and carefully in order to protect our personal data and privacy.]

Airdate: 1/18/2020

Time:

Duration: 30:00

A NEW LEAF

A GOLDEN FAMILY ANNIVERSARY [ANL108]

Today on A New Leaf, Heidi Ashcraft and her husband Daniel are about to celebrate their fiftieth wedding anniversary. She'd like to honor the occasion by sharing information about her ancestors with her children. But since her mother was adopted, there's a lot she doesn't know about her family tree. With Daisy's help, she digs deep into the past and even learns a few things about her surprising Swedish roots. As Heidi prepares for her journey of discovery, she hopes to uncover the identity of her biological grandfather, as well as learn about her DNA and ethnicity. After a deep dive into her family tree, Heidi discovers a wealth of information about her roots. After confirming the identity of her grandfather, Heidi learns that he had twelve children before he died. Finally, with the help of a DNA test, Heidi is able to confirm that her ethnicity is predominantly German and Swedish. Inspired by the revelation of her Swedish roots, Heidi and Daniel visit with a genealogist to learn more about Swedish culture. Here we will discover more about the traditional foods and clothing of Swedish people. Finishing off their day with a traditional Swedish dance, Heidi and Daniel are thrilled to share this new information and experience with their family and friends.

[Educational Message: Learning more about her family's past has provided Heidi with a new focus and journey to continue on in life. Heidi embarked on this quest to share these revelations and enrich the lives of her children and grandchildren. Learning about our past can help strengthen our present.]

Airdate: 1/25/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

LOST WORLDS [EDD217]

Today on Earth Odyssey, host Dylan Dreyer takes us to Northern India where we will embark on a journey to explore the lost worlds that remain. Known as the Seven Sisters, the Northern region of India is comprised of seven relatively unexplored and isolated states bordered by the Himalayas to the north and the

Indian Ocean to the south. Here we'll learn that at twenty-five million years old, the Himalayas are one of the youngest known mountain ranges in the world. First up, we'll discover more about the native Asian elephants and how they adapt and survive in this extreme landscape. Here we'll learn that Asian elephants embark on an annual eight-hundred-mile migration through jungles, across plains, and up mountains over two miles high. We'll discover that in ancient times, Asian elephants once roamed across Asia from Syria to Northern China. Next, we'll travel to India's northeastern state known as Meghalaya, one of the wettest regions in Northern India. We'll discover that on average, almost five-hundred inches of rain gathers in Meghalaya each year. We'll also learn that Meghalaya is considered an agrarian state as eighty percent of their population relies on farming for their livelihood. Finally, we'll discover more about the many rare primates that call this place home. We'll meet the spectacled monkeys that live high in the canopies, often in troops of up to thirty-five strong. We'll learn that these unique primates have specially adapted stomachs to help them digest tough leaves and unripe fruits. We'll also meet the hoolock gibbon, an animal often mistaken for a monkey due to its small size and mischievous appearance. But like other apes such as chimps and gorillas, the gibbon doesn't have a tail and its hands have opposable thumbs like humans. Here we'll also witness how gibbons swing between trees using a form of arboreal locomotion known as "brachiation."

[Educational Message: From massive Asian elephants to hilarious hoolock gibbons, the animals in Northern India demonstrate incredible diversity in one of the most untamed regions on the planet. The lost world of India is often unreachable by humans and its story can only be told by the animals and creatures who call this place home.]

Airdate: 1/25/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VANCOUVER [EDD218]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to Vancouver Island. Located off the west coast of Canada, Vancouver Island stretches approximately two-hundred and eighty miles long by about sixty miles wide. Vancouver Island is known as the largest island off the west coast of North America. While glaciers fuel the flow of some of Canada's tallest waterfalls, an endless network of rivers and creeks provides the ideal habitat for one of the world's most important fish. Each year, roughly half a billion salmon leave the sea to return to their spawning grounds in the rivers of North America to lay their eggs. Vancouver Island is the destination for millions of these determined fish. On their remarkable journey, the salmon face an endless array of challenges and obstacles. We'll discover that there are roughly eight species of salmon in the world, seven in the Pacific and one in the Atlantic. At the northern tip of the island in the Johnstone Strait, millions of salmon converge after having spent up to five years at sea in the Pacific Ocean. This is the first stage of their testing journey as they encounter predators such as Steller sea lions. Here we'll learn that Steller sea lions are the largest of all sea lions, reaching a length of ten feet and weighing in at over a ton. Next, as the schools of fish have made their way inland, we encounter another predator awaiting the salmon's arrival. Vancouver Island is home to the densest population of American black bears, one of the most common and largest bears in the world. We'll discover that black bears can kill up to half of the salmon in these smaller streams, consuming up to twenty-thousand calories each day when stocking up for winter. Finally, we'll witness the salmon's journey come to a close as they reach their final destination. Female salmon will lay around three-thousand eggs in a series of nests, each one covered by gravel to protect against predators and to prevent the eggs from drifting away. This final act marks both the end of the salmon's journey and the end of its life.

[Educational Message: Pacific salmon always die after they've spawned. However, their decomposing bodies will release nutrients back into the environment that feeds the aquatic food web within Vancouver Island. This in turn will nurture the next generation of salmon throughout Vancouver Island's rivers of life.]

Airdate: 1/25/2020

Time:

Duration: 30:00

CONSUMER 101

SUPER CHARGED [CNR210]

Host Jack Rico and the experts at the testing labs teach us about electric cars, give us tips on super snacking, and show us the technology behind snow blowers. First up, we'll meet an expert on the auto test track to learn more about the past and present of electric cars. Here we'll learn that the first fully electric vehicles were built in the early 1900's. As technology has changed drastically over the last one-hundred years, we'll now see how the electric cars of today have evolved. Here we'll learn that electric cars now include technology that captures energy normally lost during braking and sends that energy to the car's batteries. Known as regenerative braking, this technology uses the car's generator to help slow the car down. Next, we'll meet with a nutritionist to get tips on how to create the healthiest snack. We'll be joining a couple of teens to find out the best ways to swap out packaged foods with fresher snack options. We'll learn that only one in ten Americans eats the recommended amount of fruits and vegetables each day. We'll discover that the average daily recommendation is two to three cups of vegetables and two cups of fruits each day. Here we'll get expert tips and recipes on how we can increase the nutritional value of our daily snacks. Finally, we'll join an expert to see how snow blowers are scientifically tested and evaluated. Instead of using snow, testers will be utilizing saw dust, which mimics wet snow and is much more consistent for testing purposes. We'll learn more about the various types of snow blowers, such as gasoline, electric, and battery powered devices. We'll discover that snow blowers operate by using an auger that feeds snow through a discharge chute. Here we'll get expert tips on how to choose the right snow blower for the right job.

[Educational Message: In this episode, we learned the importance of making healthier choices in our diet. We discovered nutritional recipes that can help us replace packaged snack foods with organic fruits and vegetables. It's important that we always look for healthier alternatives in our daily diet.]

Airdate: 1/25/2020

Time:

Duration: 30:00

A NEW LEAF

HIDDEN FAMILY HERITAGES [ANL109]

Today on A New Leaf, three families search for their hidden heritage in this collection of amazing journeys of historical discovery. First, Steve and his son Remy trace their ancestors to create a school family tree project. Then, Nadia unlocks her mom's African American roots which inspires her dance audition for grad school. Then, Allison fills in some family history gaps as a Bar Mitzvah gift to her son, Jayden. For Remy and Steve, they soon trace their roots back to Ireland where their ancestors were farmers. Here we'll learn more about the great famine that killed potato crops across Ireland beginning in 1845. This famine forced many families to seek a new life elsewhere, including Remy's ancestors. Tracing their roots back even further, Remy discovers that his other ancestors came to America on the Mayflower. Next, we'll follow Nadia on her journey of discovery and witness her passion and dedication as she perfects her dance performance. We'll learn that training to become a professional ballerina can take as long as fifteen years

and will require much hard work. Nadia is also hoping to incorporate her African American heritage in her dance routine. We'll visit with an expert on African American culture and learn more about Nadia's roots as she prepares for her upcoming dance performance. Finally, we'll catch up with Allison and Jayden on their journey. After a deep dive into their family tree, Allison discovers that her family has a connection to the Titanic. Allison also hopes to get in touch with her Jewish roots and learn more about the Jewish experiences before World War II.

[Educational Message: At the beginning of their quests for knowledge about their past, these families knew very little about their ancestors and family tree. Hoping to share this information with other members of their family, these people were all determined to learn more about their family roots. On this journey, we uncovered many things never known about their pasts. Because of their determination to discover more, this information will live on in their families for generations.]

Airdate: 2/1/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO MALAYSIA [EDD219]

Today on Earth Odyssey, host Dylan Dreyer takes us back to explore the unique and diverse country of Malaysia. Malaysia is one of seventeen countries identified as megadiverse, meaning these countries harbor the majority of Earth's species. Malaysia's jungles can seem like an impenetrable wall of green but running through it all, is water. We'll discover that the longest river in Malaysia is the Rajang River, which is roughly three-hundred and fifty miles in length. We'll also learn that ninety-eight percent of the water supply used by people in Malaysia comes from its rivers and streams. First up, we'll learn more about the animals that rely on this water for survival, such as the elephants. The pygmy elephants that call this region home are the smallest in the world, standing about three feet shorter than their larger Asian elephant cousins. We discover that this is a unique adaptation that allows them to thrive in the dense forests of Malaysia. Next, we'll journey to the fascinating caves of Malaysia. Over thousands of years, streams and rivers have gradually eaten into Malaysia's soft limestone bedrock. Dissolving grain by grain, holes have become craters, and caves have been excavated into caverns. We'll discover that Malaysia is home to some of the largest cave systems on the planet. Here we'll learn more about the unique species that dwell in these caves such as bats, birds, and a variety of insects. Finally, we'll visit the coastline of Malaysia to discover more about its diverse wildlife. Here we'll learn that a mudskipper fish is perfectly at home out of water. We'll discover that mudskippers breathe through their skin and carry a bubble of air in its gill chambers, much like a scuba diver's tank. While typically small, we'll learn that mudskippers can grow between ten to twelve inches long.

[Educational Message: Malaysia's biodiversity is credited to its rich and fruitful landscape. From giant bats to fish that can walk, this country boasts some of the biggest and most unique species in the animal kingdom. The fascination with Malaysia will continue to live on with the creatures who call this place home.]

Airdate: 2/1/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ZANZIBAR REVISITED [EDD220]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the fascinating tropical archipelago that is Zanzibar. Lying twenty-five miles off the coast of Tanzania, the island chain of Zanzibar is dominated by Unguja and Pemba Islands. We'll learn that in 1964, the presidents of Tanganyika and Zanzibar united their countries to become Tanzania. First up, we begin our journey in the forests of Pemba Island which is home to one of the rarest primates in the world. Isolated from mainland Africa for more than ten-thousand years, the Zanzibar red colobus monkey calls this island home. Here we'll discover that while many primates have thumbs on their hands, no known species of colobus monkey has them. Highly social, red colobus monkeys typically reside in groups averaging between thirty and fifty individuals. Next, we'll discover more about the largest bat in the world, the Pemba flying fox. Sporting a wingspan of nearly five feet, flying foxes rely on their keen eyesight to track down their next meal. We'll discover that flying fox bats are old world fruit bats, and therefore use sight instead of echolocation to navigate. We'll also discover that the bats play an important role in the environment by dispersing pollen and seeds, which is vital to keeping the region's forests alive. Next, we'll meet one of the largest tortoises in the world, the Aldabra tortoise. Not only one of the largest of its kind, the Aldabra tortoise can live up to two-hundred years old. Highly intelligent, Aldabra tortoises are capable of distinguishing between humans with which they interact. Finally, we'll discover more about the mangrove forests on Zanzibar's coastlines. We'll learn that mangrove forests play an important role in protecting coastline ecosystems from erosion. We'll also discover that the largest mangrove forests are found in Indonesia, where they cover an area roughly the size of Vermont.

[Educational Message: The archipelago of Zanzibar is one of the most beautiful and fascinating places in the world, and the wildlife that thrives here is no different. The amount and diversity of life that's supported here is nothing short of miraculous. We must all do our part to ensure we protect our environment and ecosystems.]

Airdate: 2/1/2020

Time:

Duration: 30:00

CONSUMER 101

HOW TO PROTECT DEER AND PASSWORDS [CNR211]

Host Jack Rico and the experts at the testing labs teach us how to avoid deer strikes on the road, show us how to use a password manager, and teach us how to pack a carry-on like a pro. First up, we'll get a lesson on how to avoid hitting a deer when driving in your car. We'll learn that over 1.3 million deer are hit by drivers every year. We'll discover that driving during certain times of the day can increase your odds of a collision with a deer. Also, we learn that deer travel in groups, so if you see one, there are likely others nearby. In the event of an accident, we also learn it's important to never attempt to touch an injured animal. Next, we'll learn how to protect our online accounts by using a password manager. We'll discover that a password manager is one of the best ways to protect your privacy and security. We'll get tips on how to create an effective and secure password for your password manager. We'll also learn about two-factor authentication, which adds an extra layer of security beyond your password. Finally, we'll meet with an expert to learn the best way to pack your carry-on luggage. Here we'll get five tips on the most efficient ways to pack your carry-on in order to avoid the lines at the luggage carousel. We'll discover that making a thorough list will help you avoid overpacking and keep you organized. Also, it's important to check the weather forecast for your destination so that you pack only what you truly need. We'll also learn more about TSA requirements for luggage and how to avoid packing restricted items.

[Educational Message: It's important that we are always alert and prepared when driving on the roads. In this episode, we learned ways to avoid hitting a deer with your car. Always pay attention to your surroundings and be prepared for any obstacle on the road.]

Airdate: 2/1/2020

Time:

Duration: 30:00

A NEW LEAF

NEW BABY AND NEW FAMILY HISTORY [ANL110]

Today on A New Leaf, Jessica is overjoyed to be expecting her first baby and is eager to choose a name with family meaning. But first, she wants to confirm some roots of her family history that have always been a mystery. Jessica's search uncovers amazing details about her ancestors and a few inspired baby names to share at the gender reveal party. As Jessica prepares for her journey of discovery, she hopes to learn more about her family history to pass down to future generations. As she is pregnant with her first child, Jessica is also hoping to find a name that is representative of her Russian roots. Referencing historical passenger manifests, Jessica is able to trace her family's arrival to America at Ellis Island. Next, Jessica will meet with a historian to learn more about the journey and experiences of immigrants arriving at Ellis Island in the early 20th century. We'll learn that until the early 1920's, immigrants to the United States did not need passports or visas. Also, we'll discover that there was a rigorous health exam for all immigrants passing through Ellis Island. We'll learn that about ten percent of immigrants were marked for a medical issue and about three percent of immigrants were turned away entirely. Having gained a wealth of knowledge about her ancestors, Jessica now has a greater understanding of her ancestors' commitment to making the journey to America. Confident about her past, Jessica is now ready to share this newfound information with her family and friends.

[Educational Message: Before this journey, Jessica had little knowledge of her ancestors and family tree. Not only was she able to share these revelations with her father, she will now have this information to pass down to future generations. Learning about our past can help strengthen our present.]

Airdate: 2/8/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FROZEN FRONTIERS [EDD221]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of the most unbelievable, and unbelievably cold, places in the world. From the ice fields of Patagonia, to the high snowy mountains of the Himalayas, we'll explore what thrives and survives in some of the most frigid ecosystems in the world. First up, we begin our journey in South America in the region of Patagonia. Stretching from Argentina to Chile, Patagonia is home to the largest dinosaur fossil ever found, the second oldest tree on Earth, and a species of flightless bird that almost outnumbers humans. We'll first meet a colony of Magellanic penguins that just returned to the shores of the Punta Tombo Reserve after spending six months at sea. Here we'll learn that the Punta Tombo Reserve in Patagonia hosts the largest known colony of Magellanic penguins in the world. We'll discover that penguin couples always return to the same nest year after year to breed. Next, we'll journey to Asia where we visit the highest peaks in the world, the Himalayas. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. Here we'll meet the elusive snow leopard living in the mountains of the Himalayas. We'll discover how snow leopards have excellent nocturnal vision and that most of their kills occur during either dusk or dawn. Like many of the big cats, the snow leopard is a powerful ambush predator preferring the element of surprise when hunting. Next, we'll travel to the Ladakh

region of the Himalayas, an area covering roughly forty-five thousand square miles including the Ladakh Mountain Range. Here we'll meet with the nomadic Changpa tribe and witness how they survive in this most unforgiving environment. Also, we'll witness how these nomadic herders care for and protect their livestock from the elements and predators. Finally, we'll learn about the guanacos of Patagonia. We'll discover that llamas descended from guanacos that were domesticated in South America over six thousand years ago. Supremely adapted to surviving in the cold elements, guanacos have a double coat of fur that helps them cope with the extreme temperatures.

[Educational Message: We witnessed the incredible survival skills of various animals that thrive in the epic mountains of Patagonia and the Himalayas. Although worlds apart, these two larger than life regions share the distinct quality of diversity that makes our planet so special.]

Airdate: 2/8/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

INCREDIBLE ISLANDS [EDD222]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of the most extreme islands on Earth. We'll explore the Amazon River Islands in South America and then discover what's hiding up in the trees in the Philippines. First up, we'll travel to the heart of South America to explore the Amazon River Islands. The Amazon River region is home to the largest collection of river islands in the world. We'll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. Here we'll meet the only two primates that inhabit the Amazon River Islands, the red howler and the squirrel monkey. Here we'll discover that squirrel monkeys are known to live in groups larger than most other New World Monkeys. We'll witness how these monkeys forage for food and avoid predators in their watery environment. Next, we'll journey to Southeast Asia where the island chain of the Philippines lies. The Philippines are made up of over seven-thousand tropical islands in the Western Pacific Ocean. Among the most ancient islands on Earth, the Philippines have the world's fifth longest coastline. Here we'll learn more about the various insects that inhabit the Philippines. We'll witness the behavior of fireflies under the cover of night. We'll learn that despite their name, fireflies are actually a type of beetle. We'll discover that the flash of light emitted by fireflies occurs due to a chemical reaction inside the fly's body. Finally, we'll travel back to the Amazon to learn more about its most notorious species, the piranha. We'll discover that many piranha species are actually vegetarian, whereas "true piranhas," such as the red-bellied piranha, are carnivorous. Here we'll witness the incredible speed and efficiency of piranhas when hunting and consuming their meals.

[Educational Message: The Philippines and Amazon River Islands are two island chains that provide homes for some of the most adaptable and captivating animals on Earth. The ability to survive and adapt is what makes the plants and animals that live in this region so resilient and fascinating. Many of these islands are isolated and undisturbed. As a result, many of these unique species have flourished, uninterrupted by the modern world.]

Airdate: 2/8/2020

Time:

Duration: 30:00

CONSUMER 101

UNDER PRESSURE [CNR212]

Host Jack Rico and the experts at the testing labs teach us about smoke detectors, show us how to cook a healthy meal without using your oven, and we get expert tips on how to be a safer driver. First up, we'll meet with an appliance expert to learn how smoke detectors work and how we can keep ourselves prepared in the event of a fire. We'll witness first-hand scientific testing of smoke detectors in a controlled environment. Here we'll discover that there are two types of smoke detectors known as photoelectric and ionization detectors. We'll learn that photoelectric detectors use light to detect smoke and are less prone to false alarms. While ionization detectors are better at detecting flames than smoke, we'll learn that they are more prone to false alarms. We'll discover that dual-sensor detectors that combine both of these technologies are most recommended for your home. Next, we'll meet with an expert to learn how to cook a healthy meal without using your oven. We'll discover that appliances such as a toaster oven, air fryer, and multi-cooker can all be used instead of your oven. We'll learn that toaster ovens are beneficial because they heat up faster than a traditional oven and are ideal for baking smaller items. In order to learn more about the science of how these appliances work, we'll learn about the three ways heat is transferred- convection, conduction, and radiation. Next, we're going to learn some skills on how to become a safer driver on the roads. We first learn that it's important to always have your hands properly placed on the wheel in the nine and three o'clock positions. We next discover that it's best to use "shuffle steer" when performing a U-turn maneuver, which allows your hands to stay on the steering wheel at all times when turning. Jack will also learn about ABS, or anti-lock braking system, which prevents the wheels from locking up during braking.

[Educational Message: In this episode, we learned about the different types of smoke detectors and how they function. We discovered how ionization and photoelectric detectors use different technologies to detect smoke and fires. It's important that you choose the best smoke detector for your home. For your safety, always test your detectors monthly and replace the batteries at least once a year.]

Airdate: 2/8/2020

Time:

Duration: 30:00

A NEW LEAF

SAINT'S ARRIVAL [ANL111]

Today on A New Leaf, host Daisy Fuentes pays a visit to Sylvia, who's just become a grandmother for the first time. She wants to be able to share family stories with her new grandson, Saint, but first there are some things she'd like to learn. Sylvia soon discovers her father's African American heritage and she learns about her ancestors' lives in the years after slavery was abolished, and how her great-great-grandfather was part of a historic secret society. Sylvia is Polynesian on her mom's side, but the rest of her family tree is a big question mark. Using DNA analysis, Sylvia is able to confirm that not only is she fifty-percent Polynesian, but she's almost twenty-five percent sub-Saharan African. Utilizing historical documents and newspaper articles, Sylvia also confirms that her great-great-grandfather was a member of the Freemasons. Here we'll learn that the Freemasons are an international organization built around the core principles of brotherhood, truth, and charity. In order to gain a better understanding about her African American roots, Sylvia meets with a historian specializing in African American history. Sylvia will learn more about the history of Freemasons in the United States and how many influential African Americans were once members of the Freemasons. After gaining a wealth of knowledge about her ancestors and family tree, Sylvia is ready to share this new information with her family and new grandson.

[Educational Message: By discovering more about our past we can connect more with the present. Before this journey, Sylvia was unaware that she had African American roots. Now she has a

newfound understanding of what life was like for her ancestors long ago. Through gaining this knowledge about her family tree, Sylvia is now able pass this information down to her family for generations to come.]

Airdate: 2/15/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO THAILAND [EDD223]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the incredible country that is Thailand. Thailand was previously known as “Siam” from the 12th century until it was renamed “Thailand” in 1939. Surrounded by four countries, and between two seas, Thailand is a melting pot for wildlife across the region. We’ll discover that Thailand is home to roughly ten percent of all existing known species of animal in the world. First up, we’ll meet a skillful and secretive predator roaming the jungles of Thailand, the clouded leopard. We’ll learn more about how these cats expertly track down their prey within the dense jungles. Here we witness how clouded leopards use scent marking to claim their territory and also attract a mate. We’ll discover that clouded leopards are also the only known cat species that can climb down trees headfirst. Next, we’ll travel to the beaches and reefs of Thailand to learn more about the aquatic wildlife of Thailand. Here we’ll meet the world’s largest fish, the whale shark. Migrating through the oceans, where they go and come from is still unclear. But off the shores of Thailand, these gentle giants make the most of plankton blooms. With mouths measuring almost four feet wide, these sharks could devour most fish, but it’s the smallest creatures that they feed on. We’ll discover that whale sharks can consume tens of thousands of plankton in just one gulp. Next, we’ll meet the macaques that thrive on the shores of the Thailand coastline. Long-tailed macaques, thanks to their adaptability, are thought to have learned to fish due to shifting food sources. Here we’ll witness as the macaques use rocks and other tools to harvest their food from clams and other mollusks. We’ll learn that like humans, long-tailed macaques can be either left-handed, right-handed, or ambidextrous.

[Educational Message: When the natural world is left to forge its survival, extraordinary adaptations, behaviors, and evolutionary tricks occur. The fine balance between life and death is constantly played out in Thailand’s diverse habitats. Harboring iconic predators and inventive scavengers, these worlds bring constant challenges. Those who adapt reap the rewards and become nature’s survivors.]

Airdate: 2/15/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO AMAZON RIVER ISLANDS [EDD224]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey back to the Amazon River Islands where we’ll explore more of what lives in the water and on the land. The Amazon River region is home to the largest collection of river islands in the world. We’ll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. We begin our journey in the Rio Branco life doesn’t just survive, but flourishes. First up, we’ll learn more about a predator in these waters, the giant river otter. Giant river otters spend most of their time hunting. Nicknamed the “river wolf,” the giant otter’s size and speed allows it to compete for fish and even piranha. Moving and working as a pack, giant river otters are able to corral fish before easily picking them off one by one. We’ll also learn more about the family dynamics of giant river otters as they guard their dens and

protect their young from other predators. Next, we'll learn about the fascinating leaf cutter ant. These are no ordinary ants as it's believed they're a separate species to the ones that nest underground. Due to the constant flooding in the region, these ants have adapted to live in the treetops. We'll also discover that leaf cutter ants are one of only a few species on the planet known to grow their own food. Cultivating a special fungus garden deep within its nest, leaf cutter ants are almost entirely dependent on this fungus for food. Finally, we'll learn more about the fish species that live within the Rio Negro and how they provide for the local residents. Here we'll witness how fish species like tetras are harvested for exotic fish tanks around the world. This regulated practice provides the local fisherman with a vital source of income. Here we'll learn that many aquarium fish are caught in the wild because it is difficult to breed fish in captivity. Before the fish are taken to a new home, they must have official health certificates that are internationally recognized.

[Educational Message: The islands of the Amazon River provide a home for some of the hardest animals in the world. As flood waters engulf the islands each year, those that live here are forced to endure incredible extremes. But animals have developed ways of coping and have learned to master their ever changing environment. It's either sink or swim in the floating forests of the Amazon.]

Airdate: 2/15/2020

Time:

Duration: 30:00

CONSUMER 101

TAKE CARE [CNR213]

Host Jack Rico and the experts at the testing labs teach us how to secure our digital privacy, share some tips to keep you safe in the kitchen, and show us how to keep our cool when hydroplaning on the road. First up, we'll meet with a group of experts to find out ways to keep your digital privacy safe. We'll discover that "smart" household items such as door locks, cameras, refrigerators, and even lightbulbs can be accessed by hackers if you're not careful. We'll learn that you should have a strong password and always update the firmware for these devices. We'll discover that firmware is actually a type of software that runs the hardware of whatever device you're using to connect to the internet. It's vital to keep your firmware updated so that you always have the latest security fixes. Next, we'll meet with a nutritionist to learn ways we can stay safe in the kitchen. Here we'll discover that you should never eat raw cookie dough. We'll learn that there are a lot of potential sources of contamination in cookie dough, such as E. coli in the flour. Flour is a raw, agricultural product, which means it isn't treated prior to being packaged. We learn that contamination can occur at any step of the production chain along the way to our kitchen. However, when the dough is baked, the heat kills any bacteria thus making it safe to consume. Finally, we'll be learning about hydroplaning and how experts test tires for hydroplaning resistance. We'll first learn how tires are designed to evacuate water when driving on wet surfaces, but we discover that when traveling at higher speeds in heavy rain, the tires can lift off the road and cause your car to lose control. On a controlled test track, Jack will test the hydroplaning effects of tires at various speeds and show us how to best react when in a similar situation.

[Educational Message: In this episode, we learned about the importance of protecting your personal information and digital privacy. We learn that many "smart" household items such as doorbells and refrigerators can be a gateway to our personal information. Changing passwords and updating firmware can help prevent hackers from stealing your information.]

Airdate: 2/15/2020

Time:

Duration: 30:00

A NEW LEAF

A COMMITMENT TO FAMILY HISTORIES [ANL112]

Today on A New Leaf, newlyweds John and Peter want to present each other with more knowledge about their families' similar Greek histories. Their search leads them to some unexpected but pleasant surprises about their Greek heritage, and to some fascinating common threads in their grandfathers' stories. Both John and Peter hope to share everything with friends and family at a big wedding celebration. Utilizing historical documents and passenger manifests, John and Peter were able to trace both of their grandfathers' journeys to America. John and Peter also discover that both of their grandfathers registered for World War I. Although a DNA analysis discovered they were less Greek than they originally thought, John and Peter continue to bond over their shared heritage. In order to forge a deeper connection with their Greek roots, John and Peter will join a chef to learn more about Greek foods and culture. Today, John and Peter will be cooking a traditional Greek dish known as Spanakopita. After gaining a wealth of knowledge about their ancestors' journey to America as well as their Greek roots, John and Peter are now ready to share this new information with their family and friends at the wedding celebration.

[Educational Message: Before John and Peter began their journey of discovery, there were many unanswered questions about their family trees. After learning they were less Greek than they originally thought, John and Peter have now become inspired to discover more about their Italian heritage. Learning more about our past can help strengthen our present.]

Airdate: 2/22/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THAR DESERT REVISITED [EDD225]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Thar Desert where we'll learn more about the people and animals that live in this harsh ecosystem. Situated in Northern India, the Thar Desert is also known as the Great Indian Desert and is the seventh largest desert in the world. Temperatures here can soar to over one-hundred and twenty degrees Fahrenheit and less than two inches of rain falls each year. First up, we'll learn more about the nomadic tribes that reside in this region. We'll discover that many of these nomadic tribes move through the desert in a constant search for water and grazing for their livestock. Each year over twenty-thousand people gather for the desert's largest livestock market, the Nagaur Fair. Here these nomadic tribes come together to celebrate their traditional way of life and their ancient alliance with nature. Due to the constant droughts in the region, these farmers can't rely on crops for food and income. Instead they owe their survival to domesticated animals. Here we'll discover that India is estimated to have the largest livestock population in the world. Next, we'll journey to the Thar Desert's eastern edge in the city of Jaipur, the capital and largest city in India. Here we'll learn more about one of India's most sacred animals, the Hanuman langur. Revered above all monkeys, this adaptable primate can survive anywhere from steamy jungles to frozen forests. We'll discover that Hanuman langurs will typically live in groups ranging from roughly twenty to one-hundred members. Here we'll witness the dynamics of how humans and langurs coexist in a crowded and bustling city. Finally, we'll travel to the far southern edge of the Thar to learn more about one of the world's most formidable predators, the Asiatic lion. Here we'll learn that Asiatic lions are thought to have split from African lions roughly one-hundred-thousand years ago. We'll witness how the local farmers coexist with these powerful predators. We'll also discover that lions are the only known large felines in the world that live in groups called "prides."

[Educational Message: In the Thar Desert, the relationship between animals and humans can be traced back for generations. We learned that this relationship can be the key to survival in this harsh region of the world. The Thar is home to more creatures than any other desert in the world because its people have a long tradition of respect for nature.]

Airdate: 2/22/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ADVENTURES IN VENEZUELA [EDD226]

Today on Earth Odyssey, host Dylan Dreyer takes us back to Venezuela to explore more of its diverse and exotic wildlife. Our journey begins in Los Llanos, a wetland roughly the size of Italy that covers nearly a third of Venezuela. The over two-hundred-thousand square miles of Los Llanos has an elevation range rarely exceeding one-thousand feet above sea level. We'll discover that this region is home to more than one-hundred species of mammals and around seven-hundred species of birds. First up, we'll learn more about the capybara, the largest rodent in the world. Capybaras are closely related to guinea pigs and rock cavies, despite their massive size difference. The capybara gets its name from the Amazonian native language which translates to "master of the grasses." We'll also learn that capybaras are highly social and can live in groups of between ten and one-hundred members depending on the season. Here we'll witness how capybaras avoid predators such as anacondas, caiman, and crocodiles. Next, we'll travel to a mountain range in Venezuela known as the Guiana Shield. More than 1.8 billion years old, these are amongst the most ancient mountains in South America and cover an area about the size of Alaska and Texas combined. Home to some of the planet's most spectacular waterfalls, the Guiana Shield is called the "greenhouse of the world." Here we'll discover the supremely adapted plants and animals that live atop these mountains. We'll learn more about a fascinating plant species known as a pitcher plant. Known as carnivorous plants, there are roughly ninety known species of pitcher plants, also known as "nepenthes," across the world. We'll discover how these unique plants have adapted over time to attract and trap their next meals.

[Educational Message: The diverse landscape of Venezuela creates the perfect ecosystem that allows an incredible array of animals to thrive. The Los Llanos and Guiana Shield regions of Venezuela hold many of the spectacular natural wonders we know today. We must all do our part to protect and preserve nature.]

Airdate: 2/22/2020

Time:

Duration: 30:00

CONSUMER 101

TIRES, TICKS, AND TIPS [CNR214]

Host Jack Rico and the experts at the testing labs teach us how to properly care for your lawn, show us how car tires are tested on ice, and teach us how to protect our digital privacy. First up, we'll meet with an expert to learn the best way to properly care for your lawn. We'll learn that you shouldn't cut your grass too short by never cutting more than a third of your lawn's height. We discover that longer grass promotes deeper roots and shades the soil, preventing the water from evaporating too quickly. Also, we learn to always keep your lawn mower blade sharpened as a clean cut prevents stress on the lawn. Next, we'll be joining the auto experts on an ice hockey rink to perform tire testing and evaluate how well various types of tires stop on ice. We learn that using an indoor ice rink for this test provides a controlled setting for testers to accurately measure the performance of different tires. Here we'll discover the unique differences between all-season

tires, winter tires, and summer tires. Finally, we'll find out how to limit permissions and protect your digital privacy when using cellphone applications. We'll discover that many apps attempt to request permission to your phone's contacts, photos, calendars, and more. We'll meet with an expert and learn how to best keep our information out of other people's hands.

[Educational Message: In this episode, we learned why it's important to have the proper tires on your car depending on the driving conditions. We discovered that winter tires provide much greater stopping ability than all-season tires in icy conditions. Always be sure your car is maintained and suitable for driving in any condition.]

Airdate: 2/22/2020

Time:

Duration: 30:00

A NEW LEAF

SURPRISING FAMILY DISCOVERIES [ANL113]

Today on A New Leaf, three remarkable people take journeys of family discovery in this special look at some of the best episodes this year. After the sudden loss of his mother, Craig discovers details about his ancestors that he never knew; Joseph hopes to finally find out if he's related to famous philanthropist Andrew Carnegie; and as Lauren clears up family stories surrounding her great-grandfather's adoption, she discovers a surprising heritage along the way. For Craig, he would like to know more about his parents' relatives and their family's journey to America. Craig soon discovers that his family on his mother's side were in the garment business in New York City during the early 1900's. Inspired by this revelation, Craig visits a working textile factory to learn more about what life was like for garment workers during that time. Next, Joseph Carnegie is hoping to find out if his family is related to Andrew Carnegie. Joseph also wants to verify his potential Scottish roots, the same birthplace of Andrew Carnegie. Joseph visits with a historian at the Carnegie Art Museum where he learns a wealth of information about the history of Andrew Carnegie. Joseph also discovers that Andrew Carnegie devoted his late life to large scale philanthropy, donating the vast majority of his large fortune. Finally, Lauren would like to know more details about her great-grandfather, as well as her potential Native American or Mexican roots. After diving deep in her family history, Lauren discovers that her great-grandfather was actually from New Mexico. Once living as part of the Genizaros community, Lauren confirms her great-grandfather was of Spanish and Native American descent. Moved by this revelation, Lauren visits a historian to learn more about her connection to the Genizaros community.

[Educational Message: By discovering more about our past we can connect more with the present. Craig, Joseph, and Lauren all sought to find out more about their roots so that they could share this information with their families. A better understanding of your past can help you form stronger bonds with your family in the present.]

Airdate: 2/29/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

LOST WORLDS [EDD217]

Today on Earth Odyssey, host Dylan Dreyer takes us to Northern India where we will embark on a journey to explore the lost worlds that remain. Known as the Seven Sisters, the Northern region of India is comprised of seven relatively unexplored and isolated states bordered by the Himalayas to the north and the

Indian Ocean to the south. Here we'll learn that at twenty-five million years old, the Himalayas are one of the youngest known mountain ranges in the world. First up, we'll discover more about the native Asian elephants and how they adapt and survive in this extreme landscape. Here we'll learn that Asian elephants embark on an annual eight-hundred-mile migration through jungles, across plains, and up mountains over two miles high. We'll discover that in ancient times, Asian elephants once roamed across Asia from Syria to Northern China. Next, we'll travel to India's northeastern state known as Meghalaya, one of the wettest regions in Northern India. We'll discover that on average, almost five-hundred inches of rain gathers in Meghalaya each year. We'll also learn that Meghalaya is considered an agrarian state as eighty percent of their population relies on farming for their livelihood. Finally, we'll discover more about the many rare primates that call this place home. We'll meet the spectacled monkeys that live high in the canopies, often in troops of up to thirty-five strong. We'll learn that these unique primates have specially adapted stomachs to help them digest tough leaves and unripe fruits. We'll also meet the hoolock gibbon, an animal often mistaken for a monkey due to its small size and mischievous appearance. But like other apes such as chimps and gorillas, the gibbon doesn't have a tail and its hands have opposable thumbs like humans. Here we'll also witness how gibbons swing between trees using a form of arboreal locomotion known as "brachiation."

[Educational Message: From massive Asian elephants to hilarious hoolock gibbons, the animals in Northern India demonstrate incredible diversity in one of the most untamed regions on the planet. The lost world of India is often unreachable by humans and its story can only be told by the animals and creatures who call this place home.]

Airdate: 2/29/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VANCOUVER [EDD218]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to Vancouver Island. Located off the west coast of Canada, Vancouver Island stretches approximately two-hundred and eighty miles long by about sixty miles wide. Vancouver Island is known as the largest island off the west coast of North America. While glaciers fuel the flow of some of Canada's tallest waterfalls, an endless network of rivers and creeks provides the ideal habitat for one of the world's most important fish. Each year, roughly half a billion salmon leave the sea to return to their spawning grounds in the rivers of North America to lay their eggs. Vancouver Island is the destination for millions of these determined fish. On their remarkable journey, the salmon face an endless array of challenges and obstacles. We'll discover that there are roughly eight species of salmon in the world, seven in the Pacific and one in the Atlantic. At the northern tip of the island in the Johnstone Strait, millions of salmon converge after having spent up to five years at sea in the Pacific Ocean. This is the first stage of their testing journey as they encounter predators such as Steller sea lions. Here we'll learn that Steller sea lions are the largest of all sea lions, reaching a length of ten feet and weighing in at over a ton. Next, as the schools of fish have made their way inland, we encounter another predator awaiting the salmon's arrival. Vancouver Island is home to the densest population of American black bears, one of the most common and largest bears in the world. We'll discover that black bears can kill up to half of the salmon in these smaller streams, consuming up to twenty-thousand calories each day when stocking up for winter. Finally, we'll witness the salmon's journey come to a close as they reach their final destination. Female salmon will lay around three-thousand eggs in a series of nests, each one covered by gravel to protect against predators and to prevent the eggs from drifting away. This final act marks both the end of the salmon's journey and the end of its life.

[Educational Message: Pacific salmon always die after they've spawned. However, their decomposing bodies will release nutrients back into the environment that feeds the aquatic food web within Vancouver Island. This in turn will nurture the next generation of salmon throughout Vancouver Island's rivers of life.]

Airdate: 2/29/2020

Time:

Duration: 30:00

CONSUMER 101

PRECIOUS CARGO [CNR215]

Host Jack Rico and the experts at the testing labs teach us how child car seats are tested for safety, show us how to set up your own home security system, and we'll get tips on how to make healthier food choices. First up, we're meeting with an expert to learn about the different types of child car seats and how they are tested for safety. We'll discover that testers are measuring the ease of use, installation, and overall protection provided in the event of an accident. Here we'll learn how to properly install a car seat as well as techniques to ensure it's safely secured in the vehicle. Next, we'll meet with an expert to learn more about home security systems and how they function. We'll discover that there are many DIY home security systems that you can set up on your own without a professional. Here we'll see how sensors can be easily installed on doors and windows to help protect you from a break-in. We'll discover that these sensors utilize WIFI to connect to a main base station that is used to notify you or the police in the event someone breaks into your home. Next, we'll get some advice from an expert on how to make healthier food choices. We'll learn that you can cut the fat from cooked ground beef by rinsing the meat before serving. If you're using canned beans, you can also remove additional sodium by rinsing them with water prior to cooking. We'll discover that you can replace salt with taste alternatives such as vinegar or citrus juice. As opposed to boiling your vegetables, we'll also learn that steaming veggies will help retain more vitamins and nutrients.

[Educational Message: In this episode, we learned about the importance of eating healthy foods. We discovered simple ways to reduce the amount of fat and sodium in everyday food items. It's important that we make smart choices about the food we put into our bodies.]

Airdate: 2/29/2020

Time:

Duration: 30:00

A NEW LEAF

HIDDEN FAMILY HERITAGES [ANL109]

Today on A New Leaf, three families search for their hidden heritage in this collection of amazing journeys of historical discovery. First, Steve and his son Remy trace their ancestors to create a school family tree project. Then, Nadia unlocks her mom's African American roots which inspires her dance audition for grad school. Then, Allison fills in some family history gaps as a Bar Mitzvah gift to her son, Jayden. For Remy and Steve, they soon trace their roots back to Ireland where their ancestors were farmers. Here we'll learn more about the great famine that killed potato crops across Ireland beginning in 1845. This famine forced many families to seek a new life elsewhere, including Remy's ancestors. Tracing their roots back even further, Remy discovers that his other ancestors came to America on the Mayflower. Next, we'll follow Nadia on her journey of discovery and witness her passion and dedication as she perfects her dance performance. We'll learn that training to become a professional ballerina can take as long as fifteen years and will require much hard work. Nadia is also hoping to incorporate her African American heritage in her dance routine. We'll visit with an expert on African American culture and learn more about Nadia's roots as she prepares for her upcoming dance performance. Finally, we'll catch up with Allison and Jayden on their

journey. After a deep dive into their family tree, Allison discovers that her family has a connection to the Titanic. Allison also hopes to get in touch with her Jewish roots and learn more about the Jewish experiences before World War II.

[Educational Message: At the beginning of their quests for knowledge about their past, these families knew very little about their ancestors and family tree. Hoping to share this information with other members of their family, these people were all determined to learn more about their family roots. On this journey, we uncovered many things never known about their pasts. Because of their determination to discover more, this information will live on in their families for generations.]

Airdate: 3/7/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO MALAYSIA [EDD219]

Today on Earth Odyssey, host Dylan Dreyer takes us back to explore the unique and diverse country of Malaysia. Malaysia is one of seventeen countries identified as megadiverse, meaning these countries harbor the majority of Earth's species. Malaysia's jungles can seem like an impenetrable wall of green but running through it all, is water. We'll discover that the longest river in Malaysia is the Rajang River, which is roughly three-hundred and fifty miles in length. We'll also learn that ninety-eight percent of the water supply used by people in Malaysia comes from its rivers and streams. First up, we'll learn more about the animals that rely on this water for survival, such as the elephants. The pygmy elephants that call this region home are the smallest in the world, standing about three feet shorter than their larger Asian elephant cousins. We discover that this is a unique adaptation that allows them to thrive in the dense forests of Malaysia. Next, we'll journey to the fascinating caves of Malaysia. Over thousands of years, streams and rivers have gradually eaten into Malaysia's soft limestone bedrock. Dissolving grain by grain, holes have become craters, and caves have been excavated into caverns. We'll discover that Malaysia is home to some of the largest cave systems on the planet. Here we'll learn more about the unique species that dwell in these caves such as bats, birds, and a variety of insects. Finally, we'll visit the coastline of Malaysia to discover more about its diverse wildlife. Here we'll learn that a mudskipper fish is perfectly at home out of water. We'll discover that mudskippers breathe through their skin and carry a bubble of air in its gill chambers, much like a scuba diver's tank. While typically small, we'll learn that mudskippers can grow between ten to twelve inches long.

[Educational Message: Malaysia's biodiversity is credited to its rich and fruitful landscape. From giant bats to fish that can walk, this country boasts some of the biggest and most unique species in the animal kingdom. The fascination with Malaysia will continue to live on with the creatures who call this place home.]

Airdate: 3/7/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ZANZIBAR REVISITED [EDD220]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the fascinating tropical archipelago that is Zanzibar. Lying twenty-five miles off the coast of Tanzania, the island chain of Zanzibar is dominated by Unguja and Pemba Islands. We'll learn that in 1964, the presidents of Tanganyika and Zanzibar united their

countries to become Tanzania. First up, we begin our journey in the forests of Pemba Island which is home to one of the rarest primates in the world. Isolated from mainland Africa for more than ten-thousand years, the Zanzibar red colobus monkey calls this island home. Here we'll discover that while many primates have thumbs on their hands, no known species of colobus monkey has them. Highly social, red colobus monkeys typically reside in groups averaging between thirty and fifty individuals. Next, we'll discover more about the largest bat in the world, the Pemba flying fox. Sporting a wingspan of nearly five feet, flying foxes rely on their keen eyesight to track down their next meal. We'll discover that flying fox bats are old world fruit bats, and therefore use sight instead of echolocation to navigate. We'll also discover that the bats play an important role in the environment by dispersing pollen and seeds, which is vital to keeping the region's forests alive. Next, we'll meet one of the largest tortoises in the world, the Aldabra tortoise. Not only one of the largest of its kind, the Aldabra tortoise can live up to two-hundred years old. Highly intelligent, Aldabra tortoises are capable of distinguishing between humans with which they interact. Finally, we'll discover more about the mangrove forests on Zanzibar's coastlines. We'll learn that mangrove forests play an important role in protecting coastline ecosystems from erosion. We'll also discover that the largest mangrove forests are found in Indonesia, where they cover an area roughly the size of Vermont.

[Educational Message: The archipelago of Zanzibar is one of the most beautiful and fascinating places in the world, and the wildlife that thrives here is no different. The amount and diversity of life that's supported here is nothing short of miraculous. We must all do our part to ensure we protect our environment and ecosystems.]

Airdate: 3/7/2020

Time:

Duration: 30:00

CONSUMER 101

INFORMATION SUPERHIGHWAY [CNR208]

Host Jack Rico and the experts at the testing labs show us how to rid your home of nasty allergens, teach us how to prepare for a road trip, and explain how to get the most out of your WIFI router. First up, we'll meet with an expert to learn about various allergens and how to keep them out of your home. We'll discover that it's important to vacuum your home at least once a week, as dust can contain mites, pollen, pet dander, and even cockroach droppings. Also, we learn that if you have allergies, it's recommended that you use a vacuum with a HEPA, or High Efficiency Particulate Air, filter. Also, be sure your vacuum has a bag instead of a bin to avoid releasing those allergens back into the air when emptying. Next, we'll meet with an auto expert and learn how to make sure your car is prepped for its next road trip. Before taking your car out on the open road, it's important to check the car's fluids such as oil, coolant, and windshield washer liquid. Also, ensure your car's belts and hoses are not loose, cracked, or leaking. Additionally, we learn you should always check the pressure and treadwear of your car's tires before driving. Furthermore, it's vital to check that all of your car's lights and signals are working properly. Finally, we'll learn how you can improve the WIFI signal in your home. With the help of an expert, we'll discover that there are new technologies that can help boost your WIFI coverage. A mesh networking device can be utilized to increase WIFI capabilities in a large home or space. We'll learn how experts scientifically measure these devices for capabilities and performance.

[Educational Message: In this episode, we learned how to prepare a car for a road trip. Checking your tires, fluids, lights, and signals is critical to your safety and others on the road. Always be sure your car is maintained and suitable for travel. Preparation is crucial and will make for a smoother road trip.]

Airdate: 3/7/2020

Time:

Duration: 30:00

A NEW LEAF

NEW BABY AND NEW FAMILY HISTORY [ANL110]

Today on A New Leaf, Jessica is overjoyed to be expecting her first baby and is eager to choose a name with family meaning. But first, she wants to confirm some roots of her family history that have always been a mystery. Jessica's search uncovers amazing details about her ancestors and a few inspired baby names to share at the gender reveal party. As Jessica prepares for her journey of discovery, she hopes to learn more about her family history to pass down to future generations. As she is pregnant with her first child, Jessica is also hoping to find a name that is representative of her Russian roots. Referencing historical passenger manifests, Jessica is able to trace her family's arrival to America at Ellis Island. Next, Jessica will meet with a historian to learn more about the journey and experiences of immigrants arriving at Ellis Island in the early 20th century. We'll learn that until the early 1920's, immigrants to the United States did not need passports or visas. Also, we'll discover that there was a rigorous health exam for all immigrants passing through Ellis Island. We'll learn that about ten percent of immigrants were marked for a medical issue and about three percent of immigrants were turned away entirely. Having gained a wealth of knowledge about her ancestors, Jessica now has a greater understanding of her ancestors' commitment to making the journey to America. Confident about her past, Jessica is now ready to share this newfound information with her family and friends.

[Educational Message: Before this journey, Jessica had little knowledge of her ancestors and family tree. Not only was she able to share these revelations with her father, she will now have this information to pass down to future generations. Learning about our past can help strengthen our present.]

Airdate: 3/14/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FROZEN FRONTIERS [EDD221]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of the most unbelievable, and unbelievably cold, places in the world. From the ice fields of Patagonia, to the high snowy mountains of the Himalayas, we'll explore what thrives and survives in some of the most frigid ecosystems in the world. First up, we begin our journey in South America in the region of Patagonia. Stretching from Argentina to Chile, Patagonia is home to the largest dinosaur fossil ever found, the second oldest tree on Earth, and a species of flightless bird that almost outnumbers humans. We'll first meet a colony of Magellanic penguins that just returned to the shores of the Punta Tombo Reserve after spending six months at sea. Here we'll learn that the Punta Tombo Reserve in Patagonia hosts the largest known colony of Magellanic penguins in the world. We'll discover that penguin couples always return to the same nest year after year to breed. Next, we'll journey to Asia where we visit the highest peaks in the world, the Himalayas. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. Here we'll meet the elusive snow leopard living in the mountains of the Himalayas. We'll discover how snow leopards have excellent nocturnal vision and that most of their kills occur during either dusk or dawn. Like many of the big cats, the snow leopard is a powerful ambush predator preferring the element of surprise when hunting. Next, we'll travel to the Ladakh region of the Himalayas, an area covering roughly forty-five thousand square miles including the Ladakh Mountain Range. Here we'll meet with the nomadic Changpa tribe and witness how they survive in this

most unforgiving environment. Also, we'll witness how these nomadic herders care for and protect their livestock from the elements and predators. Finally, we'll learn about the guanacos of Patagonia. We'll discover that llamas descended from guanacos that were domesticated in South America over six thousand years ago. Supremely adapted to surviving in the cold elements, guanacos have a double coat of fur that helps them cope with the extreme temperatures.

[Educational Message: We witnessed the incredible survival skills of various animals that thrive in the epic mountains of Patagonia and the Himalayas. Although worlds apart, these two larger than life regions share the distinct quality of diversity that makes our planet so special.]

Airdate: 3/14/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

INCREDIBLE ISLANDS [EDD222]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of the most extreme islands on Earth. We'll explore the Amazon River Islands in South America and then discover what's hiding up in the trees in the Philippines. First up, we'll travel to the heart of South America to explore the Amazon River Islands. The Amazon River region is home to the largest collection of river islands in the world. We'll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. Here we'll meet the only two primates that inhabit the Amazon River Islands, the red howler and the squirrel monkey. Here we'll discover that squirrel monkeys are known to live in groups larger than most other New World Monkeys. We'll witness how these monkeys forage for food and avoid predators in their watery environment. Next, we'll journey to Southeast Asia where the island chain of the Philippines lies. The Philippines are made up of over seven-thousand tropical islands in the Western Pacific Ocean. Among the most ancient islands on Earth, the Philippines have the world's fifth longest coastline. Here we'll learn more about the various insects that inhabit the Philippines. We'll witness the behavior of fireflies under the cover of night. We'll learn that despite their name, fireflies are actually a type of beetle. We'll discover that the flash of light emitted by fireflies occurs due to a chemical reaction inside the fly's body. Finally, we'll travel back to the Amazon to learn more about its most notorious species, the piranha. We'll discover that many piranha species are actually vegetarian, whereas "true piranhas," such as the red-bellied piranha, are carnivorous. Here we'll witness the incredible speed and efficiency of piranhas when hunting and consuming their meals.

[Educational Message: The Philippines and Amazon River Islands are two island chains that provide homes for some of the most adaptable and captivating animals on Earth. The ability to survive and adapt is what makes the plants and animals that live in this region so resilient and fascinating. Many of these islands are isolated and undisturbed. As a result, many of these unique species have flourished, uninterrupted by the modern world.]

Airdate: 3/14/2020

Time:

Duration: 30:00

CONSUMER 101

DIGITAL TRAPS [CNR209]

Host Jack Rico and the experts at the testing labs teach us the differences between drivetrains, show us how to avoid online privacy traps, and teach us the science behind audio speaker testing. First up, we'll join an auto expert on the test track to learn about drivetrains and how they differ from one another. We'll learn that a drivetrain is how you get the power in your car from the engine to the wheels. We'll discover that there are

four types of drivetrains including front-wheel drive, rear-wheel drive, all-wheel drive, and four-wheel drive. We'll learn that front-wheel drive is the most common and has the best combination of fuel economy and traction. Here we'll witness how these various drivetrains perform and handle a variety of maneuvers on the test track. Next, we'll meet with a privacy expert to learn how we can protect ourselves from hackers and scammers online. We'll discover that some hackers use a tactic called "phishing" in order to lure their victims. These "phishing" emails are designed to mimic official email accounts and websites, tricking people into giving up their passwords, credit card numbers, and other personal information. We'll learn that you should always confirm the legitimacy of these email accounts and websites before giving away any personal information. Finally, we'll meet with an electronics expert to learn more about the technology and testing behind audio speakers. We'll witness how microphones are used in a controlled environment to scientifically measure the quality of various speaker systems. We'll learn about how experts measure the depth, width, height, and layers of sound emitted from speakers. We'll also discover the differences between Bluetooth, WIFI, and smart speakers and how to find the best speaker for your needs.

[Educational Message: In this episode, we learned the importance of protecting your online privacy. Hackers and scammers are improving their techniques each day and it's important we stay ahead of them. We must always use online apps and websites responsibly and carefully in order to protect our personal data and privacy.]

Airdate: 3/14/2020

Time:

Duration: 30:00

A NEW LEAF

SAINT'S ARRIVAL [ANL111]

Today on A New Leaf, host Daisy Fuentes pays a visit to Sylvia, who's just become a grandmother for the first time. She wants to be able to share family stories with her new grandson, Saint, but first there are some things she'd like to learn. Sylvia soon discovers her father's African American heritage and she learns about her ancestors' lives in the years after slavery was abolished, and how her great-great-grandfather was part of a historic secret society. Sylvia is Polynesian on her mom's side, but the rest of her family tree is a big question mark. Using DNA analysis, Sylvia is able to confirm that not only is she fifty-percent Polynesian, but she's almost twenty-five percent sub-Saharan African. Utilizing historical documents and newspaper articles, Sylvia also confirms that her great-great-grandfather was a member of the Freemasons. Here we'll learn that the Freemasons are an international organization built around the core principles of brotherhood, truth, and charity. In order to gain a better understanding about her African American roots, Sylvia meets with a historian specializing in African American history. Sylvia will learn more about the history of Freemasons in the United States and how many influential African Americans were once members of the Freemasons. After gaining a wealth of knowledge about her ancestors and family tree, Sylvia is ready to share this new information with her family and new grandson.

[Educational Message: By discovering more about our past we can connect more with the present. Before this journey, Sylvia was unaware that she had African American roots. Now she has a newfound understanding of what life was like for her ancestors long ago. Through gaining this knowledge about her family tree, Sylvia is now able pass this information down to her family for generations to come.]

Airdate: 3/21/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO THAILAND [EDD223]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the incredible country that is Thailand. Thailand was previously known as “Siam” from the 12th century until it was renamed “Thailand” in 1939. Surrounded by four countries, and between two seas, Thailand is a melting pot for wildlife across the region. We’ll discover that Thailand is home to roughly ten percent of all existing known species of animal in the world. First up, we’ll meet a skillful and secretive predator roaming the jungles of Thailand, the clouded leopard. We’ll learn more about how these cats expertly track down their prey within the dense jungles. Here we witness how clouded leopards use scent marking to claim their territory and also attract a mate. We’ll discover that clouded leopards are also the only known cat species that can climb down trees headfirst. Next, we’ll travel to the beaches and reefs of Thailand to learn more about the aquatic wildlife of Thailand. Here we’ll meet the world’s largest fish, the whale shark. Migrating through the oceans, where they go and come from is still unclear. But off the shores of Thailand, these gentle giants make the most of plankton blooms. With mouths measuring almost four feet wide, these sharks could devour most fish, but it’s the smallest creatures that they feed on. We’ll discover that whale sharks can consume tens of thousands of plankton in just one gulp. Next, we’ll meet the macaques that thrive on the shores of the Thailand coastline. Long-tailed macaques, thanks to their adaptability, are thought to have learned to fish due to shifting food sources. Here we’ll witness as the macaques use rocks and other tools to harvest their food from clams and other mollusks. We’ll learn that like humans, long-tailed macaques can be either left-handed, right-handed, or ambidextrous.

[Educational Message: When the natural world is left to forge its survival, extraordinary adaptations, behaviors, and evolutionary tricks occur. The fine balance between life and death is constantly played out in Thailand’s diverse habitats. Harboring iconic predators and inventive scavengers, these worlds bring constant challenges. Those who adapt reap the rewards and become nature’s survivors.]

Airdate: 3/21/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO AMAZON RIVER ISLANDS [EDD224]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey back to the Amazon River Islands where we’ll explore more of what lives in the water and on the land. The Amazon River region is home to the largest collection of river islands in the world. We’ll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. We begin our journey in the Rio Branco life doesn’t just survive, but flourishes. First up, we’ll learn more about a predator in these waters, the giant river otter. Giant river otters spend most of their time hunting. Nicknamed the “river wolf,” the giant otter’s size and speed allows it to compete for fish and even piranha. Moving and working as a pack, giant river otters are able to corral fish before easily picking them off one by one. We’ll also learn more about the family dynamics of giant river otters as they guard their dens and protect their young from other predators. Next, we’ll learn about the fascinating leaf cutter ant. These are no ordinary ants as it’s believed they’re a separate species to the ones that nest underground. Due to the constant flooding in the region, these ants have adapted to live in the treetops. We’ll also discover that leaf cutter ants are one of only a few species on the planet known to grow their own food. Cultivating a special

fungus garden deep within its nest, leaf cutter ants are almost entirely dependent on this fungus for food. Finally, we'll learn more about the fish species that live within the Rio Negro and how they provide for the local residents. Here we'll witness how fish species like tetras are harvested for exotic fish tanks around the world. This regulated practice provides the local fisherman with a vital source of income. Here we'll learn that many aquarium fish are caught in the wild because it is difficult to breed fish in captivity. Before the fish are taken to a new home, they must have official health certificates that are internationally recognized.

[Educational Message: The islands of the Amazon River provide a home for some of the hardiest animals in the world. As flood waters engulf the islands each year, those that live here are forced to endure incredible extremes. But animals have developed ways of coping and have learned to master their ever changing environment. It's either sink or swim in the floating forests of the Amazon.]

Airdate: 3/21/2020

Time:

Duration: 30:00

CONSUMER 101

SUPER CHARGED [CNR210]

Host Jack Rico and the experts at the testing labs teach us about electric cars, give us tips on super snacking, and show us the technology behind snow blowers. First up, we'll meet an expert on the auto test track to learn more about the past and present of electric cars. Here we'll learn that the first fully electric vehicles were built in the early 1900's. As technology has changed drastically over the last one-hundred years, we'll now see how the electric cars of today have evolved. Here we'll learn that electric cars now include technology that captures energy normally lost during braking and sends that energy to the car's batteries. Known as regenerative braking, this technology uses the car's generator to help slow the car down. Next, we'll meet with a nutritionist to get tips on how to create the healthiest snack. We'll be joining a couple of teens to find out the best ways to swap out packaged foods with fresher snack options. We'll learn that only one in ten Americans eats the recommended amount of fruits and vegetables each day. We'll discover that the average daily recommendation is two to three cups of vegetables and two cups of fruits each day. Here we'll get expert tips and recipes on how we can increase the nutritional value of our daily snacks. Finally, we'll join an expert to see how snow blowers are scientifically tested and evaluated. Instead of using snow, testers will be utilizing saw dust, which mimics wet snow and is much more consistent for testing purposes. We'll learn more about the various types of snow blowers, such as gasoline, electric, and battery powered devices. We'll discover that snow blowers operate by using an auger that feeds snow through a discharge chute. Here we'll get expert tips on how to choose the right snow blower for the right job.

[Educational Message: In this episode, we learned the importance of making healthier choices in our diet. We discovered nutritional recipes that can help us replace packaged snack foods with organic fruits and vegetables. It's important that we always look for healthier alternatives in our daily diet.]

Airdate: 3/21/2020

Time:

Duration: 30:00

A NEW LEAF

A COMMITMENT TO FAMILY HISTORIES [ANL112]

Today on A New Leaf, newlyweds John and Peter want to present each other with more knowledge about their families' similar Greek histories. Their search leads them to some unexpected but pleasant surprises about their Greek heritage, and to some fascinating common threads in their grandfathers' stories. Both John and Peter hope to share everything with friends and family at a big wedding celebration. Utilizing historical documents and passenger manifests, John and Peter were able to trace both of their grandfathers' journeys

to America. John and Peter also discover that both of their grandfathers registered for World War I. Although a DNA analysis discovered they were less Greek than they originally thought, John and Peter continue to bond over their shared heritage. In order to forge a deeper connection with their Greek roots, John and Peter will join a chef to learn more about Greek foods and culture. Today, John and Peter will be cooking a traditional Greek dish known as Spanakopita. After gaining a wealth of knowledge about their ancestors' journey to America as well as their Greek roots, John and Peter are now ready to share this new information with their family and friends at the wedding celebration.

[Educational Message: Before John and Peter began their journey of discovery, there were many unanswered questions about their family trees. After learning they were less Greek than they originally thought, John and Peter have now become inspired to discover more about their Italian heritage. Learning more about our past can help strengthen our present.]

Airdate: 3/28/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THAR DESERT REVISITED [EDD225]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Thar Desert where we'll learn more about the people and animals that live in this harsh ecosystem. Situated in Northern India, the Thar Desert is also known as the Great Indian Desert and is the seventh largest desert in the world. Temperatures here can soar to over one-hundred and twenty degrees Fahrenheit and less than two inches of rain falls each year. First up, we'll learn more about the nomadic tribes that reside in this region. We'll discover that many of these nomadic tribes move through the desert in a constant search for water and grazing for their livestock. Each year over twenty-thousand people gather for the desert's largest livestock market, the Nagaur Fair. Here these nomadic tribes come together to celebrate their traditional way of life and their ancient alliance with nature. Due to the constant droughts in the region, these farmers can't rely on crops for food and income. Instead they owe their survival to domesticated animals. Here we'll discover that India is estimated to have the largest livestock population in the world. Next, we'll journey to the Thar Desert's eastern edge in the city of Jaipur, the capital and largest city in India. Here we'll learn more about one of India's most sacred animals, the Hanuman langur. Revered above all monkeys, this adaptable primate can survive anywhere from steamy jungles to frozen forests. We'll discover that Hanuman langurs will typically live in groups ranging from roughly twenty to one-hundred members. Here we'll witness the dynamics of how humans and langurs coexist in a crowded and bustling city. Finally, we'll travel to the far southern edge of the Thar to learn more about one of the world's most formidable predators, the Asiatic lion. Here we'll learn that Asiatic lions are thought to have split from African lions roughly one-hundred-thousand years ago. We'll witness how the local farmers coexist with these powerful predators. We'll also discover that lions are the only known large felines in the world that live in groups called "prides."

[Educational Message: In the Thar Desert, the relationship between animals and humans can be traced back for generations. We learned that this relationship can be the key to survival in this harsh region of the world. The Thar is home to more creatures than any other desert in the world because its people have a long tradition of respect for nature.]

Airdate: 3/28/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ADVENTURES IN VENEZUELA [EDD226]

Today on Earth Odyssey, host Dylan Dreyer takes us back to Venezuela to explore more of its diverse and exotic wildlife. Our journey begins in Los Llanos, a wetland roughly the size of Italy that covers nearly a third of Venezuela. The over two-hundred-thousand square miles of Los Llanos has an elevation range rarely exceeding one-thousand feet above sea level. We'll discover that this region is home to more than one-hundred species of mammals and around seven-hundred species of birds. First up, we'll learn more about the capybara, the largest rodent in the world. Capybaras are closely related to guinea pigs and rock caviars, despite their massive size difference. The capybara gets its name from the Amazonian native language which translates to "master of the grasses." We'll also learn that capybaras are highly social and can live in groups of between ten and one-hundred members depending on the season. Here we'll witness how capybaras avoid predators such as anacondas, caiman, and crocodiles. Next, we'll travel to a mountain range in Venezuela known as the Guiana Shield. More than 1.8 billion years old, these are amongst the most ancient mountains in South America and cover an area about the size of Alaska and Texas combined. Home to some of the planet's most spectacular waterfalls, the Guiana Shield is called the "greenhouse of the world." Here we'll discover the supremely adapted plants and animals that live atop these mountains. We'll learn more about a fascinating plant species known as a pitcher plant. Known as carnivorous plants, there are roughly ninety known species of pitcher plants, also known as "nepenthes," across the world. We'll discover how these unique plants have adapted over time to attract and trap their next meals.

[Educational Message: The diverse landscape of Venezuela creates the perfect ecosystem that allows an incredible array of animals to thrive. The Los Llanos and Guiana Shield regions of Venezuela hold many of the spectacular natural wonders we know today. We must all do our part to protect and preserve nature.]

Airdate: 3/28/2020

Time:

Duration: 30:00

CONSUMER 101

HOW TO PROTECT DEER AND PASSWORDS [CNR211]

Host Jack Rico and the experts at the testing labs teach us how to avoid deer strikes on the road, show us how to use a password manager, and teach us how to pack a carry-on like a pro. First up, we'll get a lesson on how to avoid hitting a deer when driving in your car. We'll learn that over 1.3 million deer are hit by drivers every year. We'll discover that driving during certain times of the day can increase your odds of a collision with a deer. Also, we learn that deer travel in groups, so if you see one, there are likely others nearby. In the event of an accident, we also learn it's important to never attempt to touch an injured animal. Next, we'll learn how to protect our online accounts by using a password manager. We'll discover that a password manager is one of the best ways to protect your privacy and security. We'll get tips on how to create an effective and secure password for your password manager. We'll also learn about two-factor authentication, which adds an extra layer of security beyond your password. Finally, we'll meet with an expert to learn the best way to pack your carry-on luggage. Here we'll get five tips on the most efficient ways to pack your carry-on in order to avoid the lines at the luggage carousel. We'll discover that making a thorough list will help you avoid overpacking and keep you organized. Also, it's important to check the weather forecast for your destination so that you pack only what you truly need. We'll also learn more about TSA requirements for luggage and how to avoid packing restricted items.

[Educational Message: It's important that we are always alert and prepared when driving on the roads. In this episode, we learned ways to avoid hitting a deer with your car. Always pay attention to your surroundings and be prepared for any obstacle on the road.]

Airdate: 3/28/2020

Time:

Duration: 30:00

A NEW LEAF

SURPRISING FAMILY DISCOVERIES [ANL113]

Today on A New Leaf, three remarkable people take journeys of family discovery in this special look at some of the best episodes this year. After the sudden loss of his mother, Craig discovers details about his ancestors that he never knew; Joseph hopes to finally find out if he's related to famous philanthropist Andrew Carnegie; and as Lauren clears up family stories surrounding her great-grandfather's adoption, she discovers a surprising heritage along the way. For Craig, he would like to know more about his parents' relatives and their family's journey to America. Craig soon discovers that his family on his mother's side were in the garment business in New York City during the early 1900's. Inspired by this revelation, Craig visits a working textile factory to learn more about what life was like for garment workers during that time. Next, Joseph Carnegie is hoping to find out if his family is related to Andrew Carnegie. Joseph also wants to verify his potential Scottish roots, the same birthplace of Andrew Carnegie. Joseph visits with a historian at the Carnegie Art Museum where he learns a wealth of information about the history of Andrew Carnegie. Joseph also discovers that Andrew Carnegie devoted his late life to large scale philanthropy, donating the vast majority of his large fortune. Finally, Lauren would like to know more details about her great-grandfather, as well as her potential Native American or Mexican roots. After diving deep in her family history, Lauren discovers that her great-grandfather was actually from New Mexico. Once living as part of the Genizaros community, Lauren confirms her great-grandfather was of Spanish and Native American descent. Moved by this revelation, Lauren visits a historian to learn more about her connection to the Genizaros community.

[Educational Message: By discovering more about our past we can connect more with the present. Craig, Joseph, and Lauren all sought to find out more about their roots so that they could share this information with their families. A better understanding of your past can help you form stronger bonds with your family in the present.]

NBC NETWORK NON-BROADCAST EFFORTS

January - March, 2020

NBCUniversal's *The More You Know* website:

Since 1989, *The More You Know* has brought the nation's most important social issues to the forefront, and remains a trusted voice for sharing knowledge to improve lives and inspire action. *The More You Know*'s comprehensive website (themoreyouknow.com) includes in-depth resource and referral information on the campaign's important focus issues including:

- HEALTH – fighting childhood obesity, encouraging nutrition and physical fitness
- ENVIRONMENT – encouraging everyday actions that reduce environmental impact
- EDUCATION – recruiting new teachers and promoting their long-lasting impact
- DIGITAL LITERACY & INTERNET SAFETY - sharing online safety tips and information
- DIVERSITY – embracing differences and promoting inclusion, tolerance and respect

Also featured on site is The More You Know Learning series' *Growing Up Online*, a free eBook on digital literacy and Internet Safety. *Growing Up Online* is an important tool to initiate conversation with children about online safety. The eBook is a media-rich, two-part learning resource that provides easy-to-use information about navigating the digital world in a unique and engaging way. Part one includes safety tips, discussion questions and key takeaways for parents and teachers. Part two features four entertaining video comic books for children, focused on real situations that come up when kids go online.

Additional content on the site includes public service announcements, behind-the-scenes videos, a general overview, a talent directory, and a list of the campaign's accolades such as the prestigious Emmy and Peabody awards.

Note Regarding FCC's Video Description Rules: The programs supplied in **The More You Know** block are video-described to provide a better viewing experience for blind or visually impaired children.

2nd QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
April 1, 2020 – June 30, 2020

In the 2nd Quarter of 2020, NBC continued airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the three shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. New series *Roots Less Traveled* replaced *A New Leaf* at the beginning of the 2nd Quarter. There continued to be two half hours of *Earth Odyssey with Dylan Dreyer*.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

CONSUMER 101

Consumer 101 is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Hosted by Jack Rico with the help of experts and scientists from the Consumer Reports labs and testing facilities, Consumer 101 will give viewers a behind-the-scenes look into the science used to test every kind of product— from the obscure, to the fascinating, to the everyday. Each week, audiences will discover more about the surprising intricacy of product testing, learn more efficient ways to get the most out of everyday items, as well as catch a glimpse into a unique career path in the fields of science and technology. Consumer 101 is an empowering series aimed at giving teens the tools they need to make smarter choices as consumers, exploring the how, where, when, and why we spend our resources so we can all make educated decisions when it counts.

ROOTS LESS TRAVELED

Roots Less Traveled is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Roots Less Traveled follows two family members, often from different generations, as they gain a newfound understanding and respect for each other on their quest to learn more about their family history. Each week on Roots Less Traveled, a new pair will set out on an adventure to solve a mystery in their family tree. From rumors of a relative who sailed on the Titanic, to stories of homesteaders forging a new path for future generations, our duo discovers the truth behind the tales that have been passed down in their family, while our viewers learn the personal stories behind notable historical moments. Viewers will be taken on a literal journey to unique places around the globe, learning more about the culture and history of these significant locations and events that happened there. Throughout this experience, we will witness these family members grow closer as they gain wisdom not only about themselves, but also about how their past has helped shape their present.

3rd QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
July 1, 2020 – September 30, 2020

In the 3rd Quarter of 2020, NBC will continue airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the three shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. There will continue to be two half hours of *Earth Odyssey with Dylan Dreyer*.

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“CORE PROGRAMMING”

**PROGRAMMING FURNISHED BY THE NBC NETWORK THAT IS SPECIFICALLY
DESIGNED TO SERVE THE EDUCATIONAL AND INFORMATIONAL NEEDS OF CHILDREN
16 AND UNDER**

[AGE TARGET 13-16]

April 1, 2020 – June 30, 2020

Airdate: 4/4/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PADDLING THROUGH THE PANTANAL [EDD227]

Today on Earth Odyssey, host Dylan Dreyer leads us on an adventure through the rivers of the Pantanal. Known as the largest wetland in the world, the Pantanal is ten times larger than the Everglades in Florida. Situated in the center of South America, the vast majority of the Pantanal lies in Brazil, while the rest is in Bolivia and Paraguay. First up, we'll follow local fisherman and learn how they rely on the waters of the Pantanal for their survival. We'll discover that the Pantanal is home to an estimated three-hundred and twenty-five species of fish. We'll learn about the unique fishing techniques that have been used by the local villages for centuries. Here we'll also learn about the giant river otter that calls the Pantanal region home. Nearly six feet long and weighing more than sixty-five pounds, it fully merits its name. Unlike most otters, giant river otters live in groups and hunt in packs. Here we'll discover that giant river otters have an average lifespan of roughly twelve years in the wild. Next, we'll learn more about one of the top predators in the Pantanal region, the jaguar. With water to drink, shade from the sun, and a platform from which to spy prey, overgrown riverbanks are the perfect environment for jaguars. We'll discover that jaguars are excellent swimmers and have been seen swimming across the Panama Canal. Finally, we'll learn more about the tufted capuchin monkeys that inhabit this region. We'll discover that these monkeys use the riverside corridors of the Pantanal to spread south to the Amazon. Capuchins are highly social and have been

observed sharing territories with other primate species. We'll learn that tufted capuchins have also been observed using objects, such as rocks, as tools to crack open nuts or fruits.

[Educational Message: The wet landscape and warm climate of the Pantanal creates a hub for an incredible number of diverse fish and mammals. The traditions that are still alive in the Pantanal are central to the survival of the local villages.]

Airdate: 4/4/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

HIKING THE HIMALAYAS [EDD228]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to the Himalayas, where the extreme landscape doesn't stop the unique diversity that calls this mountain range home. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. First up, we'll learn about the fascinating bar-headed geese. These geese head south over the Himalayas to the warmer winter-feeding grounds of Northern India. But traveling more than nine-hundred miles in a single day isn't this bird's only claim to fame. Bar-headed geese choose to fly at an altitude few other creatures could barely imagine, including humans. We'll discover that bar-headed geese can fly as high as thirty-thousand feet for brief periods of time. These birds have even been spotted flying over Mt. Everest, the tallest mountain in the world. Next, we'll discover how the Himalayas have shaped the cultures of Southern Asia. Many peaks of the Himalayas are seen as sacred, and religions such as Buddhism have a strong physical presence in the remotest of areas. Prayer flags flapping in the wind break the silence across the numerous mountain passes. For centuries, Buddhist pilgrims have draped these pennants across valleys and places of spiritual practice for the wind to carry their written prayers across the landscape. Here we'll discover that the colors of prayer flags are said to represent Earth's elements of sky, air, fire, water, and earth. Finally, we'll learn more about the Asiatic black bear that calls the Himalayas home. Despite being similar in size to its American relative, a distinctive cream-colored crescent at the center of its chest gives this Himalayan resident its unique identity. We'll discover that the shape of the crescent on its chest gives this species the nickname "moon bear." Although armed with two-inch long curved claws and canine teeth designed for tearing meat, this predator is primarily a vegetarian. Berries, grasses, roots, and the occasional insect make up the majority of its diet.

[Educational Message: The Himalayas is an unbelievable region in our world. From the ancient cultures that are still practiced today, to the animals that thrive in such harsh environments, this mountain range is one of the most fascinating places on Earth.]

Airdate: 4/4/2020

Time:

Duration: 30:00

CONSUMER 101

IF CARS COULD TALK [CNR216]

Host Jack Rico and the experts at the testing labs will give us a deep dive on a test drive, show us how to protect our online accounts from hackers, and teach us how to do laundry like a scientist. First up, we'll join an auto expert for a test drive in the field to find out how cars are tested and evaluated for performance. Today we'll learn how experts evaluate aspects such as ride comfort, handling, and cabin noise over the course of a day on various terrains. In this test, we discover that road noise and wind noise can significantly increase the cabin noise. We'll learn how experts measure and evaluate which cars perform best in various

settings and conditions. Next, we'll meet with an online privacy expert to learn how to tidy up our online accounts. We'll discover that leaving old accounts online and not paying attention to them can put them at risk of being hacked. We'll also find out that the longer you leave these accounts open, the more likely it has been compromised. Additionally, we'll learn that if you use the same password for all of your online accounts, it can put all of your personal information at great risk. We'll get expert advice on the best ways to secure and tidy up your online accounts. Finally, we'll learn how to do your laundry like a scientist. We'll find out that it's always important to separate light and dark colored clothes for each load. We'll learn that different fabrics and textiles can be affected by water and dryer temperature. We'll also discover the incredible science behind static electricity on clothing.

[Educational Message: In this episode we learned the importance of protecting your personal information online. We found out that hackers can find ways to access our accounts if we do not keep them secure. It's always best to maintain strong passwords and awareness of your online presence in order to protect your personal privacy.]

Airdate: 4/4/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO JOHN F KENNEDY [RLT101]

Today on Roots Less Traveled, host Faruq Tauheed takes half-siblings Michelle and Rob to Mexico City. Here they will discover that they are related to the Uruchurtus, a very famous Mexican political family. Their journey includes a trip to the ornate National Palace where they learn that their second cousin Ernesto gave the keys to Mexico City to President John F. Kennedy. Here we'll find out that the Zocalo, or Plaza de la Constitucion, was previously the principal ceremonial site in the Aztec city of Tenochtitlan. Michelle and Rob happen to be in Mexico City during Dia de los Muertos, or Day of the Dead, a holiday that honors loved ones who have passed. In preparation for this annual cultural event, they soon learn their third cousin Manual Uruchurtu died on the Titanic, after giving up his seat on a lifeboat to a woman in need. We'll find out that in 1912, over 1,500 passengers perished when the Titanic sank during its maiden voyage. We'll discover that the 2,240 people on board the Titanic are believed to have represented as many as 30 different nationalities.

[Educational Message: Connecting with our past helps us connect to parts of ourselves that we didn't know existed. In this episode, we learned that the Uruchurtu family had a cousin that gave up his lifeboat seat when the ill-fated Titanic began to sink. Michelle and Rob were moved by this selfless act of kindness, inspiring them to show more love and compassion in their own daily lives.]

Airdate: 4/11/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VOYAGE IN VANCOUVER [EDD229]

Today on Earth Odyssey, host Dylan Dreyer takes us to Vancouver, where we will explore the beautiful landscape and diversity of animals that are native to this area. Located off the west coast of Canada, Vancouver Island stretches approximately two-hundred and eighty miles long by about sixty miles wide. Vancouver Island is known as the largest island off the west coast of North America. First up, we'll learn about the humpback whales that call that waters of Vancouver home. Reaching fifty-two feet in length and

weighing more than thirty-six tons, the humpback whale is the fifth largest animal on the planet. The humpback's enormous frames are fueled by small schooling fish like herring and swarms of tiny shrimp-like crustaceans known as krill. These toothless whales use a mass of bristles called baleen plates to filter food from the water. We'll discover that there are over ten known whale species with baleen plates, categorized as "baleen whales." Baleen bristles can be anywhere from two inches to twelve feet long and are made of the same material as our fingernails. Next, we'll travel to East Sooke Park on the southern tip of Vancouver Island where thousands of turkey vultures gather creating a unique spectacle. Masters of soaring flight, turkey vultures aren't strong flyers and rely on winds and thermal currents to keep them aloft. This efficient way of traveling uses just a fraction more energy than when they're standing still. We'll discover that turkey vultures can have a wingspan of roughly six feet and can weigh up to four pounds. We'll learn that turkey vultures are also known as buzzards or carrion crows in some parts of North America. Finally, we'll meet with the island's largest predator, the black bear. Vancouver Island is home to seven thousand to twelve thousand black bears, one of the highest concentrations of black bears in the world. Darker than mainland bears and slightly larger, the black bears of Vancouver Island can weigh up to six-hundred pounds. We'll discover that adult black bears can gain roughly thirty pounds of fat per week when preparing for hibernation.

[Educational Message: Vancouver Island is a region with giants both on land and in the ocean. These creatures have learned to master the cold and the elements to ensure survival for themselves and their offspring. With the nutrients that Vancouver Island receives from the life cycle from all living things, animals continue to thrive in this unbelievable habitat.]

Airdate: 4/11/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

EXPLORING AROUND THE ANDES [EDD230]

Today on Earth Odyssey, host Dylan Dreyer leads us on an amazing adventure to the Andes Mountains, one of the most biodiverse regions on the Earth. At over forty-five hundred miles long, and one-hundred and twenty miles wide, the Andes are an epic landscape of snow-capped mountains and belching volcanoes. We'll learn that the average peak height in the Andes Mountain Range is roughly thirteen thousand feet. First up, we'll travel to the Altiplano region of the Andes to discover more about the creatures that inhabit the area. Due to volcanic activity, toxic lakes have formed in the high altitudes of the Altiplano region. We'll discover that colorful plankton and algae thrive in these mineral rich waters. In the spring, flamingos are attracted to these lakes to feed. Here we'll discover that three of the world's six species of flamingos gather here. All flamingos are filter feeders, targeting shrimp and algae from the salty waters. We'll discover that each species of flamingo has a different sized filter in its bill, and each gathers its food from different depths to avoid competition. Here we'll learn that this filter feeding adaptation was also found in the Pterosaur, which existed roughly one-hundred and fifty million years ago. Next, we'll meet one of the Andes' most iconic animals, the Andean bear. Andean bears are also called "spectacled bears" due to their facial markings which resemble glasses. We'll discover that Andean bears have markings as complicated and unique as human fingerprints. Here we'll witness a mother Andean bear as she teaches her cubs how to forage for food. Finally, we'll journey to the cloud forest to meet with the fascinating bird species of the Andes. In the cloud forest, the high altitude causes the nights to be extremely cold and the days very damp, meaning not many flying insects can survive here. Therefore, most plants are pollinated by hummingbirds. These birds hover in position by beating their wings up to a hundred times per second, with their heartbeat reaching nearly a thousand beats per minute. To power their incredible metabolism, they must consume

more than their own weight in nectar every day. We'll discover that hummingbirds must feed from hundreds of flowers to gain enough energy to survive the cold nights.

[Educational Message: Rainfall in the cloud forest is essential to supporting the amazing biodiversity that you'll find in the Andes Mountains. From flamingos to Andena bears, this mountain range is full of danger, beauty, and intrigue.]

Airdate: 4/11/2020

Time:

Duration: 30:00

CONSUMER 101

TOW AWAY [CNR217]

Host Jack Rico and the experts at the testing labs will show us the ins and outs of towing, take us for a stroller test drive, and explain how to find the right mattress for the best night's sleep. First up, we'll meet with an auto expert to learn more about towing trailers and how to do it safely. We'll discover that every truck has a tow rating, which is how many pounds a vehicle can tow behind it. We'll discover that a tow rating consists of three basic principles such as the engine's power, 2-wheel drive vs. 4-wheel drive, and gear ratios. We'll also get a firsthand demonstration on how to correctly and safely attach a trailer to a vehicle. We'll learn that it's vital to check the electrical components of the trailer as well as the tire pressure to ensure it's safe for the road. It's also critically important to know the load capacity of the trailer and the vehicle. We'll discover that load capacity is the combined weight of people and gear in the truck and trailer. Next, we'll join an expert and a teen in the field to learn how strollers are tested and evaluated. In order to accurately simulate a child in the stroller, thirty-pound control weights are placed in the strollers for testing. Here we'll see how strollers are evaluated using various turning maneuvers as well as how they handle going over curbs and other obstructions. We'll find out that there are many different types of strollers for different activities and lifestyles. Finally, Jack visits with an expert to learn how to choose the best mattress for a good night's sleep. We'll learn that mattresses are available in a wide variety of sizes, materials, and firmness. Here we'll witness how scientific instruments are used to measure the durability and quality of a wide range of mattress types.

[Educational Message: In this episode, we learned how strollers are tested and evaluated for performance and safety. Joining our experts was a teenager with little experience using a stroller. This teenager learned valuable tips and advice on how to properly use a stroller when taking care of her siblings or when babysitting. We learned that it's critical to understand how strollers work and perform to ensure the safety of the child.]

Airdate: 4/11/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A PURPLE HEART [RLT102]

Today on Roots Less Traveled, host Faruq Tauheed takes 80-year-old dancing Grandpa Evan and his grandson Scott to Billings, Montana. We'll learn that the state of Montana became a U.S. territory during The Gold Rush of 1864. Here the duo will learn that Evan's great-grandfather was an integral part of the U.S. western states expansion of 1862 and had even cultivated a 160-acre farm. We'll discover that this was made possible by the Homestead Act, which was signed into law by President Abraham Lincoln in 1862. We'll also find out that between 1880 and 1890, the population of Montana grew from 39,000 to 143,000. Montana is nicknamed "The Treasure State" due to its availability of agate, gold, silver, and other precious

stones. But closer to Evan's heart, he learns that two of his uncles who he had met when he was a child, were both prisoners of war in WWII. Even more fascinating, Evan and Scott discover that both of their uncles received Purple Hearts. We'll find out that the Purple Heart Medal is a combat decoration awarded to members of the U.S armed forces who are wounded or killed while serving in the military. After this discovery, Evan and Scott deeply connect while visiting the Montana Purple Heart Memorial to honor their veteran relatives.

[Educational Message: When we look deeper into our past, we can gain a better understanding of our roots. In this episode, Evan and Scott learned that their relatives both served in WWII and were even taken as prisoners for several years. Given that he once served in the Air Force himself, Evan gains a new connection to his uncles and their military past. Understanding the incredible sacrifice and courage of their ancestors has brought Evan and Scott closer together.]

Airdate: 4/18/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THE AMAZING AMAZON [EDD231]

Today on Earth Odyssey, host Dylan Dreyer takes us to the Amazon to explore the wildlife and the cultures that live there today. Formed over the last fifteen million years, the Amazon covers three million square miles of South America. This vast rainforest straddles the equator making it permanently hot and wet, the ideal conditions for creating and maintaining life. First up, we'll learn about ancient civilizations living within the dense rainforests of the Amazon. We'll discover that it's now thought that five and a half million people inhabited the Amazon in the early sixteenth century. Today, there are thirty million people living in the Amazon. Many are descendants of the first waves of incomers such as rubber farmers and traders, but some are descended from people that have lived in the Amazon for ten thousand years. We'll discover that the population of the Amazon River Basin is less than ten percent indigenous. Here we'll learn about the rituals and hunting practices of the native people. We'll also witness the unique rites of passage for young boys living within the native tribes. Next, we'll discover more about the predators of the Amazon, such as the jaguar. While many cats avoid getting their feet wet, jaguars use the smaller waterways of the Amazon to move around with ease. Their large paws make excellent paddles as they hunt for fish, turtles, and even caiman. Finally, we'll discover more about the pink river dolphin. Pink river dolphins are nearly blind, but they do not require keen eyesight due to the low visibility in the murky waters of the Amazon. These creatures hunt and navigate using echolocation, an adaptation that helps the animals build a sonic picture of their underwater world. We'll discover that pink river dolphins are able to bend up to ninety degrees, allowing them to easily navigate roots and trees in the water.

[Educational Message: The traditions that have been passed down from generation to generation only add to the pure wonder of this biodiverse South American jewel. As the modern world encroaches, it's clear how vulnerable plants and animals can begin to change. The Amazon's future is in our hands and its complexities must be respected.]

Airdate: 4/18/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FINDING THE LOST WORLDS [EDD232]

Today on Earth Odyssey, host Dylan Dreyer leads us on an incredible adventure to the lost worlds of India. Known as the Seven Sisters, the Northern region of India is comprised of seven relatively unexplored and isolated states bordered by the Himalayas to the north and the Indian Ocean to the south. These seven states of India are among the least explored places on Earth. First up, we'll learn about the local inhabitants of these lost worlds of India. Although the local humans thrive among the rich forested mountains, they aren't immune to attacks from the animals they share their home with. The Indian elephant's migratory routes extend throughout the region, but their ancient paths have been seriously interrupted by the local people. Here we'll discover that elephant herds consist of about fifteen elephants on average and are typically led by the oldest female. Elephants eat an estimated fifty-six tons of food per year, totaling roughly three hundred and thirty pounds per day. As homes and crops are devastated, tensions between humans and elephants escalate. As crops spread and villages grow, further clashes seem inevitable. Here we'll learn how the local people live and work alongside these massive creatures in harmony. Next, we'll embark on a hunting journey with a local tribe and learn more about the cultural rituals of these native people. We'll also find out that traditional folk songs and dances are essential ingredients of the local culture. These celebrations are inspired by a creature that is an icon throughout Northeast India, the great hornbill. Finally, we'll discover more about the legendary great hornbill bird species. Hornbills have a long curved bill which is often brightly colored and quite heavy. Hornbills are the only birds whose first two neck bones are fused together to help support the weight of their beak. Research suggests the hornbill's impressive beak may have formed to amplify their territorial calls. Here we'll discover that hornbills primarily eat fruit but supplement their diet with small mammals, insects, and even snakes. We'll also learn that the hornbill's wings are so loud, they can be heard from long distances, even up to half a mile away.

[Educational Message: Today we witnessed an incredible connection between animals and humans that's rarely seen in the wild. Without many other places on Earth like these lost worlds, it's important to protect some of the last remaining ancient traditions our world has.]

Airdate: 4/18/2020

Time:

Duration: 30:00

CONSUMER 101

WIFI, ART THOU SAFE? [CNR218]

Host Jack Rico and the experts at the testing labs will teach us how to keep your home powered during a blackout, how to avoid the dangers of public WIFI, and how to maintain your home's roof. First up, we'll learn how to keep your digital privacy safe when using public WIFI connections. We'll meet with a digital privacy expert to discover how best to protect your accounts and avoid rogue WIFI networks. We'll learn that rogue networks are created by hackers and can be used to steal your passwords and other login information. We'll discover ways to protect our digital information by looking for secure networks, using firewalls, and establishing a virtual private network. Next, we'll meet with a roofing expert in the field to learn how best to maintain your home's roof. But before we check out the roof, we'll learn how to understand ladder safety ratings for different types of ladders. We'll learn that you should always maintain the three points of contact rule, which means keeping two hands and one foot on the ladder at all times. However, we'll discover that you shouldn't go on the roof yourself, leave that to the professionals. We'll

learn that a good pair of binoculars is all you need to examine your roof's condition. We'll also find out about the different types of roof shingles and how they're tested for durability. Finally, we'll discover how generators can help keep your home out of the dark during a blackout. We'll learn that a gas-powered portable generator is a good temporary option to power necessary appliances in your home. It's important to store your generator at least twenty feet outside of your home and ensure your extension cords are suitable for outdoor use. Also, be sure your extension cords can handle the total amperage of the appliances and devices you're powering. As roughly seventy people die each year of carbon monoxide poisoning from generators, it's critical to follow all safety precautions when using a generator.

[Educational Message: In this episode, we learned how to safely operate a generator during a power outage. It's important to remember that gas-powered generators produce carbon monoxide, a poisonous gas that can be fatal to humans. In the event of a power outage, remain calm and always practice safety when using a generator.]

Airdate: 4/18/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A LANDMARK COURT CASE [RLT103]

Today on Roots Less Traveled, host Faruq Tauheed takes mom and son duo, Sharee and DeVonn, on a trip to Nashville, Tennessee. We'll first find out that Nashville is named after an American Revolution general, Francis Nash. Additionally, we'll discover that after the Civil War, Tennessee was the first state to rejoin the Union on July 24th, 1866. At a visit to the Tennessee Supreme Court, Sharee and DeVonn will learn that their four-times great grandfather Larkin Ford was a part of an 1840s landmark Tennessee court case. In 1840, Larkin Ford was a slave living in Washington County and was owned by American Revolutionary war veteran, Loyd Ford. That year, Loyd Ford drew up a will that would give his slaves their freedom and his land after his death. When Loyd Ford died in 1843, his slaves, including Larkin Ford, sought to validate his will. Loyd Ford's children would contest their father's will through a series of Supreme Court cases. Remarkably, we'll learn that Larkin Ford prevailed and was awarded the very same farm that he worked on as a slave. After being awarded the property, Larkin Ford went on to become a delegate in the Republican Party and helped elect African American officials into Tennessee government. Inspired by this incredible revelation, Sharee and DeVonn volunteer to help register voters in Nashville. We'll learn that Tennessee earned its nickname "The Volunteer State" during the War of 1812.

[Educational Message: When we have a greater understanding of our roots, we can be inspired to do great things in our own lives. In this episode, Sharee and DeVonn discovered that their ancestor Larkin Ford secured his freedom and land before the Emancipation Proclamation and the end of the Civil War. Understanding the significance of this historic Supreme Court case, Sharee and DeVonn have gained a new sense of pride and appreciation for their family history.]

Airdate: 4/25/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GOING DOWN THE GANGES [EDD233]

Today on Earth Odyssey, host Dylan Dreyer takes us to the Ganges where we'll discover the fascinating creatures that live on this amazing landscape. On its epic journey from the highest mountains, through cultivated farmland, sprawling wilderness, to the Indian Ocean, the Ganges is the longest river in India. The Ganges provides a home to some of India's rarest creatures and a lifeline to millions of people living in

India. First up, we'll learn about some of the native bird species that call the Ganges home. Birds known as brown dippers can be found across the Himalayas, China, Japan, and Korea. Brown dippers have adapted to forage for food in the rocky stream beds that feed the Ganges. Their short wings are strong enough to swim under water and their blood stores more oxygen than terrestrial birds, allowing them to hold their breath for up to thirty seconds. Next, we'll learn about the local agriculture that takes place in the Ganges region. The lower reaches of India's Ganges river basin are so fertile, the locals call the area the rice bowl of India. Farmers reap four rice harvests a year in this region, which is double that of many parts of India. But these fertile fields bring dangers of their own. Here we'll learn about the monocled cobra and how it poses a threat to local farmers. We'll find out that nearly a million people are bitten by snakes each year, with monocled cobras being one of the most venomous snakes in Asia. We'll also discover that monocled cobras have specially adapted fangs that allow them to shoot venom at threats or prey. Here we'll learn how these creatures are highly revered and protected in the local Indian culture. Finally, we'll join some locals on a fascinating fishing expedition. Using a secret weapon, these fishermen utilize trained otters to help them with their catch. These locals have recruited some of nature's most talented fishermen and trained them to herd fish into their nets. The word "otter" is rooted in the same old English word that yielded the word "water." We'll discover that a group of otters is known as a "raft" when in the water, and a "family" when on land. Here we'll also learn that in China, fishermen have been able to use trained cormorant birds to help catch fish.

[Educational Message: The relationship between animals and humans is a peaceful reminder that respect goes a long way in the community. The river's unique properties nurture and sustain a spectacular array of wildlife. From demise and decay come new beginnings on the Ganges, India's great river of life.]

Airdate: 4/25/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CHARGING THROUGH CHINA [EDD234]

Today on Earth Odyssey, host Dylan Dreyer takes us to China to explore the unbelievable wildlife that roams the land. The snow-capped mountains, temperate valleys, and tropical jungles are home to a spectacular array of wildlife. Approximately half of China's birds and mammals live in this tiny region, many found nowhere else on Earth. First up, we'll learn about one of the world's most elusive animals, the red panda. Just slightly larger than a domestic cat, red pandas live a solitary life in the foothill forests of China. Similar to giant pandas, red pandas have a pseudo thumb that helps them grip bamboo. Red pandas can't digest the cellulose found in most plants, so their diet is made almost entirely of bamboo. Because bamboo nutrition levels are relatively low, they spend around thirteen hours a day feeding. We'll discover that to cope with cooler temperatures, red pandas' bodies are completely covered in fur, including the soles of their feet. Next, we'll learn about the agricultural practices of the local people. We'll learn that the Chinese have been cultivating rice for more than eight thousand years. Rice is considered a staple source of food for more than half the world's population. Here we'll learn about the rice terraces in the Hunan province and how they are some of the oldest human structures in China. Here locals have created a complex system of channels to divert water from the forested mountains to lower altitude fields. We'll discover that these man-made meadows are the perfect habitat for many wetland residents such as paddy frogs and pond herons. Finally, we'll journey to the southwest tropical region of China where we'll meet some fascinating insects. Weaver ants get their name from the unique manner in which they construct their nests. As one group of adults pulls living leaves together, another begins joining the leaf edges using a remarkable process. Using the silk produced by their larva, the ants apply the silk like a glue gun to connect

the leaves together. Weaver ants are highly territorial and aggressively defend their territories against intruders. Here we'll learn that silk weaver ants are a "monogynous" species," meaning they only have one queen per colony.

[Educational Message: Southwest China is a secret paradise where life fueling valleys play host to a vast array of creatures, many found nowhere else on Earth. The region's unique geography not only sustains food and water, it provides protection from the extreme neighboring climates. China's secret garden remains a unique and magical land.]

Airdate: 4/25/2020

Time:

Duration: 30:00

CONSUMER 101

ROBOT INVASION [CNR219]

Host Jack Rico and the experts at the testing labs will show us what to look for when buying a used car, the future of vacuuming, and how to keep pests out of your home. First up, Jack joins an auto expert to learn some tips on how to buy the best used car. We'll find out that when speaking to a dealer about buying a car, you should never reveal how much money you want to spend. We also learn that you should never let a car dealer rush you into a sale, always take your time to think it over first. We'll also find out that it's important to inspect the vehicle for any defects or damage before buying. It's also important to have a mechanic that you trust check the vehicle thoroughly for any other hidden issues. Next, we'll check out the science behind the next generation of smart home helpers, robotic vacuums. We'll meet with expert vacuum testers to learn more about how the robot vacuums are scientifically measured in a controlled environment. In order to ensure consistency and accuracy, testers use a controlled weight of a variety of different sized debris for the vacuums to pick up. Following the test, the debris picked up by the vacuums is weighed in order to determine how effective the vacuums performed. We'll also see how experts use sensor technology to generate a map of the vacuum's path to determine how well it covers the space of a room. There are a variety of different types of robotic vacuums you can purchase depending on your needs and budget. Finally, we'll meet with a home expert to learn how to avoid pests like ants from coming into your home. In order to protect your home from ants, we find out that it's best to keep your kitchen clean and tidy. We'll learn that ants are attracted to food and sweets, so it's best to keep any loose food products in an airtight container. We'll also discover that it's important to never spray pesticides to control an ant infestation. We'll find out that these products contain powerful chemicals that you would not want to expose to your family or pets.

[Educational Message: In this episode we learned about the importance of keeping your home clean and pest-free. By keeping our kitchen and homes clean, we can avoid inviting in any unwanted insect guests. We learned it's important to always keep safety in mind when handling an infestation. Never use strong chemicals or pesticides in and around your home, always leave that to the professionals.]

Airdate: 4/25/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE BROOKLYN BRIDGE [RLT104]

Today on Roots Less Traveled, host Faruq Tauheed takes aunt and nephew Tammy and Julian on a cosmopolitan adventure in Brooklyn, New York. We'll first learn that the Brooklyn borough of New York City was originally called "Breukelen," which is Dutch for "broken land." Tammy and Julian's journey

begins when they learn that they are related to undertaker John Baisley, who helped the city bury its dead during the Yellow Fever epidemic in 1856. Since the city of Brooklyn was so densely populated, hundreds died during this time and others left their homes and abandoned the city. We'll learn that while many were fleeing the city, John Baisley stayed in Brooklyn to help nurse the sick and dying, in most cases rendering his services without expecting or receiving any pay. Tammy and Julian also learn that they have direct ties to James Howell, a former Mayor of Brooklyn who served from 1878-1881. Not only was James Howell the 19th Mayor of Brooklyn, he also owned a large iron works company and became an integral part in building the iconic Brooklyn Bridge. To learn more about their ancestor's iron works company, Tammy and Julian visit a blacksmithing shop to discover what it would've been like to work as a blacksmith during that time. Here we'll discover that the craft of blacksmithing has been traced back to 1350 BCE.

[Educational Message: In this episode, Tammy and Julian discovered their family roots go much deeper than they had previously known. Tammy and her father always shared a strong connection to New York City and specifically the Brooklyn Bridge. After discovering that their relative, James Howell, was elected as the President of the trustees for the Brooklyn Bridge, Tammy's connection to the bridge grows even stronger. Sharing this experience with her nephew Julian only serves to strengthen that connection as well as their bond as a family.]

Airdate: 5/2/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

JOURNEY THROUGH JAPAN [EDD235]

Today on Earth Odyssey, host Dylan Dreyer leads us on an adventure through the incredible wildlife of Japan. Japan is a land of wildly diverse environments, consisting of nearly seven thousand islands spread over two thousand miles north to south. From snow-covered mountains to steamy subtropical mangroves, animals have adapted to survive in them all. First up, we'll travel to the Shiretoko peninsula in Northern Hokkaido to learn more about the animals that call this region home. Nearly a third of the world's population of Steller's sea eagles migrate here from Russia every winter. Steller's sea eagles are among the largest eagles in the world, sporting a wingspan of up to eight feet long. Here we'll discover that the Steller's sea eagle was named for Georg Wilhelm Steller, an eighteenth-century naturalist. Next, we'll learn more about the northern red fox and how it survives in the frozen winter wilderness. We'll discover that foxes' tails serve as both mechanisms for balance as well as warmth in the cold months. We'll follow these foxes and witness how these opportunistic scavengers seek out their prey in the frozen landscape. Finally, we'll discover more about the Japanese honeybee. We'll learn that Japanese honeybees can pollinate at temperatures as low as fifty degrees Fahrenheit. To make one pound of honey, bees must gather nectar from nearly two million flowers. Here we'll discover more about the honeybee's ancient rival, the Japanese hornet. Japanese hornets are more than five times the size of the honeybee and they pack an extremely potent venom. However, the Japanese honeybee has developed a unique and grisly defense tactic against the hornets. Up to five hundred bees form a ball surrounding the hornet and their vibrating bodies heat its core to more than one hundred and ten degrees Fahrenheit. The bee's secret weapon is a tolerance to two-degree greater heat than their enemy. This fascinating technique relies on teamwork and allows the honeybees to subdue much larger threats.

[Educational Message: Japan's extremely diverse landscape and vast ecosystems create a home for all types of creatures. From the smallest bees, to the largest eagles, there's no shortage of fascination for this wild animal kingdom.]

Airdate: 5/2/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

A CAMPAIGN IN CAMBODIA [EDD236]

Today on Earth Odyssey, host Dylan Dreyer takes us on an incredible journey to Cambodia. Bordered by the countries Thailand, Laos, and Vietnam, Cambodia is part of a region known as Indochina. Cambodia is home to an incredibly diverse group of wildlife, including over one hundred and twenty species of mammal. First up, we'll learn about the giant ibis, the national bird of Cambodia. With only a few birds observed in neighboring Laos and Vietnam, Cambodia is home to ninety percent of the world's population of giant ibis. While they normally remain in pairs or family groups, during the tough dry season they flock together to feed in the shrinking wetlands. Here we'll learn that the giant ibis feeds on a variety of amphibians, reptiles, insects, and other small animals. The giant ibis also relies on larger grazing animals to dig holes which create pools for the birds to feed. Next, we'll travel to lowland forests of Cambodia to discover more about Indochinese silvered langurs. Long muscular legs and gripping feet make them exceptional climbers. Agility is key to survival and they're perfectly designed for their world. Silvered langurs are also known as leaf monkeys due to their almost exclusively leafy diet. As some of the leaves they eat contain toxins, their large specialized stomach allows them to digest otherwise poisonous leaves. Silvered langurs have also been observed eating clay, potentially as an antacid to their acidic diet. Finally, we'll journey down the Mekong River and learn more about the aquatic inhabitants of the region. We'll discover that the Mekong River is the longest river in Southeast Asia and the twelfth longest in the entire world. Here we'll meet one of Cambodia's rarest and most revered predators, the Siamese crocodile. With only around two hundred and fifty remaining in the wild, this is a species on the brink. This prehistoric crocodile has mastered its hunting technique over millennia. Having walked with dinosaurs, relatively little has changed over the years. Scavenging the dead and hunting the weak, the Siamese crocodile performs a vital role for Cambodia's wildlife. Here we'll also discover that Siamese crocodiles are not able to grow past twelve feet in length from head to tail.

[Educational Message: Cambodia's wild land of monsoon rains, raging rivers, and flooding lakes provide some of the most unique habitats on Earth. Life giving waters carve out environments, providing opportunities for some and challenges for others. It's a land where lost civilizations have been rediscovered and where animals face a daily battle to survive. A tidal wave of life feeds Cambodia, the water kingdom.]

Airdate: 5/2/2020

Time:

Duration: 30:00

CONSUMER 101

ELECTRIC PAST IS PRESENT [CNR220]

Host Jack Rico and the experts at the testing labs teach us about electric cars, show us how to rid your home of nasty allergens, and teach us how to secure our digital privacy. First up, we'll meet with a group of experts to find out ways to keep your digital privacy safe. We'll discover that "smart" household items such as door locks, cameras, refrigerators, and even lightbulbs can be accessed by hackers if you're not careful. We'll learn that you should have a strong password and always update the firmware for these devices. We'll discover that firmware is actually a type of software that runs the hardware of whatever device you're using to connect to the internet. It's vital to keep your firmware updated so that you always have the latest security fixes. Next, we'll meet an expert on the auto test track to learn more about the past and present of electric cars. Here we'll learn that the first fully electric vehicles were built in the early 1900's. As technology has

changed drastically over the last hundred years, we'll now see how the electric cars of today have evolved. Here we'll learn that electric cars now include technology that captures energy normally lost during braking and sends that energy to the car's batteries. Known as regenerative braking, this technology uses the car's generator to help slow the car down. Finally, we'll meet with an expert to learn about various allergens and how to keep them out of your home. We'll discover that it's important to vacuum your home at least once a week, as dust can contain mites, pollen, pet dander, and even cockroach droppings. Also, we learn that if you have allergies, it's recommended that you use a vacuum with a HEPA, or High Efficiency Particulate Air filter. Also, be sure your vacuum has a bag instead of a bin to avoid releasing those allergens back into the air when emptying.

[Educational Message: In this episode, we learned about the importance of protecting your personal information and digital privacy. We learn that many “smart” household items such as doorbells and refrigerators can be a gateway to our personal information. Changing passwords and updating firmware can help prevent hackers from stealing your information.]

Airdate: 5/2/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO MILLIONS [RLT105]

Today on Roots Less Traveled, host Faruq Tauheed takes uncle and nephew Al and Jr on an ancestral trip to Havana, Cuba. We'll discover that stretching almost 750 miles east to west, Cuba is the largest known island in the Caribbean Sea. The city of Havana is one of the fifteen provinces of the Republic of Cuba. Here Al will learn that his grandfather, Joseph Barlow, owned and developed thirty-four blocks of downtown Havana. This area, approximately equal to 1.6 miles, also includes the now-famous suburban neighborhood Buena Vista. We'll learn that Joseph Barlow once owned the Barlow-Cuba Company of Havana. Appraised at over \$4 million during the early 1900's, the Barlow-Cuba Company was an extremely successful business. But due to an unfortunate turn of fate, Joseph Barlow lost his riches in a political coup. Joseph Barlow had previously purchased the land under old Spanish grants that were later ruled illegal by the Republic of Cuba. Joseph Barlow's property was soon seized under a provisional decree of President Zayas. Still a rich man, Joseph Barlow started a legal fight against the order but was turned down in every court in Cuba and eventually spent his entire fortune. We'll discover more about the history of Cuba and how after a 54-year-long dispute, Cuba and the United States reestablished their diplomatic relations in 2015. As Al and Jr connect over their own entrepreneurship, they learn where their family's resilience came from.

[Educational Message: In this episode, Al and Jr uncovered incredible family roots in Cuba they did not know existed. The duo discovered that their relative Joseph Barlow had achieved great wealth and success as an entrepreneur in Havana, Cuba. However, due to political and governmental changes in the region, Joseph Barlow eventually lost his great fortune. As both Al and Jr are also entrepreneurs, they connect and bond deeply over their relative's struggles and tragic end.]

Airdate: 5/9/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

MALAYSIA [EDD201]

Today on Earth Odyssey, host Dylan Dreyer takes us to Southeast Asia to the diverse country of Malaysia. Malaysia is one of seventeen countries identified as megadiverse, meaning these countries harbor the majority of Earth's species. First up we'll meet a group of proboscis monkeys and learn more about their jungle habitat. We'll discover that proboscis monkeys are named for their noses, where "proboscis" means a long, flexible snout. Next, we'll learn more about a fascinating plant species known as a pitcher plant. Known as carnivorous plants, there are roughly ninety known species of pitcher plants, also known as "nepenthes," across the world. We'll discover how these unique plants have adapted over time to attract and trap their next meals. Finally, we'll meet one of the most endangered animals in the world. Found only in Malaysia and Indonesia, the orangutan is one of our closest cousins sharing over ninety-seven percent of their DNA with humans. We'll discover that orangutans can naturally live up to around forty years old in the wild and over sixty years in captivity.

[Educational Message: The orangutan and the other amazing animals we learned about make up the diversity that gives Malaysia one of the most fascinating pallets of wildlife in the world. We must do our part to protect the natural world around us for future generations to come.]

Airdate: 5/9/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THAILAND [EDD202]

Today on Earth Odyssey, host Dylan Dreyer takes us on an adventure to Thailand where we meet an array of exotic plants and animals. Thailand was previously known as "Siam" from the 12th century until it was renamed "Thailand" in 1939. Surrounded by four countries, and between two seas, Thailand is a melting pot for wildlife across the region. First up, we'll meet a predator that sits at the top of the food chain, the Indochinese tiger. We'll learn that Thailand is thought to contain one of the largest populations of these cats in the world. We'll discover that with their powerful, long hind legs, tigers can jump distances up to thirty feet. Next, we'll visit with a family of Assamese macaques, one of the five species of Old World Monkeys that call Thailand home. We'll learn that there are more than twenty gregarious, or social, Old World macaque species known in the world. We'll also discover that all macaques live in Asia except for one species, the Barbary macaque, which lives in North Africa. Finally, we'll journey to the fascinating underground caves of Thailand. Here we learn how various cave dwelling species such as bats, snakes, and otherworldly insects navigate and survive in the darkness.

[Educational Message: Senses must be finely tuned to survive in the caves of Thailand, as well as everywhere else in this exotic land. From mammals to insects, we've learned that every animal has a specific function to help them survive each day.]

Airdate: 5/9/2020

Time:

Duration: 30:00

CONSUMER 101

ZERO MPH CAR TEST [CNR221]

Host Jack Rico and the experts at the testing labs will explore the pros and cons of smart doorbells, show us how to test drive a car without driving it, and we'll get some helpful tips from experts. First up, Jack meets with an auto expert to find out what to look for when buying a new car. But there are many things to consider before taking the car out for a test drive. We'll learn that it's important to make sure you're seated comfortably in the car. We'll discover that you want to sit at least ten inches from the steering wheel as it maximizes airbag deployment and reduces possible harm to you. We'll also learn that visibility is critical when choosing a new car. Always ensure you can see out over the hood and that blind spots aren't too obtrusive. Also, it's important to find a car with simple controls that you can easily operate while driving without distraction. Next, Jack receives some helpful tips and advice from a variety of experts. One tip we'll learn is that it's important to shake up your sunscreen before applying as it helps mix up any particles that might have clumped together. We'll also discover the best insect repellants to use when outdoors that can also help to prevent ticks. Finally, we'll discover more about the technology behind smart doorbells and the benefits of owning one. We'll meet with an expert and learn how smart doorbells are scientifically tested in various settings to determine the best model for your needs. We'll also discover more about the advanced features now becoming available on smart doorbells such as facial recognition, voice control, and geofencing.

[Educational Message: In this episode, we learned how best to evaluate a new car purchase before taking it for a test drive. In order to ensure your safety, it's important to get to know the car before purchasing it. We learned that it's best to ensure you have adequate visibility and comfort when sitting in the driver's seat. By better understanding a car before you buy, you can be confident that you'll be safer on the roads.]

Airdate: 5/9/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE CIVIL WAR [RLT106]

Today on Roots Less Traveled, host Faruq Tauheed takes father and daughter Paul and Kalina to the Civil War battleground of Port Republic, Virginia. Here they will discover Paul's great grandfather, Austin D. Springer, was a drummer boy for the Union Army. We'll find out that officers directed the musicians to play certain songs that communicated orders to the soldiers. At the battlefield of Port Republic, Paul and Kalina learn that Austin Springer was taken prisoner by the Confederate Army in 1862. Based on historical evidence, it's believed that Austin Springer stayed behind to help the wounded rather than fleeing the invading Confederate Army, leading to his swift capture. However, Paul and Kalina discover that Austin Springer eventually escaped capture and hid in slave huts until he made his way back to the Union Army. In order to better understand the conditions soldiers faced during this time, Paul and Kalina will join a Civil War re-enactment group to learn what it took to live as a soldier in the Union Army at that time. Paul, a Navy veteran who served in the Vietnam war, connects his own experience and believes that being a combat Veteran is in his genes.

[Educational Message: In this episode, Paul and Kalina connect to a side of their family history that was previously unknown to them. They discovered that their relative Austin Springer served in the

Union Army and was taken prisoner by the Confederate Army after he decided to stay behind and take care of the wounded. Paul draws from his own experiences serving in the Navy and feels a deep connection to Austin Springer's courage and resilience. This experience brings Paul and Kalina closer together and gives them a new understanding of where they come from.]

Airdate: 5/16/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VENEZUELA [EDD203]

Today on Earth Odyssey, host Dylan Dreyer takes us to one of the longest and largest rivers in the world: The Orinoco River. First, we learn that the Orinoco River curls around the Northeast corner of South America, draining more than three hundred and eighty thousand square miles of Venezuela, Colombia, and Brazil. At the river's mouth, the Orinoco Delta stretches three hundred miles along the coast of Northeast Venezuela. We'll also discover that the wet and dry seasons of the Orinoco River's climate are controlled by the north to south migration of trade winds. Next, we'll take a closer look at the four-eyed fish, one of the stranger creatures that calls the Orinoco River home. But we'll discover that these creatures actually have two eyes, each split in half so it can focus above and below the surface. Like primitive mudskippers, we'll learn that four-eyed fish occasionally beach themselves in search of food. Finally, we'll meet the only people to have made the Orinoco Delta their permanent home. Known as the "canoe people," the Warao have chosen a precarious way of life on the Orinoco. Here we'll learn how these people have designed and constructed their homes to withstand the twice daily floods that occur. However, we'll discover that these riverside homes are not permanent. When the support timbers rot or food becomes scarce, the nomadic Warao people will seek out a new home.

[Educational Message: The many long-time locals of the Orinoco give back to the river as much as they receive, continuing a tradition as old and beneficial as the river itself. The Orinoco River holds many of the spectacular natural wonders we know today. We must all do our part to protect and preserve nature.]

Airdate: 5/16/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

AMAZON [EDD204]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to South America to the dense and bustling Amazon Rainforest. Formed over the last fifteen million years, the Amazon covers three million square miles of South America. Today, sixty percent of the Amazon lies in Brazil, while the remaining forty percent is spread across eight more countries. This vast rainforest straddles the equator making it permanently hot and wet, the ideal conditions for creating and maintaining life. First up, we'll meet with a group of red howler monkeys that call the Brazilian Amazon home. Weighing in as one of the heaviest monkeys in the forest, we'll witness how these animals have adapted to a life in the trees. Next, we'll come down from the canopy and discover more about the insects teeming on the forest floor. Here we'll learn how army ant colonies are made up of several groups with specific jobs including foragers and defenders. We'll also discover how over three hundred species of birds and butterflies rely on army ants for survival. Finally, we'll visit with a sloth and learn more about how this species has adapted to life in the Amazon. We'll learn that sloths spend their entire lives in just a handful of trees, only coming to the ground once a week. Also,

we'll discover that modified muscles allow a sloth to hang for hours in positions other mammals would find impossibly uncomfortable.

[Educational Message: Being dependent on one habit and food source makes animals like the sloth very vulnerable to change. But such specialized ways of life are one of the reasons the Amazon is so diverse. We've only just scratched the surface of the marvels within this lush, life-giving ecosystem. We must all do our part to protect it.]

Airdate: 5/16/2020

Time:

Duration: 30:00

CONSUMER 101

FOLLOW THE BEAT [CNR222]

Host Jack Rico and the experts at the testing labs will give us a fascinating look at what happens to sound in an anechoic chamber, show us how best to clean a dirty car, and teach us the science behind air conditioner testing. First up, we'll meet with an expert to learn how best to clean a dirty vehicle. We'll find out that cup holders trap a significant amount of dirt and debris. We'll learn some cool tricks and tips on how to easily remove mess from small spaces using cotton swabs and wooden skewers. We'll also discover that objects like the steering wheel and gear shifter should be cleaned often, even if they don't look dirty. These touch areas can harbor dangerous germs and bacteria, so it's important to keep those clean. Next, we'll visit the lab with a home expert to find out the science behind air conditioner testing. In a climate-controlled chamber, we'll see how experts measure the effectiveness of various types and sizes of air conditioners. Testers can also change the size of the control room to replicate different sized spaces of rooms. Using thermocouples, or electrical sensors that measure temperatures, testers can scientifically determine exactly how well the various air conditioners perform. Here we'll learn about the various sizes of air conditioners and how to pick the best one for your home. Finally, we'll visit an echo-less room, known as an anechoic chamber. Here we'll learn how an anechoic chamber is specifically designed to absorb all sound waves in a particular area. We'll join an expert and discover the many scientific uses of an anechoic chamber. We'll learn that echoes interfere with scientific measurements and that it's critical to eliminate any sound waves in order to discover the true sound of a product. We'll also join a group of high school music students as they test out various musical instruments to see how they sound differently in an anechoic chamber.

[Educational Message: In this episode, we learned about the importance of keeping your car clean and tidy. Food waste and other garbage can attract pests and bacteria. It's important to keep trash out of your car and clean high touch areas to prevent the spread of germs. Also, you don't want to keep heavy things like large water bottles in your car as these objects can become projectiles in the event of an accident or even heavy braking.]

Airdate: 5/16/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO WHALERS [RLT107]

Today on Roots Less Traveled, host Faruq Tauheed takes brother and sister Ashley and Elliott back to their grandparents' hometown of Martha's Vineyard, Massachusetts. During their trip, they get a sailing lesson and learn that their five-times great grandfather, Henry Osborn, was taken prisoner on a boat in the Revolutionary War. We'll learn that the American Revolutionary War took place from April of 1775 to September of 1783. On their sailing lesson, Ashley and Elliott will learn what it would have been like to be a shipmate on a similar sea vessel during that time. We'll find out that sailboats have been used throughout

human history beginning as early as 1200 BCE. Ashley and Elliott soon discover that their three-times great-granddad, Samuel Osborn, went from debtor's prison to owning a fleet of whaling ships. Not only did Samuel Osborn represent an incredible "rags to riches" story, we'll also find out he was hailed as a local hero in 1871. It was common at the time for vessels from Massachusetts to venture into the Arctic to hunt the regional bowhead whale. On one particular voyage, weather proved to be disastrous and left thirty-three whaling ships stranded in icy peril. We'll find out that Samuel Osborn sent ships of his own to rescue the men, helping to bring more than a thousand people home safely. We'll discover that whaling in the Americas peaked from the late 1700s through the mid-1800s. At its peak, the whaling industry was the fifth largest economic sector in the United States. A surprise visit from Ashley and Elliott's parents allows them to share their newfound family history.

[Educational Message: In this episode, Ashley and Elliott discovered many unknown facts about their family history in Martha's Vineyard, Massachusetts. The two learned that their three-times great-grandfather, Samuel Osborn, went from debtor's prison to becoming a wealthy businessman. Not only did Samuel achieve great success, he became a local hero and savior in the Martha's Vineyard whaling community. Samuel Osborn's underdog beginnings and eventual heroic efforts as a whaler resonated deeply with Ashley and Elliott. In the end, Ashley and Elliott get to share this information with their parents, strengthening their connection to Martha's Vineyard and to each other.]

Airdate: 5/23/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PATAGONIA [EDD205]

Today on Earth Odyssey, host Dylan Dreyer takes us to South America where the region of Patagonia hosts a wide variety of animals. Stretching from Argentina to Chile, Patagonia is home to the largest dinosaur fossil ever found, the second oldest tree on Earth, and a species of flightless bird that almost outnumbers humans. First up, we'll meet a colony of Magellanic penguins that just returned to the shores of the Punta Tombo Reserve after spending six months at sea. Here we'll learn that the Punta Tombo Reserve in Patagonia hosts the largest known colony of Magellanic penguins in the world. We'll discover that penguin couples always return to the same nest year after year to breed. We'll also learn that penguins have a special filter near their eyes that allows them to expel salt if they accidentally swallow sea water. Next, we'll meet a group of beavers living in Patagonia and learn how they adapt to the changing seasons. Well adapted to aquatic environments, we'll discover that beavers can swim within twenty-four hours of being born. Finally, we'll learn about the guanacos of Patagonia. We'll discover that llamas descended from guanacos that were domesticated in South America over six thousand years ago. Supremely adapted to surviving in the cold elements, guanacos have a double coat of fur that helps them cope with the extreme temperatures.

[Educational Message: Patagonia is one of South America's last great wildernesses, making it one of the most fascinating regions in the world. The low plains, high mountains, and icy glaciers give this land the diversity it needs to be home to a variety of animals. The ability to adapt to one's environment is critical to ensure survival.]

Airdate: 5/23/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THE PANTANAL [EDD206]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to the wild Pantanal region of South America. Known as the largest wetland in the world, the Pantanal is ten times larger than the Everglades in Florida. Situated in the center of South America, the vast majority of the Pantanal lies in Brazil, while the rest is in Bolivia and Paraguay. We'll learn that the Pantanal wetlands are estimated to be larger than roughly twenty-nine U.S. states combined. First up, we'll discover more about the fascinating species of birds that call the Pantanal wetlands home. We'll witness the daily routines of local birds such as parakeets and macaws. Second only to the hyacinth macaw, we'll learn that red and green macaws are one of the largest parrot species on Earth. Next, we'll discover more about the predators roaming the Pantanal wetlands, such as the jaguar. Weighing over two-hundred pounds, the jaguar is one of the heaviest cats in the world. Here we'll learn that due to a large supply of food, jaguars in this region are twice the size of other jaguars found in Latin America. Finally, we'll journey to one of the mightiest waterfalls in the Americas, Iguazu Falls. Shaped like a giant horseshoe, Iguazu Falls is made up of two-hundred and seventy-five falls dropping over two-hundred feet into a narrow chasm. Stretching almost two miles across, we'll also learn that Iguazu Falls is nearly three times the width of Niagara Falls.

[Educational Message: All of the rivers from the Pantanal eventually flow into the Rio Plata, creating the second largest river basin on Earth. The Pantanal plays a crucial role in controlling this massive volume of water, acting like a giant sponge. During the wet season, it acts as a natural break, preventing flash floods from hitting Southern Brazil, Paraguay, and Argentina. During the dry season, it becomes a vital reservoir.]

Airdate: 5/23/2020

Time:

Duration: 30:00

CONSUMER 101

CANCELING NOISE AND THE SECRETS OF SAFE RIDING [CNR223]

Host Jack Rico and the experts at the testing labs will show us how to safely share the road when riding a bike, teach us the science behind noise cancelling headphones, and show us how to keep winter ice out of your pipes. First up, we'll join auto experts on the test track to learn how to safely share the road on a bicycle. Today, we'll find out how to safely operate a car near a bicyclist, as well as how to safely ride your bicycle near moving cars. We'll first discover that you should always allow three feet or more of space between you and a cyclist when driving a car. We'll also learn that you never pass a cyclist on a blind turn. Additionally, as a driver, you should always be aware of your blind spots and must allow cyclists to pass before making right turns. As a cyclist on the road, we'll learn you should always have your bike maintained before taking it out on the road. Additional safety precautions such as bike lights and reflective or bright clothing are critical. Here we'll also learn about the various hand signals cyclists must use to alert cars around them. It's also important to never use headphones while riding a bicycle to ensure you can always hear your surroundings. Next, we'll join an expert and visit the anechoic chamber in the testing labs to find out how noise cancelling headphones are evaluated. Here we'll witness how noise cancelling headphones are scientifically measured and tested for their effectiveness. We'll discover how soundwaves work and how they're comprised of two main components, compressions and rarefactions. Finally, we'll meet with a home expert to learn how to keep the pipes in your home from freezing up during the winter. If the temperature

outside drops below freezing, and your pipes aren't well insulated, the water inside can turn to ice and burst your pipe. Even a small hole can release hundreds of gallons of water and cause thousands of dollars' worth of damage. We'll get expert tips on how to ensure your home is ready for winter and what to do in the event of a water emergency.

[Educational Message: In this episode, we learned how to safely use your bicycle on the roads. Sharing the road with cars can be very dangerous, so it's critical that you follow all the necessary safety precautions. Always wear bright, reflective clothing and ensure you have safety lights on both the front and back of your bicycle. Also, always be aware of your surroundings and never wear headphones while riding your bicycle.]

Airdate: 5/23/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE PAST [RLT108]

Today on Roots Less Traveled, Host Faruq Tauheed takes us back to look at some of our most memorable moments. First, we'll follow Rob and Michelle to Mexico City. Their journey includes a trip to the ornate National Palace where they learn that their second cousin Ernesto gave the keys to Mexico City to President John F. Kennedy. Rob and Michelle also discover that their third cousin Manual Uruchurtu died on the Titanic, after giving up his seat on a lifeboat to a woman in need. Next, we go to Cuba where uncle and nephew Al & Jr. bond while learning that Al's grandfather Joseph Barlow owned thirty-two blocks in downtown Havana. We'll learn that Joseph Barlow once owned the Barlow-Cuba Company of Havana. Appraised at over \$4 million during the early 1900's, the Barlow-Cuba Company was an extremely successful business. But due to an unfortunate turn of fate, Joseph Barlow lost his riches in a political coup. Finally, we go on a historical Tennessee adventure with mother and son Sharee and DeVonn. At a visit to the Tennessee Supreme Court, Sharee and DeVonn will learn that their four-times great grandfather Larkin Ford was part of an 1840s landmark Tennessee court case. Larkin Ford was a slave whose owner granted him his freedom and left him property in his will years before the Emancipation Proclamation declared an end to slavery in the United States. Although the will was contested, the court ultimately ruled in Larkin Ford's favor, and he went on to become a delegate in the Republican Party, helping to elect African American officials into Tennessee government.

[Educational Message: By learning more about our past, we can learn more about ourselves and where we come from. In this episode, we witnessed several stories of family members discovering incredible information about their historical roots that was previously unknown. By filling in the gaps of their history, these family members are able to forge stronger connections with each other in the present.]

Airdate: 5/30/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THAR DESERT [EDD207]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to one of the biggest and most populated deserts in the world. Situated in Northern India, the Thar Desert is also known as the Great Indian Desert and is the seventh largest desert in the world. Temperatures here can soar to over one-hundred and twenty degrees Fahrenheit and less than two inches of rain falls each year. We begin on the Thar Desert's eastern edge in the city of Jaipur, the capital and largest city in India. Here we'll meet the rhesus macaques that live

in the city of Jaipur. While macaques traditionally live in forests, Jaipur has expanded into their natural habitat and the monkeys have now adapted to city life. Here we'll witness the dynamics of how humans and macaques coexist in a crowded and bustling city. Next, we'll travel to the Aravalli Hills region of the Thar Desert to meet India's most iconic predator, the Bengal tiger. The Aravalli Forest is home to around thirty of India's remaining fifteen-hundred Bengal tigers. At nearly one-hundred and fourteen decibels, we'll learn that a Bengal tiger's roar can be heard up to two miles away. Also, we'll discover that a Bengal tiger's camouflage stripe pattern is unique and that no two tigers have the exact same pattern. Finally, we'll witness the incredible migration of the remarkable demoiselle crane. To escape Asia's bitter winters, the demoiselle crane migrates over two-thousand miles to the Thar Desert each year. Battling freezing winds and thin air, these cranes will even fly over the top of Mt. Everest during their journey. Here we'll also discover that demoiselle cranes are the most common and smallest known species of crane.

[Educational Message: So harsh yet so full of life, the Thar Desert has always been a place where people and animals have needed each other. The Thar is home to more creatures than any other desert in the world because its people have a long tradition of respect for nature. We must all do our part to respect and protect our natural world.]

Airdate: 5/30/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PHILIPPINES [EDD208]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to Southeast Asia where lies the island chain of the Philippines. The Philippines are made up of over seven-thousand tropical islands in the Western Pacific Ocean. Among the most ancient islands on Earth, the Philippines have the world's fifth longest coastline. We'll also learn how the islands were named after King Philip II, who ruled Spain during the sixteenth-century age of exploration. First up, we'll visit the dense rainforests of the Philippines to discover more about the plant and insect species that inhabit the region. We'll learn more about the forest scorpion and how it uses a special venom to subdue its prey. We'll discover that some scientists believe scorpions were one of the first species to switch from water to land dwellers. Next, we'll visit with a creature unique to this region, known as a binturong. One of the Philippines' rarest and most elusive animals, the binturong is one of the few Old World mammals that has a fully prehensile tail. Also known as a "bearcat," we'll learn that the binturong's closest relatives are the African civet and genet. Finally, we'll journey underground to the fascinating cave systems of the Philippines. We'll learn how caves are formed when groundwater that is slightly acidic erodes the rock away until forming a hole. Here we'll discover how bats, scorpions, spiders, and other unique creatures adapt and thrive in the darkness of the caves.

[Educational Message: The Philippines are home to some of the rarest animals on Earth as many of these ancient islands are isolated and undisturbed. As a result, many unique species have flourished, uninterrupted by the modern world.]

Airdate: 5/30/2020

Time:

Duration: 30:00

CONSUMER 101

HOT CAR STORIES – TRUE OR FALSE [CNR224]

Host Jack Rico and the experts at the testing labs will show us the dangers of leaving pets and children in a hot car, how to choose the best pots and pans for making a great meal, and how to prep your air conditioner for the summer. First up, Jack meets with an auto safety expert to discuss how quickly your car can heat up

and create a potentially life-threatening situation if any loved ones or pets are left behind. We'll be going to the auto test center to measure and demonstrate exactly how hot these cars can get when unattended. Today we'll be conducting an experiment to see if the color of the car makes a difference in how hot it can get. Also, we'll be testing if cracking the windows makes a difference in the car's temperature. Using thermometers and timers, we'll witness how these experiments are scientifically conducted to accurately measure how hot the interior of the car gets, and why you should never leave children or pets in a car unattended. Next, we'll meet with an expert for tips on how to pick the best pots and pans for your kitchen. We'll discover that non-stick pans are the ideal choice for cooking delicate foods such as eggs or other items that don't require high heat. We'll learn that stainless steel pans are the best option for searing foods at high temperatures. Here we'll witness how experts scientifically test pots and pans for their performance with various foods and ranges of temperature. Finally, we'll get some helpful tips from an expert on how to maintain your air conditioner and prepare it for the summer. We'll discover that window air conditioners can harbor mold and other irritants, so it's always a good idea to store it in a dry place during the offseason. Also, always clean the air filter at the beginning of each season and be sure to wash it every month thereafter.

[Educational Message: In this episode, we learned about the dangers of leaving children and pets in cars unattended. While you should never do this at any time of the year, it's especially dangerous during the summer months. We witnessed how hot cars can get when sitting in the sun for only a short period of time. This can become a life-threatening situation for a child or pet. Always practice safety and never leave children or pets in your car unattended.]

Airdate: 5/30/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A LANDMARK COURT CASE [RLT103]

Today on Roots Less Traveled, host Faruq Tauheed takes mom and son duo, Sharee and DeVonn, on a trip to Nashville, Tennessee. We'll first find out that Nashville is named after an American Revolution general, Francis Nash. Additionally, we'll discover that after the Civil War, Tennessee was the first state to rejoin the Union on July 24th, 1866. At a visit to the Tennessee Supreme Court, Sharee and DeVonn will learn that their four-times great grandfather Larkin Ford was a part of an 1840s landmark Tennessee court case. In 1840, Larkin Ford was a slave living in Washington County and was owned by American Revolutionary war veteran, Loyd Ford. That year, Loyd Ford drew up a will that would give his slaves their freedom and his land after his death. When Loyd Ford died in 1843, his slaves, including Larkin Ford, sought to validate his will. Loyd Ford's children would contest their father's will through a series of Supreme Court cases. Remarkably, we'll learn that Larkin Ford prevailed and was awarded the very same farm that he worked on as a slave. After being awarded the property, Larkin Ford went on to become a delegate in the Republican Party and helped elect African American officials into Tennessee government. Inspired by this incredible revelation, Sharee and DeVonn volunteer to help register voters in Nashville. We'll learn that Tennessee earned its nickname "The Volunteer State" during the War of 1812.

[Educational Message: When we have a greater understanding of our roots, we can be inspired to do great things in our own lives. In this episode, Sharee and DeVonn discovered that their ancestor Larkin Ford secured his freedom and land before the Emancipation Proclamation and the end of the Civil War. Understanding the significance of this historic Supreme Court case, Sharee and DeVonn have gained a new sense of pride and appreciation for their family history.]

Airdate: 6/6/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PADDLING THROUGH THE PANTANAL [EDD227]

Today on Earth Odyssey, host Dylan Dreyer leads us on an adventure through the rivers of the Pantanal. Known as the largest wetland in the world, the Pantanal is ten times larger than the Everglades in Florida. Situated in the center of South America, the vast majority of the Pantanal lies in Brazil, while the rest is in Bolivia and Paraguay. First up, we'll follow local fisherman and learn how they rely on the waters of the Pantanal for their survival. We'll discover that the Pantanal is home to an estimated three-hundred and twenty-five species of fish. We'll learn about the unique fishing techniques that have been used by the local villages for centuries. Here we'll also learn about the giant river otter that calls the Pantanal region home. Nearly six feet long and weighing more than sixty-five pounds, it fully merits its name. Unlike most otters, giant river otters live in groups and hunt in packs. Here we'll discover that giant river otters have an average lifespan of roughly twelve years in the wild. Next, we'll learn more about one of the top predators in the Pantanal region, the jaguar. With water to drink, shade from the sun, and a platform from which to spy prey, overgrown riverbanks are the perfect environment for jaguars. We'll discover that jaguars are excellent swimmers and have been seen swimming across the Panama Canal. Finally, we'll learn more about the tufted capuchin monkeys that inhabit this region. We'll discover that these monkeys use the riverside corridors of the Pantanal to spread south to the Amazon. Capuchins are highly social and have been observed sharing territories with other primate species. We'll learn that tufted capuchins have also been observed using objects, such as rocks, as tools to crack open nuts or fruits.

[Educational Message: The wet landscape and warm climate of the Pantanal creates a hub for an incredible number of diverse fish and mammals. The traditions that are still alive in the Pantanal are central to the survival of the local villages.]

Airdate: 6/6/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

HIKING THE HIMALAYAS [EDD228]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to the Himalayas, where the extreme landscape doesn't stop the unique diversity that calls this mountain range home. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. First up, we'll learn about the fascinating bar-headed geese. These geese head south over the Himalayas to the warmer winter-feeding grounds of Northern India. But traveling more than nine-hundred miles in a single day isn't this bird's only claim to fame. Bar-headed geese choose to fly at an altitude few other creatures could barely imagine, including humans. We'll discover that bar-headed geese can fly as high as thirty-thousand feet for brief periods of time. These birds have even been spotted flying over Mt. Everest, the tallest mountain in the world. Next, we'll discover how the Himalayas have shaped the cultures of Southern Asia. Many peaks of the Himalayas are seen as sacred, and religions such as Buddhism have a strong physical presence in the remotest of areas. Prayer flags flapping in the wind break the silence across the numerous mountain passes. For centuries, Buddhist pilgrims have draped these pennants across valleys and places of spiritual practice for the wind to carry their written prayers across the landscape. Here we'll discover that the colors of prayer flags are said to represent Earth's elements of sky, air, fire, water, and earth. Finally, we'll learn more about the Asiatic black bear that calls the Himalayas home. Despite being similar in size to its American relative, a distinctive cream-colored

crescent at the center of its chest gives this Himalayan resident its unique identity. We'll discover that the shape of the crescent on its chest gives this species the nickname "moon bear." Although armed with two-inch long curved claws and canine teeth designed for tearing meat, this predator is primarily a vegetarian. Berries, grasses, roots, and the occasional insect make up the majority of its diet.

[Educational Message: The Himalayas is an unbelievable region in our world. From the ancient cultures that are still practiced today, to the animals that thrive in such harsh environments, this mountain range is one of the most fascinating places on Earth.]

Airdate: 6/6/2020

Time:

Duration: 30:00

CONSUMER 101

TALKING TO THE FUTURE [CNR225]

Host Jack Rico and the experts at the testing labs will teach us about the future of car technology, how to choose the right lawnmower, and how we can keep our information private when using smart televisions. First up, we'll join an auto expert to learn more about the future of technology on the roads. Vehicle to Everything, or V2X, is a newly developed technology that can enable vehicles to communicate with one another. V2X can also share information with the city's infrastructure, communicating everything from road conditions to traffic information and beyond. We'll discover that this technology has been implemented in cities and is already showing positive results. The goal is that V2X can help save lives by being implemented on ambulances, police vehicles, and fire trucks to better allow them to respond to incidents more quickly. Next, we'll meet with a lawn mower expert to learn more about lawn mowers and how to find the best one for your needs. We'll discover that there are many different types of lawn mowers such as push, self-propelled, battery powered, lawn tractor, and zero-turn radius. We'll learn that each mower is specifically designed and suited for different sized jobs. We'll also learn that it's important to wear ear protection when using a lawn mower. Finally, we'll join an expert to learn more about smart televisions and how they might be collecting our personal information. We'll discover that smart televisions are capable of collecting data on our viewing habits via the Automatic Content Recognition technology. Here we'll learn some tips on how to disable these functions and keep our personal information private.

[Educational Message: In this episode we learned about new technology changing the way we stay safe on the road. The new V2X technology is proving to be a vital tool in helping cities manage traffic, busses, and plows. Implementing this technology in emergency response vehicles will help reduce response time and allow help to get where its needed as fast as possible.]

Airdate: 6/6/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A PURPLE HEART [RLT102]

Today on Roots Less Traveled, host Faruq Tauheed takes 80-year-old dancing Grandpa Evan and his grandson Scott to Billings, Montana. We'll learn that the state of Montana became a U.S. territory during The Gold Rush of 1864. Here the duo will learn that Evan's great-grandfather was an integral part of the U.S. western states expansion of 1862 and had even cultivated a 160-acre farm. We'll discover that this was made possible by the Homestead Act, which was signed into law by President Abraham Lincoln in 1862. We'll also find out that between 1880 and 1890, the population of Montana grew from 39,000 to 143,000. Montana is nicknamed "The Treasure State" due to its availability of agate, gold, silver, and other precious stones. But closer to Evan's heart, he learns that two of his uncles who he had met when he was a child,

were both prisoners of war in WWII. Even more fascinating, Evan and Scott discover that both of their uncles received Purple Hearts. We'll find out that the Purple Heart Medal is a combat decoration awarded to members of the U.S armed forces who are wounded or killed while serving in the military. After this discovery, Evan and Scott deeply connect while visiting the Montana Purple Heart Memorial to honor their veteran relatives.

[Educational Message: When we look deeper into our past, we can gain a better understanding of our roots. In this episode, Evan and Scott learned that their relatives both served in WWII and were even taken as prisoners for several years. Given that he once served in the Air Force himself, Evan gains a new connection to his uncles and their military past. Understanding the incredible sacrifice and courage of their ancestors has brought Evan and Scott closer together.]

Airdate: 6/13/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VOYAGE IN VANCOUVER [EDD229]

Today on Earth Odyssey, host Dylan Dreyer takes us to Vancouver, where we will explore the beautiful landscape and diversity of animals that are native to this area. Located off the west coast of Canada, Vancouver Island stretches approximately two-hundred and eighty miles long by about sixty miles wide. Vancouver Island is known as the largest island off the west coast of North America. First up, we'll learn about the humpback whales that call that waters of Vancouver home. Reaching fifty-two feet in length and weighing more than thirty-six tons, the humpback whale is the fifth largest animal on the planet. The humpback's enormous frames are fueled by small schooling fish like herring and swarms of tiny shrimp-like crustaceans known as krill. These toothless whales use a mass of bristles called baleen plates to filter food from the water. We'll discover that there are over ten known whale species with baleen plates, categorized as "baleen whales." Baleen bristles can be anywhere from two inches to twelve feet long and are made of the same material as our fingernails. Next, we'll travel to East Sooke Park on the southern tip of Vancouver Island where thousands of turkey vultures gather creating a unique spectacle. Masters of soaring flight, turkey vultures aren't strong flyers and rely on winds and thermal currents to keep them aloft. This efficient way of traveling uses just a fraction more energy than when they're standing still. We'll discover that turkey vultures can have a wingspan of roughly six feet and can weigh up to four pounds. We'll learn that turkey vultures are also known as buzzards or carrion crows in some parts of North America. Finally, we'll meet with the island's largest predator, the black bear. Vancouver Island is home to seven thousand to twelve thousand black bears, one of the highest concentrations of black bears in the world. Darker than mainland bears and slightly larger, the black bears of Vancouver Island can weigh up to six-hundred pounds. We'll discover that adult black bears can gain roughly thirty pounds of fat per week when preparing for hibernation.

[Educational Message: Vancouver Island is a region with giants both on land and in the ocean. These creatures have learned to master the cold and the elements to ensure survival for themselves and their offspring. With the nutrients that Vancouver Island receives from the life cycle from all living things, animals continue to thrive in this unbelievable habitat.]

Airdate: 6/13/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

EXPLORING AROUND THE ANDES [EDD230]

Today on Earth Odyssey, host Dylan Dreyer leads us on an amazing adventure to the Andes Mountains, one of the most biodiverse regions on the Earth. At over forty-five hundred miles long, and one-hundred and twenty miles wide, the Andes are an epic landscape of snow-capped mountains and belching volcanoes. We'll learn that the average peak height in the Andes Mountain Range is roughly thirteen thousand feet. First up, we'll travel to the Altiplano region of the Andes to discover more about the creatures that inhabit the area. Due to volcanic activity, toxic lakes have formed in the high altitudes of the Altiplano region. We'll discover that colorful plankton and algae thrive in these mineral rich waters. In the spring, flamingos are attracted to these lakes to feed. Here we'll discover that three of the world's six species of flamingos gather here. All flamingos are filter feeders, targeting shrimp and algae from the salty waters. We'll discover that each species of flamingo has a different sized filter in its bill, and each gathers its food from different depths to avoid competition. Here we'll learn that this filter feeding adaptation was also found in the Pterosaur, which existed roughly one-hundred and fifty million years ago. Next, we'll meet one of the Andes' most iconic animals, the Andean bear. Andean bears are also called "spectacled bears" due to their facial markings which resemble glasses. We'll discover that Andean bears have markings as complicated and unique as human fingerprints. Here we'll witness a mother Andean bear as she teaches her cubs how to forage for food. Finally, we'll journey to the cloud forest to meet with the fascinating bird species of the Andes. In the cloud forest, the high altitude causes the nights to be extremely cold and the days very damp, meaning not many flying insects can survive here. Therefore, most plants are pollinated by hummingbirds. These birds hover in position by beating their wings up to a hundred times per second, with their heartbeat reaching nearly a thousand beats per minute. To power their incredible metabolism, they must consume more than their own weight in nectar every day. We'll discover that hummingbirds must feed from hundreds of flowers to gain enough energy to survive the cold nights.

[Educational Message: Rainfall in the cloud forest is essential to supporting the amazing biodiversity that you'll find in the Andes Mountains. From flamingos to Andean bears, this mountain range is full of danger, beauty, and intrigue.]

Airdate: 6/13/2020

Time:

Duration: 30:00

CONSUMER 101

CONQUERING THE USED CAR PURCHASE [CNR226]

Host Jack Rico and the experts at the testing labs will show us how to avoid online privacy traps, what to look for when buying a used car, and the future of vacuuming. First up, we'll meet with a privacy expert to learn how we can protect ourselves from hackers and scammers online. We'll discover that some hackers use a tactic called "phishing" in order to lure their victims. These "phishing" emails are designed to mimic official email accounts and websites, tricking people into giving up their passwords, credit card numbers, and other personal information. We'll learn that you should always confirm the legitimacy of these email accounts and websites before giving away any personal information. Next, Jack joins an auto expert to learn some tips on how to buy the best used car. We'll find out that when speaking to a dealer about buying a car, you should never reveal how much money you want to spend. We also learn that you should never let a car dealer rush you into a sale, always take your time to think it over first. We'll also find out that it's important to inspect the vehicle for any defects or damage before buying. It's also important to have a mechanic that

you trust check the vehicle thoroughly for any other hidden issues. Finally, we'll check out the science behind the next generation of smart home helpers, robotic vacuums. We'll meet with expert vacuum testers to learn more about how the robot vacuums are scientifically measured in a controlled environment. In order to ensure consistency and accuracy, testers use a controlled weight of a variety of different sized debris for the vacuums to pick up. Following the test, the debris picked up by the vacuums is weighed in order to determine how effective the vacuums performed. We'll also see how experts use sensor technology to generate a map of the vacuum's path to determine how well it covers the space of a room.

[Educational Message: In this episode, we learned the importance of protecting your online privacy. Hackers and scammers are improving their techniques each day and it's important we stay ahead of them. We must always use online apps and websites responsibly and carefully in order to protect our personal data and privacy.]

Airdate: 6/13/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE BROOKLYN BRIDGE [RLT104]

Today on Roots Less Traveled, host Faruq Tauheed takes aunt and nephew Tammy and Julian on a cosmopolitan adventure in Brooklyn, New York. We'll first learn that the Brooklyn borough of New York City was originally called "Breukelen," which is Dutch for "broken land." Tammy and Julian's journey begins when they learn that they are related to undertaker John Baisley, who helped the city bury its dead during the Yellow Fever epidemic in 1856. Since the city of Brooklyn was so densely populated, hundreds died during this time and others left their homes and abandoned the city. We'll learn that while many were fleeing the city, John Baisley stayed in Brooklyn to help nurse the sick and dying, in most cases rendering his services without expecting or receiving any pay. Tammy and Julian also learn that they have direct ties to James Howell, a former Mayor of Brooklyn who served from 1878-1881. Not only was James Howell the 19th Mayor of Brooklyn, he also owned a large iron works company and became an integral part in building the iconic Brooklyn Bridge. To learn more about their ancestor's iron works company, Tammy and Julian visit a blacksmithing shop to discover what it would've been like to work as a blacksmith during that time. Here we'll discover that the craft of blacksmithing has been traced back to 1350 BCE.

[Educational Message: In this episode, Tammy and Julian discovered their family roots go much deeper than they had previously known. Tammy and her father always shared a strong connection to New York City and specifically the Brooklyn Bridge. After discovering that their relative, James Howell, was elected as the President of the trustees for the Brooklyn Bridge, Tammy's connection to the bridge grows even stronger. Sharing this experience with her nephew Julian only serves to strengthen that connection as well as their bond as a family.]

Airdate: 6/20/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THE AMAZING AMAZON [EDD231]

Today on Earth Odyssey, host Dylan Dreyer takes us to the Amazon to explore the wildlife and the cultures that live there today. Formed over the last fifteen million years, the Amazon covers three million square miles of South America. This vast rainforest straddles the equator making it permanently hot and wet, the ideal conditions for creating and maintaining life. First up, we'll learn about ancient civilizations living

within the dense rainforests of the Amazon. We'll discover that it's now thought that five and a half million people inhabited the Amazon in the early sixteenth century. Today, there are thirty million people living in the Amazon. Many are descendants of the first waves of incomers such as rubber farmers and traders, but some are descended from people that have lived in the Amazon for ten thousand years. We'll discover that the population of the Amazon River Basin is less than ten percent indigenous. Here we'll learn about the rituals and hunting practices of the native people. We'll also witness the unique rites of passage for young boys living within the native tribes. Next, we'll discover more about the predators of the Amazon, such as the jaguar. While many cats avoid getting their feet wet, jaguars use the smaller waterways of the Amazon to move around with ease. Their large paws make excellent paddles as they hunt for fish, turtles, and even caiman. Finally, we'll discover more about the pink river dolphin. Pink river dolphins are nearly blind, but they do not require keen eyesight due to the low visibility in the murky waters of the Amazon. These creatures hunt and navigate using echolocation, an adaptation that helps the animals build a sonic picture of their underwater world. We'll discover that pink river dolphins are able to bend up to ninety degrees, allowing them to easily navigate roots and trees in the water.

[Educational Message: The traditions that have been passed down from generation to generation only add to the pure wonder of this biodiverse South American jewel. As the modern world encroaches, it's clear how vulnerable plants and animals can begin to change. The Amazon's future is in our hands and its complexities must be respected.]

Airdate: 6/20/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FINDING THE LOST WORLDS [EDD232]

Today on Earth Odyssey, host Dylan Dreyer leads us on an incredible adventure to the lost worlds of India. Known as the Seven Sisters, the Northern region of India is comprised of seven relatively unexplored and isolated states bordered by the Himalayas to the north and the Indian Ocean to the south. These seven states of India are among the least explored places on Earth. First up, we'll learn about the local inhabitants of these lost worlds of India. Although the local humans thrive among the rich forested mountains, they aren't immune to attacks from the animals they share their home with. The Indian elephant's migratory routes extend throughout the region, but their ancient paths have been seriously interrupted by the local people. Here we'll discover that elephant herds consist of about fifteen elephants on average and are typically led by the oldest female. Elephants eat an estimated fifty-six tons of food per year, totaling roughly three hundred and thirty pounds per day. As homes and crops are devastated, tensions between humans and elephants escalate. As crops spread and villages grow, further clashes seem inevitable. Here we'll learn how the local people live and work alongside these massive creatures in harmony. Next, we'll embark on a hunting journey with a local tribe and learn more about the cultural rituals of these native people. We'll also find out that traditional folk songs and dances are essential ingredients of the local culture. These celebrations are inspired by a creature that is an icon throughout Northeast India, the great hornbill. Finally, we'll discover more about the legendary great hornbill bird species. Hornbills have a long curved bill which is often brightly colored and quite heavy. Hornbills are the only birds whose first two neck bones are fused together to help support the weight of their beak. Research suggests the hornbill's impressive beak may have formed to amplify their territorial calls. Here we'll discover that hornbills primarily eat fruit but supplement their diet with small mammals, insects, and even snakes. We'll also learn that the hornbill's wings are so loud, they can be heard from long distances, even up to half a mile away.

[Educational Message: Today we witnessed an incredible connection between animals and humans that's rarely seen in the wild. Without many other places on Earth like these lost worlds, it's important to protect some of the last remaining ancient traditions our world has.]

Airdate: 6/20/2020

Time:

Duration: 30:00

CONSUMER 101

UNDER PRESSURE [CNR212]

Host Jack Rico and the experts at the testing labs teach us about smoke detectors, show us how to cook a healthy meal without using your oven, and we get expert tips on how to be a safer driver. First up, we'll meet with an appliance expert to learn how smoke detectors work and how we can keep ourselves prepared in the event of a fire. We'll witness first-hand scientific testing of smoke detectors in a controlled environment. Here we'll discover that there are two types of smoke detectors known as photoelectric and ionization detectors. We'll learn that photoelectric detectors use light to detect smoke and are less prone to false alarms. While ionization detectors are better at detecting flames than smoke, we'll learn that they are more prone to false alarms. We'll discover that dual-sensor detectors that combine both of these technologies are most recommended for your home. Next, we'll meet with an expert to learn how to cook a healthy meal without using your oven. We'll discover that appliances such as a toaster oven, air fryer, and multi-cooker can all be used instead of your oven. We'll learn that toaster ovens are beneficial because they heat up faster than a traditional oven and are ideal for baking smaller items. In order to learn more about the science of how these appliances work, we'll learn about the three ways heat is transferred- convection, conduction, and radiation. Next, we're going to learn some skills on how to become a safer driver on the roads. We first learn that it's important to always have your hands properly placed on the wheel in the nine and three o'clock positions. We next discover that it's best to use "shuffle steer" when performing a U-turn maneuver, which allows your hands to stay on the steering wheel at all times when turning. Jack will also learn about ABS, or anti-lock braking system, which prevents the wheels from locking up during braking.

[Educational Message: In this episode, we learned about the different types of smoke detectors and how they function. We discovered how ionization and photoelectric detectors use different technologies to detect smoke and fires. It's important that you choose the best smoke detector for your home. For your safety, always test your detectors monthly and replace the batteries at least once a year.]

Airdate: 6/20/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO JOHN F KENNEDY [RLT101]

Today on Roots Less Traveled, host Faruq Tauheed takes half-siblings Michelle and Rob to Mexico City. Here they will discover that they are related to the Uruchurtus, a very famous Mexican political family. Their journey includes a trip to the ornate National Palace where they learn that their second cousin Ernesto gave the keys to Mexico City to President John F. Kennedy. Here we'll find out that the Zocalo, or Plaza de la Constitucion, was previously the principal ceremonial site in the Aztec city of Tenochtitlan. Michelle and Rob happen to be in Mexico City during Dia de los Muertos, or Day of the Dead, a holiday that honors loved ones who have passed. In preparation for this annual cultural event, they soon learn their third cousin Manual Uruchurtu died on the Titanic, after giving up his seat on a lifeboat to a woman in need. We'll find out that in 1912, over 1,500 passengers perished when the Titanic sank during its maiden voyage. We'll

discover that the 2,240 people on board the Titanic are believed to have represented as many as 30 different nationalities.

[Educational Message: Connecting with our past helps us connect to parts of ourselves that we didn't know existed. In this episode, we learned that the Uruchurtu family had a cousin that gave up his lifeboat seat when the ill-fated Titanic began to sink. Michelle and Rob were moved by this selfless act of kindness, inspiring them to show more love and compassion in their own daily lives.]

Airdate: 6/27/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GOING DOWN THE GANGES [EDD233]

Today on Earth Odyssey, host Dylan Dreyer takes us to the Ganges where we'll discover the fascinating creatures that live on this amazing landscape. On its epic journey from the highest mountains, through cultivated farmland, sprawling wilderness, to the Indian Ocean, the Ganges is the longest river in India. The Ganges provides a home to some of India's rarest creatures and a lifeline to millions of people living in India. First up, we'll learn about some of the native bird species that call the Ganges home. Birds known as brown dippers can be found across the Himalayas, China, Japan, and Korea. Brown dippers have adapted to forage for food in the rocky stream beds that feed the Ganges. Their short wings are strong enough to swim under water and their blood stores more oxygen than terrestrial birds, allowing them to hold their breath for up to thirty seconds. Next, we'll learn about the local agriculture that takes place in the Ganges region. The lower reaches of India's Ganges river basin are so fertile, the locals call the area the rice bowl of India. Farmers reap four rice harvests a year in this region, which is double that of many parts of India. But these fertile fields bring dangers of their own. Here we'll learn about the monocled cobra and how it poses a threat to local farmers. We'll find out that nearly a million people are bitten by snakes each year, with monocled cobras being one of the most venomous snakes in Asia. We'll also discover that monocled cobras have specially adapted fangs that allow them to shoot venom at threats or prey. Here we'll learn how these creatures are highly revered and protected in the local Indian culture. Finally, we'll join some locals on a fascinating fishing expedition. Using a secret weapon, these fishermen utilize trained otters to help them with their catch. These locals have recruited some of nature's most talented fishermen and trained them to herd fish into their nets. The word "otter" is rooted in the same old English word that yielded the word "water." We'll discover that a group of otters is known as a "raft" when in the water, and a "family" when on land. Here we'll also learn that in China, fishermen have been able to use trained cormorant birds to help catch fish.

[Educational Message: The relationship between animals and humans is a peaceful reminder that respect goes a long way in the community. The river's unique properties nurture and sustain a spectacular array of wildlife. From demise and decay come new beginnings on the Ganges, India's great river of life.]

Airdate: 6/27/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CHARGING THROUGH CHINA [EDD234]

Today on Earth Odyssey, host Dylan Dreyer takes us to China to explore the unbelievable wildlife that roams the land. The snow-capped mountains, temperate valleys, and tropical jungles are home to a spectacular array of wildlife. Approximately half of China's birds and mammals live in this tiny region,

many found nowhere else on Earth. First up, we'll learn about one of the world's most elusive animals, the red panda. Just slightly larger than a domestic cat, red pandas live a solitary life in the foothill forests of China. Similar to giant pandas, red pandas have a pseudo thumb that helps them grip bamboo. Red pandas can't digest the cellulose found in most plants, so their diet is made almost entirely of bamboo. Because bamboo nutrition levels are relatively low, they spend around thirteen hours a day feeding. We'll discover that to cope with cooler temperatures, red pandas' bodies are completely covered in fur, including the soles of their feet. Next, we'll learn about the agricultural practices of the local people. We'll learn that the Chinese have been cultivating rice for more than eight thousand years. Rice is considered a staple source of food for more than half the world's population. Here we'll learn about the rice terraces in the Hunan province and how they are some of the oldest human structures in China. Here locals have created a complex system of channels to divert water from the forested mountains to lower altitude fields. We'll discover that these man-made meadows are the perfect habitat for many wetland residents such as paddy frogs and pond herons. Finally, we'll journey to the southwest tropical region of China where we'll meet some fascinating insects. Weaver ants get their name from the unique manner in which they construct their nests. As one group of adults pulls living leaves together, another begins joining the leaf edges using a remarkable process. Using the silk produced by their larva, the ants apply the silk like a glue gun to connect the leaves together. Weaver ants are highly territorial and aggressively defend their territories against intruders. Here we'll learn that silk weaver ants are a "monogynous" species," meaning they only have one queen per colony.

[Educational Message: Southwest China is a secret paradise where life fueling valleys play host to a vast array of creatures, many found nowhere else on Earth. The region's unique geography not only sustains food and water, it provides protection from the extreme neighboring climates. China's secret garden remains a unique and magical land.]

Airdate: 6/27/2020

Time:

Duration: 30:00

CONSUMER 101

TAKE CARE [CNR213]

Host Jack Rico and the experts at the testing labs teach us how to secure our digital privacy, share some tips to keep you safe in the kitchen, and show us how to keep our cool when hydroplaning on the road. First up, we'll meet with a group of experts to find out ways to keep your digital privacy safe. We'll discover that "smart" household items such as door locks, cameras, refrigerators, and even lightbulbs can be accessed by hackers if you're not careful. We'll learn that you should have a strong password and always update the firmware for these devices. We'll discover that firmware is actually a type of software that runs the hardware of whatever device you're using to connect to the internet. It's vital to keep your firmware updated so that you always have the latest security fixes. Next, we'll meet with a nutritionist to learn ways we can stay safe in the kitchen. Here we'll discover that you should never eat raw cookie dough. We'll learn that there are a lot of potential sources of contamination in cookie dough, such as E. coli in the flour. Flour is a raw, agricultural product, which means it isn't treated prior to being packaged. We learn that contamination can occur at any step of the production chain along the way to our kitchen. However, when the dough is baked, the heat kills any bacteria, making it safe to consume. Finally, we'll be learning about hydroplaning and how experts test tires for hydroplaning resistance. We'll first learn how tires are designed to evacuate water when driving on wet surfaces, but we discover that when traveling at higher speeds in heavy rain, the tires can lift off the road and cause your car to lose control. On a controlled test track, Jack will test the hydroplaning effects of tires at various speeds and show us how to best react when in a similar situation.

[Educational Message: In this episode, we learned about the importance of protecting your personal information and digital privacy. We learn that many “smart” household items such as doorbells and refrigerators can be a gateway to our personal information. Changing passwords and updating firmware can help prevent hackers from stealing your information.]

Airdate: 6/27/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE CIVIL WAR [RLT106]

Today on Roots Less Traveled, host Faruq Tauheed takes father and daughter Paul and Kalina to the Civil War battleground of Port Republic, Virginia. Here they will discover Paul’s great grandfather, Austin D. Springer, was a drummer boy for the Union Army. We’ll find out that officers directed the musicians to play certain songs that communicated orders to the soldiers. At the battlefield of Port Republic, Paul and Kalina learn that Austin Springer was taken prisoner by the Confederate Army in 1862. Based on historical evidence, it’s believed that Austin Springer stayed behind to help the wounded rather than fleeing the invading Confederate Army, leading to his swift capture. However, Paul and Kalina discover that Austin Springer eventually escaped capture and hid in slave huts until he made his way back to the Union Army. In order to better understand the conditions soldiers faced during this time, Paul and Kalina will join a Civil War re-enactment group to learn what it took to live as a soldier in the Union Army at that time. Paul, a Navy veteran who served in the Vietnam war, connects his own experience and believes that being a combat Veteran is in his genes.

[Educational Message: In this episode, Paul and Kalina connect to a side of their family history that was previously unknown to them. They discovered that their relative Austin Springer served in the Union Army and was taken prisoner by the Confederate Army after he decided to stay behind and take care of the wounded. Paul draws from his own experiences serving in the Navy and feels a deep connection to Austin Springer’s courage and resilience. This experience brings Paul and Kalina closer together and gives them a new understanding of where they come from.]

NBC NETWORK NON-BROADCAST EFFORTS

April - June, 2020

NBCUniversal's *The More You Know* website:

Since 1989, *The More You Know* has brought the nation's most important social issues to the forefront, and remains a trusted voice for sharing knowledge to improve lives and inspire action. *The More You Know*'s comprehensive website (themoreyouknow.com) includes in-depth resource and referral information on the campaign's important focus issues including:

- HEALTH – fighting childhood obesity, encouraging nutrition and physical fitness
- ENVIRONMENT – encouraging everyday actions that reduce environmental impact
- EDUCATION – recruiting new teachers and promoting their long-lasting impact
- DIGITAL LITERACY & INTERNET SAFETY - sharing online safety tips and information
- DIVERSITY – embracing differences and promoting inclusion, tolerance and respect

Also featured on site is The More You Know Learning series' *Growing Up Online*, a free eBook on digital literacy and Internet Safety. *Growing Up Online* is an important tool to initiate conversation with children about online safety. The eBook is a media-rich, two-part learning resource that provides easy-to-use information about navigating the digital world in a unique and engaging way. Part one includes safety tips, discussion questions and key takeaways for parents and teachers. Part two features four entertaining video comic books for children, focused on real situations that come up when kids go online.

Additional content on the site includes public service announcements, behind-the-scenes videos, a general overview, a talent directory, and a list of the campaign's accolades such as the prestigious Emmy and Peabody awards.

Note Regarding FCC's Video Description Rules: The programs supplied in **The More You Know** block are video-described to provide a better viewing experience for blind or visually impaired children.

3rd QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
July 1, 2020 – September 30, 2020

In the 3rd Quarter of 2020, NBC continued airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the four shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. There continued to be two half hours of *Earth Odyssey with Dylan Dreyer*.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

CONSUMER 101

Consumer 101 is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Hosted by Jack Rico with the help of experts and scientists from the Consumer Reports labs and testing facilities, Consumer 101 will give viewers a behind-the-scenes look into the science used to test every kind of product—from the obscure, to the fascinating, to the everyday. Each week, audiences will discover more about the surprising intricacy of product testing, learn more efficient ways to get the most out of everyday items, as well as catch a glimpse into a unique career path in the fields of science and technology. Consumer 101 is an empowering series aimed at giving teens the tools they need to make smarter choices as consumers, exploring the how, where, when, and why we spend our resources so we can all make educated decisions when it counts.

ROOTS LESS TRAVELED

Roots Less Traveled is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Roots Less Traveled follows two family members, often from different generations, as they gain a newfound understanding and respect for each other on their quest to learn more about their family history. Each week on Roots Less Traveled, a new pair will set out on an adventure to solve a mystery in their family tree. From rumors of a relative who sailed on the Titanic, to

stories of homesteaders forging a new path for future generations, our duo discovers the truth behind the tales that have been passed down in their family, while our viewers learn the personal stories behind notable historical moments. Viewers will be taken on a literal journey to unique places around the globe, learning more about the culture and history of these significant locations and events that happened there. Throughout this experience, we will witness these family members grow closer as they gain wisdom not only about themselves, but also about how their past has helped shape their present.

4th QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
October 1, 2020 – December 31, 2020

In the 4th Quarter of 2020, NBC will continue airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the six shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. There will continue to be two half hours of *Earth Odyssey with Dylan Dreyer*. Beginning in the 4th Quarter of 2020, stations will have the option of airing the final hour of the block (*The Voyager with Josh Garcia* and *Vets Saving Pets*) on their primary channel or on their secondary D2/D3 channel.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

A NEW LEAF

A New Leaf is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Hosted by Daisy Fuentes, A New Leaf will follow everyday people on the cusp of key life inflection points, using family history, genealogy, and sometimes DNA analysis to help guide them on their journey of self-discovery. Along the way, viewers will learn about different cultures as our featured guest uncovers new information about their family's heritage. Each week, A New Leaf will teach viewers the importance of appreciating and understanding their family history in order to make important decisions to enact positive changes in their lives.

THE VOYAGER WITH JOSH GARCIA

The Voyager with Josh Garcia is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. The Voyager with Josh Garcia takes viewers on

an exciting and immersive journey around the globe with world traveler and host, Josh Garcia. Each episode gives audiences access to the world's most incredible destinations as Josh seeks out the truly authentic experiences one can only find when shown by a knowledgeable and passionate guide. In each episode, Josh learns how to prepare an authentic, regional meal, visits a local artisan to learn about their trade and craft, and samples the culture while learning about the heritage of the region's population, showing viewers what is so unique about each city he visits. The Voyager with Josh Garcia brings viewers on an enthralling adventure to explore the people and cultures that make our world so breathtaking.

“CORE PROGRAMMING”

**PROGRAMMING FURNISHED BY THE NBC NETWORK THAT IS SPECIFICALLY
DESIGNED TO SERVE THE EDUCATIONAL AND INFORMATIONAL NEEDS OF CHILDREN
16 AND UNDER**

[AGE TARGET 13-16]

July 1, 2020 – September 30, 2020

Airdate: 7/4/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

JOURNEY THROUGH JAPAN [EDD235]

Today on Earth Odyssey, host Dylan Dreyer leads us on an adventure through the incredible wildlife of Japan. Japan is a land of wildly diverse environments, consisting of nearly seven thousand islands spread over two thousand miles north to south. From snow-covered mountains to steamy subtropical mangroves, animals have adapted to survive in them all. First up, we'll travel to the Shiretoko peninsula in Northern Hokkaido to learn more about the animals that call this region home. Nearly a third of the world's population of Steller's sea eagles migrate here from Russia every winter. Steller's sea eagles are among the largest eagles in the world, sporting a wingspan of up to eight feet long. Here we'll discover that the Steller's sea eagle was named for Georg Wilhelm Steller, an eighteenth-century naturalist. Next, we'll learn more about the northern red fox and how it survives in the frozen winter wilderness. We'll discover that foxes' tails serve as both mechanisms for balance as well as warmth in the cold months. We'll follow these foxes and witness how these opportunistic scavengers seek out their prey in the frozen landscape. Finally, we'll discover more about the Japanese honeybee. We'll learn that Japanese honeybees can pollinate at temperatures as low as fifty degrees Fahrenheit. To make one pound of honey, bees must gather nectar from nearly two million flowers. Here we'll discover more about the honeybee's ancient rival, the Japanese hornet. Japanese hornets are more than five times the size of the honeybee and they pack an extremely potent venom. However, the Japanese honeybee has developed a unique and grisly defense tactic against the hornets. Up to five hundred bees form a ball surrounding the hornet and their vibrating bodies heat its core to more than one hundred and ten degrees Fahrenheit. The bee's secret weapon is a tolerance to two-degree greater heat than their enemy. This fascinating technique relies on teamwork and allows the honeybees to subdue much larger threats.

[Educational Message: Japan's extremely diverse landscape and vast ecosystems create a home for all types of creatures. From the smallest bees, to the largest eagles, there's no shortage of fascination for this wild animal kingdom.]

Airdate: 7/4/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

A CAMPAIGN IN CAMBODIA [EDD236]

Today on Earth Odyssey, host Dylan Dreyer takes us on an incredible journey to Cambodia. Bordered by the countries Thailand, Laos, and Vietnam, Cambodia is part of a region known as Indochina. Cambodia is home to an incredibly diverse group of wildlife, including over one hundred and twenty species of mammal. First up, we'll learn about the giant ibis, the national bird of Cambodia. With only a few birds observed in neighboring Laos and Vietnam, Cambodia is home to ninety percent of the world's population of giant ibis. While they normally remain in pairs or family groups, during the tough dry season they flock together to feed in the shrinking wetlands. Here we'll learn that the giant ibis feeds on a variety of amphibians, reptiles, insects, and other small animals. The giant ibis also relies on larger grazing animals to dig holes which create pools for the birds to feed. Next, we'll travel to lowland forests of Cambodia to discover more about Indochinese silvered langurs. Long muscular legs and gripping feet make them exceptional climbers. Agility is key to survival and they're perfectly designed for their world. Silvered langurs are also known as leaf monkeys due to their almost exclusively leafy diet. As some of the leaves they eat contain toxins, their large specialized stomach allows them to digest otherwise poisonous leaves. Silvered langurs have also been observed eating clay, potentially as an antacid to their acidic diet. Finally, we'll journey down the Mekong River and learn more about the aquatic inhabitants of the region. We'll discover that the Mekong River is the longest river in Southeast Asia and the twelfth longest in the entire world. Here we'll meet one of Cambodia's rarest and most revered predators, the Siamese crocodile. With only around two hundred and fifty remaining in the wild, this is a species on the brink. This prehistoric crocodile has mastered its hunting technique over millennia. Having walked with dinosaurs, relatively little has changed over the years. Scavenging the dead and hunting the weak, the Siamese crocodile performs a vital role for Cambodia's wildlife. Here we'll also discover that Siamese crocodiles are not able to grow past twelve feet in length from head to tail.

[Educational Message: Cambodia's wild land of monsoon rains, raging rivers, and flooding lakes provide some of the most unique habitats on Earth. Life giving waters carve out environments, providing opportunities for some and challenges for others. It's a land where lost civilizations have been rediscovered and where animals face a daily battle to survive. A tidal wave of life feeds Cambodia, the water kingdom.]

Airdate: 7/4/2020

Time:

Duration: 30:00

CONSUMER 101

TIRES, TICKS, AND TIPS [CNR214]

Host Jack Rico and the experts at the testing labs teach us how to properly care for your lawn, show us how car tires are tested on ice, and teach us how to protect our digital privacy. First up, we'll meet with an expert to learn the best way to properly care for your lawn. We'll learn that you shouldn't cut your grass too short by never cutting more than a third of your lawn's height. We discover that longer grass promotes deeper roots and shades the soil, preventing the water from evaporating too quickly. Also, we learn to always keep your lawn mower blade sharpened as a clean cut prevents stress on the lawn. Next, we'll be joining the auto experts on an ice hockey rink to perform tire testing and evaluate how well various types of tires stop on ice. We learn that using an indoor ice rink for this test provides a controlled setting for testers to accurately measure the performance of different tires. Here we'll discover the unique differences between all-season

tires, winter tires, and summer tires. Finally, we'll find out how to limit permissions and protect your digital privacy when using cellphone applications. We'll discover that many apps attempt to request permission to your phone's contacts, photos, calendars, and more. We'll meet with an expert and learn how to best keep our information out of other people's hands.

[Educational Message: In this episode, we learned why it's important to have the proper tires on your car depending on the driving conditions. We discovered that winter tires provide much greater stopping ability than all-season tires in icy conditions. Always be sure your car is maintained and suitable for driving in any condition.]

Airdate: 7/4/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A LANDMARK COURT CASE [RLT103]

Today on Roots Less Traveled, host Faruq Tauheed takes mom and son duo, Sharee and DeVonn, on a trip to Nashville, Tennessee. We'll first find out that Nashville is named after an American Revolution general, Francis Nash. Additionally, we'll discover that after the Civil War, Tennessee was the first state to rejoin the Union on July 24th, 1866. At a visit to the Tennessee Supreme Court, Sharee and DeVonn will learn that their four-times great grandfather Larkin Ford was a part of an 1840s landmark Tennessee court case. In 1840, Larkin Ford was a slave living in Washington County and was owned by American Revolutionary war veteran, Loyd Ford. That year, Loyd Ford drew up a will that would give his slaves their freedom and his land after his death. When Loyd Ford died in 1843, his slaves, including Larkin Ford, sought to validate his will. Loyd Ford's children would contest their father's will through a series of Supreme Court cases. Remarkably, we'll learn that Larkin Ford prevailed and was awarded the very same farm that he worked on as a slave. After being awarded the property, Larkin Ford went on to become a delegate in the Republican Party and helped elect African American officials into Tennessee government. Inspired by this incredible revelation, Sharee and DeVonn volunteer to help register voters in Nashville. We'll learn that Tennessee earned its nickname "The Volunteer State" during the War of 1812.

[Educational Message: When we have a greater understanding of our roots, we can be inspired to do great things in our own lives. In this episode, Sharee and DeVonn discovered that their ancestor Larkin Ford secured his freedom and land before the Emancipation Proclamation and the end of the Civil War. Understanding the significance of this historic Supreme Court case, Sharee and DeVonn have gained a new sense of pride and appreciation for their family history.]

Airdate: 7/11/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ZANZIBAR [EDD209]

Today on Earth Odyssey, host Dylan Dreyer takes us to the coast of Africa to the archipelago of Zanzibar. Lying twenty-five miles off the coast of Tanzania, the island chain of Zanzibar is dominated by Unguja and Pemba Islands. We'll learn that in 1964, the presidents of Tanganyika and Zanzibar united their countries to become Tanzania. First up, we'll visit the beaches of Zanzibar to witness the behaviors and mating rituals of shore-dwelling crabs. Here we'll discover that fiddler crabs have both gills and a primitive lung for breathing underwater and on land. We'll also witness adaptation skills of fiddler crabs and how they seal off their burrows using a ball of mud to keep them safe from the tide. Next, we'll meet the world's largest crab

species that calls Zanzibar home, the coconut crab. Weighing as much as eight pounds with a leg span of up to three feet wide, the coconut crab is the planet's largest land-living invertebrate. We'll also discover that the coconut crab's sense of smell is so powerful that almost half of their brain is dedicated to smell. Finally, we'll travel to the pristine coral reefs of Zanzibar. We'll learn that some of these coral reefs stretch fifty-five miles across the ocean floor, growing for more than fifty-million years. Zanzibar hosts some of the most spectacular coral gardens in the world with more than ninety percent of East Africa's hard coral species found in Zanzibar.

[Educational Message: The beaches and reefs of Zanzibar are full of a wide array of vivacious wildlife and organisms. Maintaining the health of our Earth's oceans is vital to ensure the future and survival of our coral reefs and their inhabitants. We must all strive to properly dispose of waste and keep our oceans clean.]

Airdate: 7/11/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

AMAZON RIVER ISLANDS [EDD210]

Today on Earth Odyssey, host Dylan Dreyer takes us to the heart of South America to explore the Amazon River Islands. The Amazon River region is home to the largest collection of river islands in the world. We'll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. First up, we'll meet the only two primates that inhabit the Amazon River Islands, the red howler and the squirrel monkey. Here we'll discover that squirrel monkeys are known to live in groups larger than most other New World Monkeys. We'll witness how these monkeys forage for food and avoid predators in their watery environment. Next, we'll learn more about the most notorious species of fish in the Amazon, the piranha. We'll discover that many piranha species are actually vegetarian whereas "true piranhas," such as the red-bellied piranha, are carnivorous. Here we'll witness the incredible speed and efficiency of piranhas when hunting and consuming their meals. Finally, we'll learn about the fascinating plants and trees that grow in the Amazon River Islands. Here we'll witness how the Monguba tree releases its seeds at the start of the wet season. We'll observe how these massive trees use the waters below to distribute their seeds far and wide. We'll witness how these seeds are transported throughout the islands, providing food and sustenance for creatures of all sizes.

[Educational Message: The ability to survive and adapt is what makes the plants and animals that live in this region of South America so resilient and fascinating. We may be faced with new challenges each day, but our ability to adapt to those changes makes us stronger.]

Airdate: 7/11/2020

Time:

Duration: 30:00

CONSUMER 101

PRECIOUS CARGO [CNR215]

Host Jack Rico and the experts at the testing labs teach us how child car seats are tested for safety, show us how to set up your own home security system, and we'll get tips on how to make healthier food choices. First up, we're meeting with an expert to learn about the different types of child car seats and how they are tested for safety. We'll discover that testers are measuring the ease of use, installation, and overall protection provided in the event of an accident. Here we'll learn how to properly install a car seat as well as techniques to ensure it's safely secured in the vehicle. Next, we'll meet with an expert to learn more about

home security systems and how they function. We'll discover that there are many DIY home security systems that you can set up on your own without a professional. Here we'll see how sensors can be easily installed on doors and windows to help protect you from a break-in. We'll discover that these sensors utilize WIFI to connect to a main base station that is used to notify you or the police in the event someone breaks into your home. Next, we'll get some advice from an expert on how to make healthier food choices. We'll learn that you can cut the fat from cooked ground beef by rinsing the meat before serving. If you're using canned beans, you can also remove additional sodium by rinsing them with water prior to cooking. We'll discover that you can replace salt with taste alternatives such as vinegar or citrus juice. As opposed to boiling your vegetables, we'll also learn that steaming veggies will help retain more vitamins and nutrients.

[Educational Message: In this episode, we learned about the importance of eating healthy foods. We discovered simple ways to reduce the amount of fat and sodium in everyday food items. It's important that we make smart choices about the food we put into our bodies.]

Airdate: 7/11/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO WHALERS [RLT107]

Today on Roots Less Traveled, host Faruq Tauheed takes brother and sister Ashley and Elliott back to their grandparents' hometown of Martha's Vineyard, Massachusetts. During their trip, they get a sailing lesson and learn that their five-times great grandfather, Henry Osborn, was taken prisoner on a boat in the Revolutionary War. We'll learn that the American Revolutionary War took place from April of 1775 to September of 1783. On their sailing lesson, Ashley and Elliott will learn what it would have been like to be a shipmate on a similar sea vessel during that time. We'll find out that sailboats have been used throughout human history beginning as early as 1200 BCE. Ashley and Elliott soon discover that their three-times great-granddad, Samuel Osborn, went from debtor's prison to owning a fleet of whaling ships. Not only did Samuel Osborn represent an incredible "rags to riches" story, we'll also find out he was hailed as a local hero in 1871. It was common at the time for vessels from Massachusetts to venture into the Arctic to hunt the regional bowhead whale. On one particular voyage, weather proved to be disastrous and left thirty-three whaling ships stranded in icy peril. We'll find out that Samuel Osborn sent ships of his own to rescue the men, helping to bring more than a thousand people home safely. We'll discover that whaling in the Americas peaked from the late 1700s through the mid-1800s. At its peak, the whaling industry was the fifth largest economic sector in the United States. A surprise visit from Ashley and Elliott's parents allows them to share their newfound family history.

[Educational Message: In this episode, Ashley and Elliott discovered many unknown facts about their family history in Martha's Vineyard, Massachusetts. The two learned that their three-times great-grandfather, Samuel Osborn, went from debtor's prison to becoming a wealthy businessman. Not only did Samuel achieve great success, he became a local hero and savior in the Martha's Vineyard whaling community. Samuel Osborn's underdog beginnings and eventual heroic efforts as a whaler resonated deeply with Ashley and Elliott. In the end, Ashley and Elliott get to share this information with their parents, strengthening their connection to Martha's Vineyard and to each other.]

Airdate: 7/18/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ANDES [EDD211]

Today on Earth Odyssey, host Dylan Dreyer takes us to the peak of South America to the Andes Mountains. Despite steep slopes, frequent earthquakes, and centuries of heavy rain, the remains of ancient cities survive in the Andes. The climate fuels rapid plant growth and most of the ancient remains have long been reclaimed by nature. First, we'll visit the remains of an ancient city known as Machu Picchu, the lost city of the Incas. We'll discover that Machu Picchu is made up of more than one-hundred and fifty buildings including baths, houses, temples, and sanctuaries. Research has shown that a complex balance existed between the Incas and the world around them. Next, we'll visit with modern-day descendants of the Incas, the Quechuan people. We'll learn that their ability to survive at this high altitude is primarily due to their reliance on livestock. We'll discover how the llama is of critical importance to the Quechuan people. The llama is one of the oldest domesticated animals and provides food, clothing, and transport to the Quechuan people. Finally, we'll meet one of the top predators of the Andes, the puma. Due to the presence of a large food source, pumas are more common in the Andes than anywhere else in their range. We'll also discover that pumas have excellent night vision that helps them locate prey in the darkness.

[Educational Message: The Andes is a mountain range of incredible diversity, it forms South America's backbone, and contains some of the most hostile habitats on Earth. But on every slope, at every altitude, life has found a way to exist.]

Airdate: 7/18/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PHILIPPINES REVISITED [EDD212]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Philippines where we find some of the most fascinating wildlife in the animal kingdom. The Philippines are a chain of tropical islands in the Western Pacific Ocean and is home to some of the world's most exotic wildlife. First up, we'll learn about one of the most complex ecosystems in the Philippines, mangrove forests. Where salt water meets fresh water, it creates a unique and unforgiving environment. Here we'll discover that mangroves can absorb and contain more carbon from the atmosphere than terrestrial forests. We'll also learn that mangroves contribute to ocean acidification, which in turn can help prevent coral bleaching. Here we'll follow a group of locals from this region and witness as they forage for food and supplies in the mangrove forests. Next, we'll travel to another mangrove forest on the island of Bohol. Here we'll watch a troop of long-tailed macaques as they navigate the twisted mangroves in search of food. We'll discover that long-tailed macaques, who spend most of their time in trees, can leap over sixteen feet at a time. Long-tailed macaques are primarily frugivorous, which means their diet consists mainly of fruit. Finally, we'll learn more about the various insects that inhabit the Philippines. Here we'll witness the behavior of fireflies under the cover of night. We'll learn that despite their name, fireflies are actually a type of beetle. We'll discover that the flash of light emitted by fireflies occurs due to a chemical reaction inside the fly's body.

[Educational Message: The Philippines are home to some of the rarest animals on Earth, as well as some of the most unusual. Since these ancient islands have been left largely isolated and undisturbed, unique and fascinating species have been able to flourish uninterrupted. When spending time in

nature, we should always practice Leave No Trace and do our best to limit our impact on the environment.]

Airdate: 7/18/2020

Time:

Duration: 30:00

CONSUMER 101

IF CARS COULD TALK [CNR216]

Host Jack Rico and the experts at the testing labs will give us a deep dive on a test drive, show us how to protect our online accounts from hackers, and teach us how to do laundry like a scientist. First up, we'll join an auto expert for a test drive in the field to find out how cars are tested and evaluated for performance. Today we'll learn how experts evaluate aspects such as ride comfort, handling, and cabin noise over the course of a day on various terrains. In this test, we discover that road noise and wind noise can significantly increase the cabin noise. We'll learn how experts measure and evaluate which cars perform best in various settings and conditions. Next, we'll meet with an online privacy expert to learn how to tidy up our online accounts. We'll discover that leaving old accounts online and not paying attention to them can put them at risk of being hacked. We'll also find out that the longer you leave these accounts open, the more likely it has been compromised. Additionally, we'll learn that if you use the same password for all of your online accounts, it can put all of your personal information at great risk. We'll get expert advice on the best ways to secure and tidy up your online accounts. Finally, we'll learn how to do your laundry like a scientist. We'll find out that it's always important to separate light and dark colored clothes for each load. We'll learn that different fabrics and textiles can be affected by water and dryer temperature. We'll also discover the incredible science behind static electricity on clothing.

[Educational Message: In this episode we learned the importance of protecting your personal information online. We found out that hackers can find ways to access our accounts if we do not keep them secure. It's always best to maintain strong passwords and awareness of your online presence in order to protect your personal privacy.]

Airdate: 7/18/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO MILLIONS [RLT105]

Today on Roots Less Traveled, host Faruq Tauheed takes uncle and nephew Al and Jr on an ancestral trip to Havana, Cuba. We'll discover that stretching almost 750 miles east to west, Cuba is the largest known island in the Caribbean Sea. The city of Havana is one of the fifteen provinces of the Republic of Cuba. Here Al will learn that his grandfather, Joseph Barlow, owned and developed thirty-four blocks of downtown Havana. This area, approximately equal to 1.6 miles, also includes the now-famous suburban neighborhood Buena Vista. We'll learn that Joseph Barlow once owned the Barlow-Cuba Company of Havana. Appraised at over \$4 million during the early 1900's, the Barlow-Cuba Company was an extremely successful business. But due to an unfortunate turn of fate, Joseph Barlow lost his riches in a political coup. Joseph Barlow had previously purchased the land under old Spanish grants that were later ruled illegal by the Republic of Cuba. Joseph Barlow's property was soon seized under a provisional decree of President Zayas. Still a rich man, Joseph Barlow started a legal fight against the order but was turned down in every court in Cuba and eventually spent his entire fortune. We'll discover more about the history of Cuba and how after a 54-year-long dispute, Cuba and the United States reestablished their diplomatic relations in

2015. As Al and Jr connect over their own entrepreneurship, they learn where their family's resilience came from.

[Educational Message: In this episode, Al and Jr uncovered incredible family roots in Cuba they did not know existed. The duo discovered that their relative Joseph Barlow had achieved great wealth and success as an entrepreneur in Havana, Cuba. However, due to political and governmental changes in the region, Joseph Barlow eventually lost his great fortune. As both Al and Jr are also entrepreneurs, they connect and bond deeply over their relative's struggles and tragic end.]

Airdate: 7/25/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

BEST OF: SOUTH AMERICA [EDD213]

Today on Earth Odyssey, host Dylan Dreyer takes us back to South America to explore more of this fascinating part of the globe. South America is home to a vibrant and fertile ecosystem supported by the Amazon and Orinoco Rivers. First, we learn that the Orinoco River curls around the Northeast corner of South America, draining more than three hundred and eighty thousand square miles of Venezuela, Colombia, and Brazil. At the river's mouth, the Orinoco Delta stretches three hundred miles along the coast of Northeast Venezuela. We'll also discover that the wet and dry seasons of the Orinoco River's climate are controlled by the north to south migration of trade winds. Next, we visit the Amazon which covers three million square miles of South America. Today, sixty percent of the Amazon lies in Brazil, while the remaining forty percent is spread across eight more countries. This vast rainforest straddles the equator making it permanently hot and wet, the ideal conditions for creating and maintaining life. Here we'll meet a group of red howler monkeys that call the Brazilian Amazon home. Weighing in as one of the heaviest monkeys in the forest, we'll witness how these animals have adapted to a life in the trees. Finally, we'll meet the only people to have made the Orinoco Delta their permanent home. Known as the "canoe people," the Warao have chosen a precarious way of life on the Orinoco. Here we'll learn how these people have designed and constructed their homes to withstand the twice daily floods that occur. However, we'll discover that these riverside homes are not permanent. When the support timbers rot or food becomes scarce, the nomadic Warao people will seek out a new home.

[Educational Message: The many long-time locals of the Orinoco give back to the river as much as they receive, continuing a tradition as old and beneficial as the river itself. The Orinoco River holds many of the spectacular natural wonders we know today. We must all do our part to protect and preserve nature.]

Airdate: 7/25/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

BEST OF: ISLANDS [EDD214]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of our favorite islands from around the world. First up, we'll journey back to Malaysia. Malaysia is one of seventeen countries identified as megadiverse, meaning these countries harbor the majority of Earth's species. First up we'll meet a group of proboscis monkeys and learn more about their jungle habitat. We'll discover that proboscis monkeys are named for their noses, where "proboscis" means a long, flexible snout. Next, we'll travel back to Thailand. Thailand was previously known as "Siam" from the 12th century until it was renamed "Thailand" in 1939. Surrounded by four countries, and between two seas, Thailand is a melting pot for wildlife across the region.

Here we'll meet a predator that sits at the top of the food chain, the Indochinese tiger. We'll learn that Thailand is thought to contain one of the largest populations of these cats in the world. We'll discover that with their powerful, long hind legs, tigers can jump distances up to thirty feet. Finally, back in Malaysia, we'll meet one of the most endangered animals in the world. Found only in Malaysia and Indonesia, the orangutan is one of our closest cousins sharing over 97% of their DNA with humans. We'll discover that orangutans can naturally live up to around forty years old in the wild and over sixty years in captivity.

[Educational Message: The orangutan and the other amazing animals we learned about make up the diversity that gives Malaysia one of the most fascinating pallets of wildlife in the world. We must do our part to protect the natural world around us for future generations to come.]

Airdate: 7/25/2020

Time:

Duration: 30:00

CONSUMER 101

TOW AWAY [CNR217]

Host Jack Rico and the experts at the testing labs will show us the ins and outs of towing, take us for a stroller test drive, and explain how to find the right mattress for the best night's sleep. First up, we'll meet with an auto expert to learn more about towing trailers and how to do it safely. We'll discover that every truck has a tow rating, which is how many pounds a vehicle can tow behind it. We'll discover that a tow rating consists of three basic principles such as the engine's power, 2-wheel drive vs. 4-wheel drive, and gear ratios. We'll also get a firsthand demonstration on how to correctly and safely attach a trailer to a vehicle. We'll learn that it's vital to check the electrical components of the trailer as well as the tire pressure to ensure it's safe for the road. It's also critically important to know the load capacity of the trailer and the vehicle. We'll discover that load capacity is the combined weight of people and gear in the truck and trailer. Next, we'll join an expert and a teen in the field to learn how strollers are tested and evaluated. In order to accurately simulate a child in the stroller, thirty-pound control weights are placed in the strollers for testing. Here we'll see how strollers are evaluated using various turning maneuvers as well as how they handle going over curbs and other obstructions. We'll find out that there are many different types of strollers for different activities and lifestyles. Finally, Jack visits with an expert to learn how to choose the best mattress for a good night's sleep. We'll learn that mattresses are available in a wide variety of sizes, materials, and firmness. Here we'll witness how scientific instruments are used to measure the durability and quality of a wide range of mattress types.

[Educational Message: In this episode, we learned how strollers are tested and evaluated for performance and safety. Joining our experts was a teenager with little experience using a stroller. This teenager learned valuable tips and advice on how to properly use a stroller when taking care of her siblings or when babysitting. We learned that it's critical to understand how strollers work and perform to ensure the safety of the child.]

Airdate: 7/25/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A PURPLE HEART [RLT102]

Today on Roots Less Traveled, host Faruq Tauheed takes 80-year-old dancing Grandpa Evan and his grandson Scott to Billings, Montana. We'll learn that the state of Montana became a U.S. territory during The Gold Rush of 1864. Here the duo will learn that Evan's great-grandfather was an integral part of the U.S. western states expansion of 1862 and had even cultivated a 160-acre farm. We'll discover that this was

made possible by the Homestead Act, which was signed into law by President Abraham Lincoln in 1862. We'll also find out that between 1880 and 1890, the population of Montana grew from 39,000 to 143,000. Montana is nicknamed "The Treasure State" due to its availability of agate, gold, silver, and other precious stones. But closer to Evan's heart, he learns that two of his uncles who he had met when he was a child, were both prisoners of war in WWII. Even more fascinating, Evan and Scott discover that both of their uncles received Purple Hearts. We'll find out that the Purple Heart Medal is a combat decoration awarded to members of the U.S armed forces who are wounded or killed while serving in the military. After this discovery, Evan and Scott deeply connect while visiting the Montana Purple Heart Memorial to honor their veteran relatives.

[Educational Message: When we look deeper into our past, we can gain a better understanding of our roots. In this episode, Evan and Scott learned that their relatives both served in WWII and were even taken as prisoners for several years. Given that he once served in the Air Force himself, Evan gains a new connection to his uncles and their military past. Understanding the incredible sacrifice and courage of their ancestors has brought Evan and Scott closer together.]

Airdate: 8/1/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THE HIMALAYAS [EDD215]

Today on Earth Odyssey, host Dylan Dreyer takes us to Asia where we visit the highest peaks in the world, the Himalayas. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. First up, we'll meet the elusive snow leopard living in the mountains of the Himalayas. We'll discover how snow leopards have excellent nocturnal vision and that most of their kills occur during either dusk or dawn. Like many of the big cats, the snow leopard is a powerful ambush predator preferring the element of surprise when hunting. Next, we'll travel to the Ladakh region of the Himalayas, an area covering roughly forty-five thousand square miles including the Ladakh Mountain Range. Here we'll meet with the nomadic Changpa tribe and witness how they survive in this most unforgiving environment. Also, we'll witness how these nomadic herders care for and protect their livestock from the elements and predators. We'll learn how out of the several types of herding, nomadic herding is considered the oldest known form. Finally, we'll visit the high-elevation lakes of the Himalayas. Here we'll learn that there are roughly nineteen known major rivers that help drain the snow melt from the Himalayas region. Located at over sixteen-thousand feet in elevation, we'll discover that Tilicho Lake of Nepal is considered one of the highest lakes in the world.

[Educational Message: The Himalayas are a hostile wilderness that challenge all who venture to their snowy slopes. But these mammoth mountains also have a positive effect on the climate, supporting the lives of an endless number of creatures, including one of the largest populations of people on the planet. Despite the harsh climate and treacherous landscape, this epic mountain range sustains life for animals and people who are born to thrive in the most dangerous parts of the world.]

Airdate: 8/1/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PATAGONIA REVISITED [EDD216]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Patagonia region of South America. Stretching south from the Rio Colorado, Patagonia covers more than three-hundred thousand square miles of Argentina and Chile. Patagonia is home to one of the world's largest deserts and yet billions of gallons of freshwater are locked into the ice of its vast glacier fields. Here we'll learn that scientists believe that Patagonia's Perito Moreno glacier is nearly eighteen-thousand years old. First up, we'll travel to the Northeast coast of Patagonia to visit a colony of sea lions. While sea lions can "walk" within minutes of birth, they are typically not great swimmers until they are a few months old. Here we'll witness how sea lions evade attacks from orca whales on the shores of Patagonia's beaches. Next, we'll witness an armadillo as it seeks out a new mate. We'll learn that the word "armadillo" comes from the Spanish word which translates to "little armored one." We'll also discover that despite their poor eyesight, armadillos have a very keen sense of smell. Finally, we'll visit a colony of Patagonian conures that make their home on the seaside. We'll learn that conures are considered New World parrots, which means they originated in the Western Hemisphere. Here we'll witness how these colorful birds use their beaks to carve out burrows in the sandstone cliff sides. We'll discover that this stretch of cliffside is home to the largest colony of conures in the world.

[Educational Message: Patagonia is one of South America's last great wildernesses, making it one of the most fascinating regions in the world. The low plains, high mountains, and icy glaciers give this land the diversity it needs to be home to a variety of fascinating animals. The ability to adapt to one's environment is critical to ensure survival.]

Airdate: 8/1/2020

Time:

Duration: 30:00

CONSUMER 101

WIFI, ART THOU SAFE? [CNR218]

Host Jack Rico and the experts at the testing labs will teach us how to keep your home powered during a blackout, how to avoid the dangers of public WIFI, and how to maintain your home's roof. First up, we'll learn how to keep your digital privacy safe when using public WIFI connections. We'll meet with a digital privacy expert to discover how best to protect your accounts and avoid rogue WIFI networks. We'll learn that rogue networks are created by hackers and can be used to steal your passwords and other login information. We'll discover ways to protect our digital information by looking for secure networks, using firewalls, and establishing a virtual private network. Next, we'll meet with a roofing expert in the field to learn how best to maintain your home's roof. But before we check out the roof, we'll learn how to understand ladder safety ratings for different types of ladders. We'll learn that you should always maintain the three points of contact rule, which means keeping two hands and one foot on the ladder at all times. However, we'll discover that you shouldn't go on the roof yourself, leave that to the professionals. We'll learn that a good pair of binoculars is all you need to examine your roof's condition. We'll also find out about the different types of roof shingles and how they're tested for durability. Finally, we'll discover how generators can help keep your home out of the dark during a blackout. We'll learn that a gas-powered portable generator is a good temporary option to power necessary appliances in your home. It's important to store your generator at least twenty feet outside of your home and ensure your extension cords are suitable for outdoor use. Also, be sure your extension cords can handle the total amperage of the appliances and

devices you're powering. As roughly seventy people die each year of carbon monoxide poisoning from generators, it's critical to follow all safety precautions when using a generator.

[Educational Message: In this episode, we learned how to safely operate a generator during a power outage. It's important to remember that gas-powered generators produce carbon monoxide, a poisonous gas that can be fatal to humans. In the event of a power outage, remain calm and always practice safety when using a generator.]

Airdate: 8/1/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE PAST [RLT108]

Today on Roots Less Traveled, Host Faruq Tauheed takes us back to look at some of our most memorable moments. First, we'll follow Rob and Michelle to Mexico City. Their journey includes a trip to the ornate National Palace where they learn that their second cousin Ernesto gave the keys to Mexico City to President John F. Kennedy. Rob and Michelle also discover that their third cousin Manuel Uruchurtu died on the Titanic, after giving up his seat on a lifeboat to a woman in need. Next, we go to Cuba where uncle and nephew Al & Jr. bond while learning that Al's grandfather Joseph Barlow owned thirty-two blocks in downtown Havana. We'll learn that Joseph Barlow once owned the Barlow-Cuba Company of Havana. Appraised at over \$4 million during the early 1900's, the Barlow-Cuba Company was an extremely successful business. But due to an unfortunate turn of fate, Joseph Barlow lost his riches in a political coup. Finally, we go on a historical Tennessee adventure with mother and son Sharee and DeVonn. At a visit to the Tennessee Supreme Court, Sharee and DeVonn will learn that their four-times great grandfather Larkin Ford was part of an 1840s landmark Tennessee court case. Larkin Ford was a slave whose owner granted him his freedom and left him property in his will years before the Emancipation Proclamation declared an end to slavery in the United States. Although the will was contested, the court ultimately ruled in Larkin Ford's favor, and he went on to become a delegate in the Republican Party, helping to elect African American officials into Tennessee government.

[Educational Message: By learning more about our past, we can learn more about ourselves and where we come from. In this episode, we witnessed several stories of family members discovering incredible information about their historical roots that was previously unknown. By filling in the gaps of their history, these family members are able to forge stronger connections with each other in the present.]

Airdate: 8/8/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

LOST WORLDS [EDD217]

Today on Earth Odyssey, host Dylan Dreyer takes us to Northern India where we will embark on a journey to explore the lost worlds that remain. Known as the Seven Sisters, the Northern region of India is comprised of seven relatively unexplored and isolated states bordered by the Himalayas to the north and the Indian Ocean to the south. Here we'll learn that at twenty-five million years old, the Himalayas are one of the youngest known mountain ranges in the world. First up, we'll discover more about the native Asian elephants and how they adapt and survive in this extreme landscape. Here we'll learn that Asian elephants embark on an annual eight-hundred-mile migration through jungles, across plains, and up mountains over two miles high. We'll discover that in ancient times, Asian elephants once roamed across Asia from Syria to

Northern China. Next, we'll travel to India's northeastern state known as Meghalaya, one of the wettest regions in Northern India. We'll discover that on average, almost five-hundred inches of rain gathers in Meghalaya each year. We'll also learn that Meghalaya is considered an agrarian state as eighty percent of their population relies on farming for their livelihood. Finally, we'll discover more about the many rare primates that call this place home. We'll meet the spectacled monkeys that live high in the canopies, often in troops of up to thirty-five strong. We'll learn that these unique primates have specially adapted stomachs to help them digest tough leaves and unripe fruits. We'll also meet the hoolock gibbon, an animal often mistaken for a monkey due to its small size and mischievous appearance. But like other apes such as chimps and gorillas, the gibbon doesn't have a tail and its hands have opposable thumbs like humans. Here we'll also witness how gibbons swing between trees using a form of arboreal locomotion known as "brachiation."

[Educational Message: From massive Asian elephants to hilarious hoolock gibbons, the animals in Northern India demonstrate incredible diversity in one of the most untamed regions on the planet. The lost world of India is often unreachable by humans and its story can only be told by the animals and creatures who call this place home.]

Airdate: 8/8/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VANCOUVER [EDD218]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to Vancouver Island. Located off the west coast of Canada, Vancouver Island stretches approximately two-hundred and eighty miles long by about sixty miles wide. Vancouver Island is known as the largest island off the west coast of North America. While glaciers fuel the flow of some of Canada's tallest waterfalls, an endless network of rivers and creeks provides the ideal habitat for one of the world's most important fish. Each year, roughly half a billion salmon leave the sea to return to their spawning grounds in the rivers of North America to lay their eggs. Vancouver Island is the destination for millions of these determined fish. On their remarkable journey, the salmon face an endless array of challenges and obstacles. We'll discover that there are roughly eight species of salmon in the world, seven in the Pacific and one in the Atlantic. At the northern tip of the island in the Johnstone Strait, millions of salmon converge after having spent up to five years at sea in the Pacific Ocean. This is the first stage of their testing journey as they encounter predators such as Steller sea lions. Here we'll learn that Steller sea lions are the largest of all sea lions, reaching a length of ten feet and weighing in at over a ton. Next, as the schools of fish have made their way inland, we encounter another predator awaiting the salmon's arrival. Vancouver Island is home to the densest population of American black bears, one of the most common and largest bears in the world. We'll discover that black bears can kill up to half of the salmon in these smaller streams, consuming up to twenty-thousand calories each day when stocking up for winter. Finally, we'll witness the salmon's journey come to a close as they reach their final destination. Female salmon will lay around three-thousand eggs in a series of nests, each one covered by gravel to protect against predators and to prevent the eggs from drifting away. This final act marks both the end of the salmon's journey and the end of its life.

[Educational Message: Pacific salmon always die after they've spawned. However, their decomposing bodies will release nutrients back into the environment that feeds the aquatic food web within Vancouver Island. This in turn will nurture the next generation of salmon throughout Vancouver Island's rivers of life.]

Airdate: 8/8/2020

Time:

Duration: 30:00

CONSUMER 101

ROBOT INVASION [CNR219]

Host Jack Rico and the experts at the testing labs will show us what to look for when buying a used car, the future of vacuuming, and how to keep pests out of your home. First up, Jack joins an auto expert to learn some tips on how to buy the best used car. We'll find out that when speaking to a dealer about buying a car, you should never reveal how much money you want to spend. We also learn that you should never let a car dealer rush you into a sale, always take your time to think it over first. We'll also find out that it's important to inspect the vehicle for any defects or damage before buying. It's also important to have a mechanic that you trust check the vehicle thoroughly for any other hidden issues. Next, we'll check out the science behind the next generation of smart home helpers, robotic vacuums. We'll meet with expert vacuum testers to learn more about how the robot vacuums are scientifically measured in a controlled environment. In order to ensure consistency and accuracy, testers use a controlled weight of a variety of different sized debris for the vacuums to pick up. Following the test, the debris picked up by the vacuums is weighed in order to determine how effective the vacuums performed. We'll also see how experts use sensor technology to generate a map of the vacuum's path to determine how well it covers the space of a room. There are a variety of different types of robotic vacuums you can purchase depending on your needs and budget. Finally, we'll meet with a home expert to learn how to avoid pests like ants from coming into your home. In order to protect your home from ants, we find out that it's best to keep your kitchen clean and tidy. We'll learn that ants are attracted to food and sweets, so it's best to keep any loose food products in an airtight container. We'll also discover that it's important to never spray pesticides to control an ant infestation. We'll find out that these products contain powerful chemicals that you would not want to expose to your family or pets.

[Educational Message: In this episode we learned about the importance of keeping your home clean and pest-free. By keeping our kitchen and homes clean, we can avoid inviting in any unwanted insect guests. We learned it's important to always keep safety in mind when handling an infestation. Never use strong chemicals or pesticides in and around your home, always leave that to the professionals.]

Airdate: 8/8/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE BROOKLYN BRIDGE [RLT104]

Today on Roots Less Traveled, host Faruq Tauheed takes aunt and nephew Tammy and Julian on a cosmopolitan adventure in Brooklyn, New York. We'll first learn that the Brooklyn borough of New York City was originally called "Breukelen," which is Dutch for "broken land." Tammy and Julian's journey begins when they learn that they are related to undertaker John Baisley, who helped the city bury its dead during the Yellow Fever epidemic in 1856. Since the city of Brooklyn was so densely populated, hundreds died during this time and others left their homes and abandoned the city. We'll learn that while many were fleeing the city, John Baisley stayed in Brooklyn to help nurse the sick and dying, in most cases rendering his services without expecting or receiving any pay. Tammy and Julian also learn that they have direct ties to James Howell, a former Mayor of Brooklyn who served from 1878-1881. Not only was James Howell the 19th Mayor of Brooklyn, he also owned a large iron works company and became an integral part in building the iconic Brooklyn Bridge. To learn more about their ancestor's iron works company, Tammy and Julian

visit a blacksmithing shop to discover what it would've been like to work as a blacksmith during that time. Here we'll discover that the craft of blacksmithing has been traced back to 1350 BCE.

[Educational Message: In this episode, Tammy and Julian discovered their family roots go much deeper than they had previously known. Tammy and her father always shared a strong connection to New York City and specifically the Brooklyn Bridge. After discovering that their relative, James Howell, was elected as the President of the trustees for the Brooklyn Bridge, Tammy's connection to the bridge grows even stronger. Sharing this experience with her nephew Julian only serves to strengthen that connection as well as their bond as a family.]

Airdate: 8/15/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO MALAYSIA [EDD219]

Today on Earth Odyssey, host Dylan Dreyer takes us back to explore the unique and diverse country of Malaysia. Malaysia is one of seventeen countries identified as megadiverse, meaning these countries harbor the majority of Earth's species. Malaysia's jungles can seem like an impenetrable wall of green but running through it all, is water. We'll discover that the longest river in Malaysia is the Rajang River, which is roughly three-hundred and fifty miles in length. We'll also learn that ninety-eight percent of the water supply used by people in Malaysia comes from its rivers and streams. First up, we'll learn more about the animals that rely on this water for survival, such as the elephants. The pygmy elephants that call this region home are the smallest in the world, standing about three feet shorter than their larger Asian elephant cousins. We discover that this is a unique adaptation that allows them to thrive in the dense forests of Malaysia. Next, we'll journey to the fascinating caves of Malaysia. Over thousands of years, streams and rivers have gradually eaten into Malaysia's soft limestone bedrock. Dissolving grain by grain, holes have become craters, and caves have been excavated into caverns. We'll discover that Malaysia is home to some of the largest cave systems on the planet. Here we'll learn more about the unique species that dwell in these caves such as bats, birds, and a variety of insects. Finally, we'll visit the coastline of Malaysia to discover more about its diverse wildlife. Here we'll learn that a mudskipper fish is perfectly at home out of water. We'll discover that mudskippers breathe through their skin and carry a bubble of air in its gill chambers, much like a scuba diver's tank. While typically small, we'll learn that mudskippers can grow between ten to twelve inches long.

[Educational Message: Malaysia's biodiversity is credited to its rich and fruitful landscape. From giant bats to fish that can walk, this country boasts some of the biggest and most unique species in the animal kingdom. The fascination with Malaysia will continue to live on with the creatures who call this place home.]

Airdate: 8/15/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ZANZIBAR REVISITED [EDD220]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the fascinating tropical archipelago that is Zanzibar. Lying twenty-five miles off the coast of Tanzania, the island chain of Zanzibar is dominated by Unguja and Pemba Islands. We'll learn that in 1964, the presidents of Tanganyika and Zanzibar united their countries to become Tanzania. First up, we begin our journey in the forests of Pemba Island which is home to one of the rarest primates in the world. Isolated from mainland Africa for more than ten-thousand years,

the Zanzibar red colobus monkey calls this island home. Here we'll discover that while many primates have thumbs on their hands, no known species of colobus monkey has them. Highly social, red colobus monkeys typically reside in groups averaging between thirty and fifty individuals. Next, we'll discover more about the largest bat in the world, the Pemba flying fox. Sporting a wingspan of nearly five feet, flying foxes rely on their keen eyesight to track down their next meal. We'll discover that flying fox bats are old world fruit bats, and therefore use sight instead of echolocation to navigate. We'll also discover that the bats play an important role in the environment by dispersing pollen and seeds, which is vital to keeping the region's forests alive. Next, we'll meet one of the largest tortoises in the world, the Aldabra tortoise. Not only one of the largest of its kind, the Aldabra tortoise can live up to two-hundred years old. Highly intelligent, Aldabra tortoises are capable of distinguishing between humans with which they interact. Finally, we'll discover more about the mangrove forests on Zanzibar's coastlines. We'll learn that mangrove forests play an important role in protecting coastline ecosystems from erosion. We'll also discover that the largest mangrove forests are found in Indonesia, where they cover an area roughly the size of Vermont.

[Educational Message: The archipelago of Zanzibar is one of the most beautiful and fascinating places in the world, and the wildlife that thrives here is no different. The amount and diversity of life that's supported here is nothing short of miraculous. We must all do our part to ensure we protect our environment and ecosystems.]

Airdate: 8/15/2020

Time:

Duration: 30:00

CONSUMER 101

ELECTRIC PAST IS PRESENT [CNR220]

Host Jack Rico and the experts at the testing labs teach us about electric cars, show us how to rid your home of nasty allergens, and teach us how to secure our digital privacy. First up, we'll meet with a group of experts to find out ways to keep your digital privacy safe. We'll discover that "smart" household items such as door locks, cameras, refrigerators, and even lightbulbs can be accessed by hackers if you're not careful. We'll learn that you should have a strong password and always update the firmware for these devices. We'll discover that firmware is actually a type of software that runs the hardware of whatever device you're using to connect to the internet. It's vital to keep your firmware updated so that you always have the latest security fixes. Next, we'll meet an expert on the auto test track to learn more about the past and present of electric cars. Here we'll learn that the first fully electric vehicles were built in the early 1900's. As technology has changed drastically over the last hundred years, we'll now see how the electric cars of today have evolved. Here we'll learn that electric cars now include technology that captures energy normally lost during braking and sends that energy to the car's batteries. Known as regenerative braking, this technology uses the car's generator to help slow the car down. Finally, we'll meet with an expert to learn about various allergens and how to keep them out of your home. We'll discover that it's important to vacuum your home at least once a week, as dust can contain mites, pollen, pet dander, and even cockroach droppings. Also, we learn that if you have allergies, it's recommended that you use a vacuum with a HEPA, or High Efficiency Particulate Air filter. Also, be sure your vacuum has a bag instead of a bin to avoid releasing those allergens back into the air when emptying.

[Educational Message: In this episode, we learned about the importance of protecting your personal information and digital privacy. We learn that many "smart" household items such as doorbells and refrigerators can be a gateway to our personal information. Changing passwords and updating firmware can help prevent hackers from stealing your information.]

Airdate: 8/15/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE CIVIL WAR [RLT106]

Today on Roots Less Traveled, host Faruq Tauheed takes father and daughter Paul and Kalina to the Civil War battleground of Port Republic, Virginia. Here they will discover Paul's great grandfather, Austin D. Springer, was a drummer boy for the Union Army. We'll find out that officers directed the musicians to play certain songs that communicated orders to the soldiers. At the battlefield of Port Republic, Paul and Kalina learn that Austin Springer was taken prisoner by the Confederate Army in 1862. Based on historical evidence, it's believed that Austin Springer stayed behind to help the wounded rather than fleeing the invading Confederate Army, leading to his swift capture. However, Paul and Kalina discover that Austin Springer eventually escaped capture and hid in slave huts until he made his way back to the Union Army. In order to better understand the conditions soldiers faced during this time, Paul and Kalina will join a Civil War re-enactment group to learn what it took to live as a soldier in the Union Army at that time. Paul, a Navy veteran who served in the Vietnam war, connects his own experience and believes that being a combat Veteran is in his genes.

[Educational Message: In this episode, Paul and Kalina connect to a side of their family history that was previously unknown to them. They discovered that their relative Austin Springer served in the Union Army and was taken prisoner by the Confederate Army after he decided to stay behind and take care of the wounded. Paul draws from his own experiences serving in the Navy and feels a deep connection to Austin Springer's courage and resilience. This experience brings Paul and Kalina closer together and gives them a new understanding of where they come from.]

Airdate: 8/22/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FROZEN FRONTIERS [EDD221]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of the most unbelievable, and unbelievably cold, places in the world. From the ice fields of Patagonia, to the high snowy mountains of the Himalayas, we'll explore what thrives and survives in some of the most frigid ecosystems in the world. First up, we begin our journey in South America in the region of Patagonia. Stretching from Argentina to Chile, Patagonia is home to the largest dinosaur fossil ever found, the second oldest tree on Earth, and a species of flightless bird that almost outnumbers humans. We'll first meet a colony of Magellanic penguins that just returned to the shores of the Punta Tombo Reserve after spending six months at sea. Here we'll learn that the Punta Tombo Reserve in Patagonia hosts the largest known colony of Magellanic penguins in the world. We'll discover that penguin couples always return to the same nest year after year to breed. Next, we'll journey to Asia where we visit the highest peaks in the world, the Himalayas. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. Here we'll meet the elusive snow leopard living in the mountains of the Himalayas. We'll discover how snow leopards have excellent nocturnal vision and that most of their kills occur during either dusk or dawn. Like many of the big cats, the snow leopard is a powerful ambush predator preferring the element of surprise when hunting. Next, we'll travel to the Ladakh region of the Himalayas, an area covering roughly forty-five thousand square miles including the Ladakh Mountain Range. Here we'll meet with the nomadic Changpa tribe and witness how they survive in this most unforgiving environment. Also, we'll witness how these nomadic herders care for and protect their

livestock from the elements and predators. Finally, we'll learn about the guanacos of Patagonia. We'll discover that llamas descended from guanacos that were domesticated in South America over six thousand years ago. Supremely adapted to surviving in the cold elements, guanacos have a double coat of fur that helps them cope with the extreme temperatures.

[Educational Message: We witnessed the incredible survival skills of various animals that thrive in the epic mountains of Patagonia and the Himalayas. Although worlds apart, these two larger than life regions share the distinct quality of diversity that makes our planet so special.]

Airdate: 8/22/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

INCREDIBLE ISLANDS [EDD222]

Today on Earth Odyssey, host Dylan Dreyer takes us back to some of the most extreme islands on Earth. We'll explore the Amazon River Islands in South America and then discover what's hiding up in the trees in the Philippines. First up, we'll travel to the heart of South America to explore the Amazon River Islands. The Amazon River region is home to the largest collection of river islands in the world. We'll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. Here we'll meet the only two primates that inhabit the Amazon River Islands, the red howler and the squirrel monkey. Here we'll discover that squirrel monkeys are known to live in groups larger than most other New World Monkeys. We'll witness how these monkeys forage for food and avoid predators in their watery environment. Next, we'll journey to Southeast Asia where the island chain of the Philippines lies. The Philippines are made up of over seven-thousand tropical islands in the Western Pacific Ocean. Among the most ancient islands on Earth, the Philippines have the world's fifth longest coastline. Here we'll learn more about the various insects that inhabit the Philippines. We'll witness the behavior of fireflies under the cover of night. We'll learn that despite their name, fireflies are actually a type of beetle. We'll discover that the flash of light emitted by fireflies occurs due to a chemical reaction inside the fly's body. Finally, we'll travel back to the Amazon to learn more about its most notorious species, the piranha. We'll discover that many piranha species are actually vegetarian, whereas "true piranhas," such as the red-bellied piranha, are carnivorous. Here we'll witness the incredible speed and efficiency of piranhas when hunting and consuming their meals.

[Educational Message: The Philippines and Amazon River Islands are two island chains that provide homes for some of the most adaptable and captivating animals on Earth. The ability to survive and adapt is what makes the plants and animals that live in this region so resilient and fascinating. Many of these islands are isolated and undisturbed. As a result, many of these unique species have flourished, uninterrupted by the modern world.]

Airdate: 8/22/2020

Time:

Duration: 30:00

CONSUMER 101

ZERO MPH CAR TEST [CNR221]

Host Jack Rico and the experts at the testing labs will explore the pros and cons of smart doorbells, show us how to test drive a car without driving it, and we'll get some helpful tips from experts. First up, Jack meets with an auto expert to find out what to look for when buying a new car. But there are many things to consider before taking the car out for a test drive. We'll learn that it's important to make sure you're seated comfortably in the car. We'll discover that you want to sit at least ten inches from the steering wheel as it

maximizes airbag deployment and reduces possible harm to you. We'll also learn that visibility is critical when choosing a new car. Always ensure you can see out over the hood and that blind spots aren't too obtrusive. Also, it's important to find a car with simple controls that you can easily operate while driving without distraction. Next, Jack receives some helpful tips and advice from a variety of experts. One tip we'll learn is that it's important to shake up your sunscreen before applying as it helps mix up any particles that might have clumped together. We'll also discover the best insect repellants to use when outdoors that can also help to prevent ticks. Finally, we'll discover more about the technology behind smart doorbells and the benefits of owning one. We'll meet with an expert and learn how smart doorbells are scientifically tested in various settings to determine the best model for your needs. We'll also discover more about the advanced features now becoming available on smart doorbells such as facial recognition, voice control, and geofencing.

[Educational Message: In this episode, we learned how best to evaluate a new car purchase before taking it for a test drive. In order to ensure your safety, it's important to get to know the car before purchasing it. We learned that it's best to ensure you have adequate visibility and comfort when sitting in the driver's seat. By better understanding a car before you buy, you can be confident that you'll be safer on the roads.]

Airdate: 8/22/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO JOHN F KENNEDY [RLT101]

Today on Roots Less Traveled, host Faruq Tauheed takes half-siblings Michelle and Rob to Mexico City. Here they will discover that they are related to the Uruchurtus, a very famous Mexican political family. Their journey includes a trip to the ornate National Palace where they learn that their second cousin Ernesto gave the keys to Mexico City to President John F. Kennedy. Here we'll find out that the Zocalo, or Plaza de la Constitucion, was previously the principal ceremonial site in the Aztec city of Tenochtitlan. Michelle and Rob happen to be in Mexico City during Dia de los Muertos, or Day of the Dead, a holiday that honors loved ones who have passed. In preparation for this annual cultural event, they soon learn their third cousin Manual Uruchurtu died on the Titanic, after giving up his seat on a lifeboat to a woman in need. We'll find out that in 1912, over 1,500 passengers perished when the Titanic sank during its maiden voyage. We'll discover that the 2,240 people on board the Titanic are believed to have represented as many as 30 different nationalities.

[Educational Message: Connecting with our past helps us connect to parts of ourselves that we didn't know existed. In this episode, we learned that the Uruchurtu family had a cousin that gave up his lifeboat seat when the ill-fated Titanic began to sink. Michelle and Rob were moved by this selfless act of kindness, inspiring them to show more love and compassion in their own daily lives.]

Airdate: 8/29/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO THAILAND [EDD223]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the incredible country that is Thailand. Thailand was previously known as "Siam" from the 12th century until it was renamed "Thailand" in 1939. Surrounded by four countries, and between two seas, Thailand is a melting pot for wildlife across the region. We'll discover that Thailand is home to roughly ten percent of all existing known species of animal in the

world. First up, we'll meet a skillful and secretive predator roaming the jungles of Thailand, the clouded leopard. We'll learn more about how these cats expertly track down their prey within the dense jungles. Here we witness how clouded leopards use scent marking to claim their territory and also attract a mate. We'll discover that clouded leopards are also the only known cat species that can climb down trees headfirst. Next, we'll travel to the beaches and reefs of Thailand to learn more about the aquatic wildlife of Thailand. Here we'll meet the world's largest fish, the whale shark. Migrating through the oceans, where they go and come from is still unclear. But off the shores of Thailand, these gentle giants make the most of plankton blooms. With mouths measuring almost four feet wide, these sharks could devour most fish, but it's the smallest creatures that they feed on. We'll discover that whale sharks can consume tens of thousands of plankton in just one gulp. Next, we'll meet the macaques that thrive on the shores of the Thailand coastline. Long-tailed macaques, thanks to their adaptability, are thought to have learned to fish due to shifting food sources. Here we'll witness as the macaques use rocks and other tools to harvest their food from clams and other mollusks. We'll learn that like humans, long-tailed macaques can be either left-handed, right-handed, or ambidextrous.

[Educational Message: When the natural world is left to forge its survival, extraordinary adaptations, behaviors, and evolutionary tricks occur. The fine balance between life and death is constantly played out in Thailand's diverse habitats. Harboring iconic predators and inventive scavengers, these worlds bring constant challenges. Those who adapt reap the rewards and become nature's survivors.]

Airdate: 8/29/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO AMAZON RIVER ISLANDS [EDD224]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey back to the Amazon River Islands where we'll explore more of what lives in the water and on the land. The Amazon River region is home to the largest collection of river islands in the world. We'll learn that this region is made up of more than one-thousand islands that stretch along six-hundred miles of the wildest waterways in the Amazon Rainforest. We begin our journey in the Rio Branco life doesn't just survive, but flourishes. First up, we'll learn more about a predator in these waters, the giant river otter. Giant river otters spend most of their time hunting. Nicknamed the "river wolf," the giant otter's size and speed allows it to compete for fish and even piranha. Moving and working as a pack, giant river otters are able to corral fish before easily picking them off one by one. We'll also learn more about the family dynamics of giant river otters as they guard their dens and protect their young from other predators. Next, we'll learn about the fascinating leaf cutter ant. These are no ordinary ants as it's believed they're a separate species to the ones that nest underground. Due to the constant flooding in the region, these ants have adapted to live in the treetops. We'll also discover that leaf cutter ants are one of only a few species on the planet known to grow their own food. Cultivating a special fungus garden deep within its nest, leaf cutter ants are almost entirely dependent on this fungus for food. Finally, we'll learn more about the fish species that live within the Rio Negro and how they provide for the local residents. Here we'll witness how fish species like tetras are harvested for exotic fish tanks around the world. This regulated practice provides the local fisherman with a vital source of income. Here we'll learn that many aquarium fish are caught in the wild because it is difficult to breed fish in captivity. Before the fish are taken to a new home, they must have official health certificates that are internationally recognized.

[Educational Message: The islands of the Amazon River provide a home for some of the hardest animals in the world. As flood waters engulf the islands each year, those that live here are forced to

endure incredible extremes. But animals have developed ways of coping and have learned to master their ever changing environment. It's either sink or swim in the floating forests of the Amazon.]

Airdate: 8/29/2020

Time:

Duration: 30:00

CONSUMER 101

FOLLOW THE BEAT [CNR222]

Host Jack Rico and the experts at the testing labs will give us a fascinating look at what happens to sound in an anechoic chamber, show us how best to clean a dirty car, and teach us the science behind air conditioner testing. First up, we'll meet with an expert to learn how best to clean a dirty vehicle. We'll find out that cup holders trap a significant amount of dirt and debris. We'll learn some cool tricks and tips on how to easily remove mess from small spaces using cotton swabs and wooden skewers. We'll also discover that objects like the steering wheel and gear shifter should be cleaned often, even if they don't look dirty. These touch areas can harbor dangerous germs and bacteria, so it's important to keep those clean. Next, we'll visit the lab with a home expert to find out the science behind air conditioner testing. In a climate-controlled chamber, we'll see how experts measure the effectiveness of various types and sizes of air conditioners. Testers can also change the size of the control room to replicate different sized spaces of rooms. Using thermocouples, or electrical sensors that measure temperatures, testers can scientifically determine exactly how well the various air conditioners perform. Here we'll learn about the various sizes of air conditioners and how to pick the best one for your home. Finally, we'll visit an echo-less room, known as an anechoic chamber. Here we'll learn how an anechoic chamber is specifically designed to absorb all sound waves in a particular area. We'll join an expert and discover the many scientific uses of an anechoic chamber. We'll learn that echoes interfere with scientific measurements and that it's critical to eliminate any sound waves in order to discover the true sound of a product. We'll also join a group of high school music students as they test out various musical instruments to see how they sound differently in an anechoic chamber.

[Educational Message: In this episode, we learned about the importance of keeping your car clean and tidy. Food waste and other garbage can attract pests and bacteria. It's important to keep trash out of your car and clean high touch areas to prevent the spread of germs. Also, you don't want to keep heavy things like large water bottles in your car as these objects can become projectiles in the event of an accident or even heavy braking.]

Airdate: 8/29/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO WHALERS [RLT107]

Today on Roots Less Traveled, host Faruq Tauheed takes brother and sister Ashley and Elliott back to their grandparents' hometown of Martha's Vineyard, Massachusetts. During their trip, they get a sailing lesson and learn that their five-times great grandfather, Henry Osborn, was taken prisoner on a boat in the Revolutionary War. We'll learn that the American Revolutionary War took place from April of 1775 to September of 1783. On their sailing lesson, Ashley and Elliott will learn what it would have been like to be a shipmate on a similar sea vessel during that time. We'll find out that sailboats have been used throughout human history beginning as early as 1200 BCE. Ashley and Elliott soon discover that their three-times great-granddad, Samuel Osborn, went from debtor's prison to owning a fleet of whaling ships. Not only did Samuel Osborn represent an incredible "rags to riches" story, we'll also find out he was hailed as a local hero in 1871. It was common at the time for vessels from Massachusetts to venture into the Arctic to hunt

the regional bowhead whale. On one particular voyage, weather proved to be disastrous and left thirty-three whaling ships stranded in icy peril. We'll find out that Samuel Osborn sent ships of his own to rescue the men, helping to bring more than a thousand people home safely. We'll discover that whaling in the Americas peaked from the late 1700s through the mid-1800s. At its peak, the whaling industry was the fifth largest economic sector in the United States. A surprise visit from Ashley and Elliott's parents allows them to share their newfound family history.

[Educational Message: In this episode, Ashley and Elliott discovered many unknown facts about their family history in Martha's Vineyard, Massachusetts. The two learned that their three-times great-grandfather, Samuel Osborn, went from debtor's prison to becoming a wealthy businessman. Not only did Samuel achieve great success, he became a local hero and savior in the Martha's Vineyard whaling community. Samuel Osborn's underdog beginnings and eventual heroic efforts as a whaler resonated deeply with Ashley and Elliott. In the end, Ashley and Elliott get to share this information with their parents, strengthening their connection to Martha's Vineyard and to each other.]

Airdate: 9/5/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THAR DESERT REVISITED [EDD225]

Today on Earth Odyssey, host Dylan Dreyer takes us back to the Thar Desert where we'll learn more about the people and animals that live in this harsh ecosystem. Situated in Northern India, the Thar Desert is also known as the Great Indian Desert and is the seventh largest desert in the world. Temperatures here can soar to over one-hundred and twenty degrees Fahrenheit and less than two inches of rain falls each year. First up, we'll learn more about the nomadic tribes that reside in this region. We'll discover that many of these nomadic tribes move through the desert in a constant search for water and grazing for their livestock. Each year over twenty-thousand people gather for the desert's largest livestock market, the Nagaur Fair. Here these nomadic tribes come together to celebrate their traditional way of life and their ancient alliance with nature. Due to the constant droughts in the region, these farmers can't rely on crops for food and income. Instead they owe their survival to domesticated animals. Here we'll discover that India is estimated to have the largest livestock population in the world. Next, we'll journey to the Thar Desert's eastern edge in the city of Jaipur, the capital and largest city in India. Here we'll learn more about one of India's most sacred animals, the Hanuman langur. Revered above all monkeys, this adaptable primate can survive anywhere from steamy jungles to frozen forests. We'll discover that Hanuman langurs will typically live in groups ranging from roughly twenty to one-hundred members. Here we'll witness the dynamics of how humans and langurs coexist in a crowded and bustling city. Finally, we'll travel to the far southern edge of the Thar to learn more about one of the world's most formidable predators, the Asiatic lion. Here we'll learn that Asiatic lions are thought to have split from African lions roughly one-hundred-thousand years ago. We'll witness how the local farmers coexist with these powerful predators. We'll also discover that lions are the only known large felines in the world that live in groups called "prides."

[Educational Message: In the Thar Desert, the relationship between animals and humans can be traced back for generations. We learned that this relationship can be the key to survival in this harsh region of the world. The Thar is home to more creatures than any other desert in the world because its people have a long tradition of respect for nature.]

Airdate: 9/5/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

ADVENTURES IN VENEZUELA [EDD226]

Today on Earth Odyssey, host Dylan Dreyer takes us back to Venezuela to explore more of its diverse and exotic wildlife. Our journey begins in Los Llanos, a wetland roughly the size of Italy that covers nearly a third of Venezuela. The over two-hundred-thousand square miles of Los Llanos has an elevation range rarely exceeding one-thousand feet above sea level. We'll discover that this region is home to more than one-hundred species of mammals and around seven-hundred species of birds. First up, we'll learn more about the capybara, the largest rodent in the world. Capybaras are closely related to guinea pigs and rock caviars, despite their massive size difference. The capybara gets its name from the Amazonian native language which translates to "master of the grasses." We'll also learn that capybaras are highly social and can live in groups of between ten and one-hundred members depending on the season. Here we'll witness how capybaras avoid predators such as anacondas, caiman, and crocodiles. Next, we'll travel to a mountain range in Venezuela known as the Guiana Shield. More than 1.8 billion years old, these are amongst the most ancient mountains in South America and cover an area about the size of Alaska and Texas combined. Home to some of the planet's most spectacular waterfalls, the Guiana Shield is called the "greenhouse of the world." Here we'll discover the supremely adapted plants and animals that live atop these mountains. We'll learn more about a fascinating plant species known as a pitcher plant. Known as carnivorous plants, there are roughly ninety known species of pitcher plants, also known as "nepenthes," across the world. We'll discover how these unique plants have adapted over time to attract and trap their next meals.

[Educational Message: The diverse landscape of Venezuela creates the perfect ecosystem that allows an incredible array of animals to thrive. The Los Llanos and Guiana Shield regions of Venezuela hold many of the spectacular natural wonders we know today. We must all do our part to protect and preserve nature.]

Airdate: 9/5/2020

Time:

Duration: 30:00

CONSUMER 101

CANCELING NOISE AND THE SECRETS OF SAFE RIDING [CNR223]

Host Jack Rico and the experts at the testing labs will show us how to safely share the road when riding a bike, teach us the science behind noise cancelling headphones, and show us how to keep winter ice out of your pipes. First up, we'll join auto experts on the test track to learn how to safely share the road on a bicycle. Today, we'll find out how to safely operate a car near a bicyclist, as well as how to safely ride your bicycle near moving cars. We'll first discover that you should always allow three feet or more of space between you and a cyclist when driving a car. We'll also learn that you never pass a cyclist on a blind turn. Additionally, as a driver, you should always be aware of your blind spots and must allow cyclists to pass before making right turns. As a cyclist on the road, we'll learn you should always have your bike maintained before taking it out on the road. Additional safety precautions such as bike lights and reflective or bright clothing are critical. Here we'll also learn about the various hand signals cyclists must use to alert cars around them. It's also important to never use headphones while riding a bicycle to ensure you can always hear your surroundings. Next, we'll join an expert and visit the anechoic chamber in the testing labs to find out how noise cancelling headphones are evaluated. Here we'll witness how noise cancelling headphones are scientifically measured and tested for their effectiveness. We'll discover how soundwaves work and how they're comprised of two main components, compressions and rarefactions. Finally, we'll meet with a home

expert to learn how to keep the pipes in your home from freezing up during the winter. If the temperature outside drops below freezing, and your pipes aren't well insulated, the water inside can turn to ice and burst your pipe. Even a small hole can release hundreds of gallons of water and cause thousands of dollars' worth of damage. We'll get expert tips on how to ensure your home is ready for winter and what to do in the event of a water emergency.

[Educational Message: In this episode, we learned how to safely use your bicycle on the roads. Sharing the road with cars can be very dangerous, so it's critical that you follow all the necessary safety precautions. Always wear bright, reflective clothing and ensure you have safety lights on both the front and back of your bicycle. Also, always be aware of your surroundings and never wear headphones while riding your bicycle.]

Airdate: 9/5/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO A PURPLE HEART [RLT102]

Today on Roots Less Traveled, host Faruq Tauheed takes 80-year-old dancing Grandpa Evan and his grandson Scott to Billings, Montana. We'll learn that the state of Montana became a U.S. territory during The Gold Rush of 1864. Here the duo will learn that Evan's great-grandfather was an integral part of the U.S. western states expansion of 1862 and had even cultivated a 160-acre farm. We'll discover that this was made possible by the Homestead Act, which was signed into law by President Abraham Lincoln in 1862. We'll also find out that between 1880 and 1890, the population of Montana grew from 39,000 to 143,000. Montana is nicknamed "The Treasure State" due to its availability of agate, gold, silver, and other precious stones. But closer to Evan's heart, he learns that two of his uncles who he had met when he was a child, were both prisoners of war in WWII. Even more fascinating, Evan and Scott discover that both of their uncles received Purple Hearts. We'll find out that the Purple Heart Medal is a combat decoration awarded to members of the U.S armed forces who are wounded or killed while serving in the military. After this discovery, Evan and Scott deeply connect while visiting the Montana Purple Heart Memorial to honor their veteran relatives.

[Educational Message: When we look deeper into our past, we can gain a better understanding of our roots. In this episode, Evan and Scott learned that their relatives both served in WWII and were even taken as prisoners for several years. Given that he once served in the Air Force himself, Evan gains a new connection to his uncles and their military past. Understanding the incredible sacrifice and courage of their ancestors has brought Evan and Scott closer together.]

Airdate: 9/12/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

PADDLING THROUGH THE PANTANAL [EDD227]

Today on Earth Odyssey, host Dylan Dreyer leads us on an adventure through the rivers of the Pantanal. Known as the largest wetland in the world, the Pantanal is ten times larger than the Everglades in Florida. Situated in the center of South America, the vast majority of the Pantanal lies in Brazil, while the rest is in Bolivia and Paraguay. First up, we'll follow local fisherman and learn how they rely on the waters of the Pantanal for their survival. We'll discover that the Pantanal is home to an estimated three-hundred and twenty-five species of fish. We'll learn about the unique fishing techniques that have been used by the local villages for centuries. Here we'll also learn about the giant river otter that calls the Pantanal region home.

Nearly six feet long and weighing more than sixty-five pounds, it fully merits its name. Unlike most otters, giant river otters live in groups and hunt in packs. Here we'll discover that giant river otters have an average lifespan of roughly twelve years in the wild. Next, we'll learn more about one of the top predators in the Pantanal region, the jaguar. With water to drink, shade from the sun, and a platform from which to spy prey, overgrown riverbanks are the perfect environment for jaguars. We'll discover that jaguars are excellent swimmers and have been seen swimming across the Panama Canal. Finally, we'll learn more about the tufted capuchin monkeys that inhabit this region. We'll discover that these monkeys use the riverside corridors of the Pantanal to spread south to the Amazon. Capuchins are highly social and have been observed sharing territories with other primate species. We'll learn that tufted capuchins have also been observed using objects, such as rocks, as tools to crack open nuts or fruits.

[Educational Message: The wet landscape and warm climate of the Pantanal creates a hub for an incredible number of diverse fish and mammals. The traditions that are still alive in the Pantanal are central to the survival of the local villages.]

Airdate: 9/12/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

HIKING THE HIMALAYAS [EDD228]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to the Himalayas, where the extreme landscape doesn't stop the unique diversity that calls this mountain range home. At over sixteen-thousand feet above sea level, among the most treacherous and untamed mountains in the world, certain highly adapted species have made the Himalayas their home. First up, we'll learn about the fascinating bar-headed geese. These geese head south over the Himalayas to the warmer winter-feeding grounds of Northern India. But traveling more than nine-hundred miles in a single day isn't this bird's only claim to fame. Bar-headed geese choose to fly at an altitude few other creatures could barely imagine, including humans. We'll discover that bar-headed geese can fly as high as thirty-thousand feet for brief periods of time. These birds have even been spotted flying over Mt. Everest, the tallest mountain in the world. Next, we'll discover how the Himalayas have shaped the cultures of Southern Asia. Many peaks of the Himalayas are seen as sacred, and religions such as Buddhism have a strong physical presence in the remotest of areas. Prayer flags flapping in the wind break the silence across the numerous mountain passes. For centuries, Buddhist pilgrims have draped these pennants across valleys and places of spiritual practice for the wind to carry their written prayers across the landscape. Here we'll discover that the colors of prayer flags are said to represent Earth's elements of sky, air, fire, water, and earth. Finally, we'll learn more about the Asiatic black bear that calls the Himalayas home. Despite being similar in size to its American relative, a distinctive cream-colored crescent at the center of its chest gives this Himalayan resident its unique identity. We'll discover that the shape of the crescent on its chest gives this species the nickname "moon bear." Although armed with two-inch long curved claws and canine teeth designed for tearing meat, this predator is primarily a vegetarian. Berries, grasses, roots, and the occasional insect make up the majority of its diet.

[Educational Message: The Himalayas is an unbelievable region in our world. From the ancient cultures that are still practiced today, to the animals that thrive in such harsh environments, this mountain range is one of the most fascinating places on Earth.]

Airdate: 9/12/2020

Time:

Duration: 30:00

CONSUMER 101

HOT CAR STORIES – TRUE OR FALSE [CNR224]

Host Jack Rico and the experts at the testing labs will show us the dangers of leaving pets and children in a hot car, how to choose the best pots and pans for making a great meal, and how to prep your air conditioner for the summer. First up, Jack meets with an auto safety expert to discuss how quickly your car can heat up and create a potentially life-threatening situation if any loved ones or pets are left behind. We'll be going to the auto test center to measure and demonstrate exactly how hot these cars can get when unattended. Today we'll be conducting an experiment to see if the color of the car makes a difference in how hot it can get. Also, we'll be testing if cracking the windows makes a difference in the car's temperature. Using thermometers and timers, we'll witness how these experiments are scientifically conducted to accurately measure how hot the interior of the car gets, and why you should never leave children or pets in a car unattended. Next, we'll meet with an expert for tips on how to pick the best pots and pans for your kitchen. We'll discover that non-stick pans are the ideal choice for cooking delicate foods such as eggs or other items that don't require high heat. We'll learn that stainless steel pans are the best option for searing foods at high temperatures. Here we'll witness how experts scientifically test pots and pans for their performance with various foods and ranges of temperature. Finally, we'll get some helpful tips from an expert on how to maintain your air conditioner and prepare it for the summer. We'll discover that window air conditioners can harbor mold and other irritants, so it's always a good idea to store it in a dry place during the offseason. Also, always clean the air filter at the beginning of each season and be sure to wash it every month thereafter.

[Educational Message: In this episode, we learned about the dangers of leaving children and pets in cars unattended. While you should never do this at any time of the year, it's especially dangerous during the summer months. We witnessed how hot cars can get when sitting in the sun for only a short period of time. This can become a life-threatening situation for a child or pet. Always practice safety and never leave children or pets in your car unattended.]

Airdate: 9/12/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO MILLIONS [RLT105]

Today on Roots Less Traveled, host Faruq Tauheed takes uncle and nephew Al and Jr on an ancestral trip to Havana, Cuba. We'll discover that stretching almost 750 miles east to west, Cuba is the largest known island in the Caribbean Sea. The city of Havana is one of the fifteen provinces of the Republic of Cuba. Here Al will learn that his grandfather, Joseph Barlow, owned and developed thirty-four blocks of downtown Havana. This area, approximately equal to 1.6 miles, also includes the now-famous suburban neighborhood Buena Vista. We'll learn that Joseph Barlow once owned the Barlow-Cuba Company of Havana. Appraised at over \$4 million during the early 1900's, the Barlow-Cuba Company was an extremely successful business. But due to an unfortunate turn of fate, Joseph Barlow lost his riches in a political coup. Joseph Barlow had previously purchased the land under old Spanish grants that were later ruled illegal by the Republic of Cuba. Joseph Barlow's property was soon seized under a provisional decree of President Zayas. Still a rich man, Joseph Barlow started a legal fight against the order but was turned down in every court in Cuba and eventually spent his entire fortune. We'll discover more about the history of Cuba and how after a 54-year-long dispute, Cuba and the United States reestablished their diplomatic relations in

2015. As Al and Jr connect over their own entrepreneurship, they learn where their family's resilience came from.

[Educational Message: In this episode, Al and Jr uncovered incredible family roots in Cuba they did not know existed. The duo discovered that their relative Joseph Barlow had achieved great wealth and success as an entrepreneur in Havana, Cuba. However, due to political and governmental changes in the region, Joseph Barlow eventually lost his great fortune. As both Al and Jr are also entrepreneurs, they connect and bond deeply over their relative's struggles and tragic end.]

Airdate: 9/19/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VOYAGE IN VANCOUVER [EDD229]

Today on Earth Odyssey, host Dylan Dreyer takes us to Vancouver, where we will explore the beautiful landscape and diversity of animals that are native to this area. Located off the west coast of Canada, Vancouver Island stretches approximately two-hundred and eighty miles long by about sixty miles wide. Vancouver Island is known as the largest island off the west coast of North America. First up, we'll learn about the humpback whales that call that waters of Vancouver home. Reaching fifty-two feet in length and weighing more than thirty-six tons, the humpback whale is the fifth largest animal on the planet. The humpback's enormous frames are fueled by small schooling fish like herring and swarms of tiny shrimp-like crustaceans known as krill. These toothless whales use a mass of bristles called baleen plates to filter food from the water. We'll discover that there are over ten known whale species with baleen plates, categorized as "baleen whales." Baleen bristles can be anywhere from two inches to twelve feet long and are made of the same material as our fingernails. Next, we'll travel to East Sooke Park on the southern tip of Vancouver Island where thousands of turkey vultures gather creating a unique spectacle. Masters of soaring flight, turkey vultures aren't strong flyers and rely on winds and thermal currents to keep them aloft. This efficient way of traveling uses just a fraction more energy than when they're standing still. We'll discover that turkey vultures can have a wingspan of roughly six feet and can weigh up to four pounds. We'll learn that turkey vultures are also known as buzzards or carrion crows in some parts of North America. Finally, we'll meet with the island's largest predator, the black bear. Vancouver Island is home to seven thousand to twelve thousand black bears, one of the highest concentrations of black bears in the world. Darker than mainland bears and slightly larger, the black bears of Vancouver Island can weigh up to six-hundred pounds. We'll discover that adult black bears can gain roughly thirty pounds of fat per week when preparing for hibernation.

[Educational Message: Vancouver Island is a region with giants both on land and in the ocean. These creatures have learned to master the cold and the elements to ensure survival for themselves and their offspring. With the nutrients that Vancouver Island receives from the life cycle from all living things, animals continue to thrive in this unbelievable habitat.]

Airdate: 9/19/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

EXPLORING AROUND THE ANDES [EDD230]

Today on Earth Odyssey, host Dylan Dreyer leads us on an amazing adventure to the Andes Mountains, one of the most biodiverse regions on the Earth. At over forty-five hundred miles long, and one-hundred and twenty miles wide, the Andes are an epic landscape of snow-capped mountains and belching volcanoes.

We'll learn that the average peak height in the Andes Mountain Range is roughly thirteen thousand feet. First up, we'll travel to the Altiplano region of the Andes to discover more about the creatures that inhabit the area. Due to volcanic activity, toxic lakes have formed in the high altitudes of the Altiplano region. We'll discover that colorful plankton and algae thrive in these mineral rich waters. In the spring, flamingos are attracted to these lakes to feed. Here we'll discover that three of the world's six species of flamingos gather here. All flamingos are filter feeders, targeting shrimp and algae from the salty waters. We'll discover that each species of flamingo has a different sized filter in its bill, and each gathers its food from different depths to avoid competition. Here we'll learn that this filter feeding adaptation was also found in the Pterosaur, which existed roughly one-hundred and fifty million years ago. Next, we'll meet one of the Andes' most iconic animals, the Andean bear. Andean bears are also called "spectacled bears" due to their facial markings which resemble glasses. We'll discover that Andean bears have markings as complicated and unique as human fingerprints. Here we'll witness a mother Andean bear as she teaches her cubs how to forage for food. Finally, we'll journey to the cloud forest to meet with the fascinating bird species of the Andes. In the cloud forest, the high altitude causes the nights to be extremely cold and the days very damp, meaning not many flying insects can survive here. Therefore, most plants are pollinated by hummingbirds. These birds hover in position by beating their wings up to a hundred times per second, with their heartbeat reaching nearly a thousand beats per minute. To power their incredible metabolism, they must consume more than their own weight in nectar every day. We'll discover that hummingbirds must feed from hundreds of flowers to gain enough energy to survive the cold nights.

[Educational Message: Rainfall in the cloud forest is essential to supporting the amazing biodiversity that you'll find in the Andes Mountains. From flamingos to Andean bears, this mountain range is full of danger, beauty, and intrigue.]

Airdate: 9/19/2020

Time:

Duration: 30:00

CONSUMER 101

TALKING TO THE FUTURE [CNR225]

Host Jack Rico and the experts at the testing labs will teach us about the future of car technology, how to choose the right lawnmower, and how we can keep our information private when using smart televisions. First up, we'll join an auto expert to learn more about the future of technology on the roads. Vehicle to Everything, or V2X, is a newly developed technology that can enable vehicles to communicate with one another. V2X can also share information with the city's infrastructure, communicating everything from road conditions to traffic information and beyond. We'll discover that this technology has been implemented in cities and is already showing positive results. The goal is that V2X can help save lives by being implemented on ambulances, police vehicles, and fire trucks to better allow them to respond to incidents more quickly. Next, we'll meet with a lawn mower expert to learn more about lawn mowers and how to find the best one for your needs. We'll discover that there are many different types of lawn mowers such as push, self-propelled, battery powered, lawn tractor, and zero-turn radius. We'll learn that each mower is specifically designed and suited for different sized jobs. We'll also learn that it's important to wear ear protection when using a lawn mower. Finally, we'll join an expert to learn more about smart televisions and how they might be collecting our personal information. We'll discover that smart televisions are capable of collecting data on our viewing habits via the Automatic Content Recognition technology. Here we'll learn some tips on how to disable these functions and keep our personal information private.

[Educational Message: In this episode we learned about new technology changing the way we stay safe on the road. The new V2X technology is proving to be a vital tool in helping cities manage traffic,

busses, and plows. Implementing this technology in emergency response vehicles will help reduce response time and allow help to get where its needed as fast as possible.]

Airdate: 9/19/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE BROOKLYN BRIDGE [RLT104]

Today on Roots Less Traveled, host Faruq Tauheed takes aunt and nephew Tammy and Julian on a cosmopolitan adventure in Brooklyn, New York. We'll first learn that the Brooklyn borough of New York City was originally called "Breukelen," which is Dutch for "broken land." Tammy and Julian's journey begins when they learn that they are related to undertaker John Baisley, who helped the city bury its dead during the Yellow Fever epidemic in 1856. Since the city of Brooklyn was so densely populated, hundreds died during this time and others left their homes and abandoned the city. We'll learn that while many were fleeing the city, John Baisley stayed in Brooklyn to help nurse the sick and dying, in most cases rendering his services without expecting or receiving any pay. Tammy and Julian also learn that they have direct ties to James Howell, a former Mayor of Brooklyn who served from 1878-1881. Not only was James Howell the 19th Mayor of Brooklyn, he also owned a large iron works company and became an integral part in building the iconic Brooklyn Bridge. To learn more about their ancestor's iron works company, Tammy and Julian visit a blacksmithing shop to discover what it would've been like to work as a blacksmith during that time. Here we'll discover that the craft of blacksmithing has been traced back to 1350 BCE.

[Educational Message: In this episode, Tammy and Julian discovered their family roots go much deeper than they had previously known. Tammy and her father always shared a strong connection to New York City and specifically the Brooklyn Bridge. After discovering that their relative, James Howell, was elected as the President of the trustees for the Brooklyn Bridge, Tammy's connection to the bridge grows even stronger. Sharing this experience with her nephew Julian only serves to strengthen that connection as well as their bond as a family.]

Airdate: 9/26/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

THE AMAZING AMAZON [EDD231]

Today on Earth Odyssey, host Dylan Dreyer takes us to the Amazon to explore the wildlife and the cultures that live there today. Formed over the last fifteen million years, the Amazon covers three million square miles of South America. This vast rainforest straddles the equator making it permanently hot and wet, the ideal conditions for creating and maintaining life. First up, we'll learn about ancient civilizations living within the dense rainforests of the Amazon. We'll discover that it's now thought that five and a half million people inhabited the Amazon in the early sixteenth century. Today, there are thirty million people living in the Amazon. Many are descendants of the first waves of incomers such as rubber farmers and traders, but some are descended from people that have lived in the Amazon for ten thousand years. We'll discover that the population of the Amazon River Basin is less than ten percent indigenous. Here we'll learn about the rituals and hunting practices of the native people. We'll also witness the unique rites of passage for young boys living within the native tribes. Next, we'll discover more about the predators of the Amazon, such as the jaguar. While many cats avoid getting their feet wet, jaguars use the smaller waterways of the Amazon to move around with ease. Their large paws make excellent paddles as they hunt for fish, turtles, and even caiman. Finally, we'll discover more about the pink river dolphin. Pink river dolphins are nearly blind, but

they do not require keen eyesight due to the low visibility in the murky waters of the Amazon. These creatures hunt and navigate using echolocation, an adaptation that helps the animals build a sonic picture of their underwater world. We'll discover that pink river dolphins are able to bend up to ninety degrees, allowing them to easily navigate roots and trees in the water.

[Educational Message: The traditions that have been passed down from generation to generation only add to the pure wonder of this biodiverse South American jewel. As the modern world encroaches, it's clear how vulnerable plants and animals can begin to change. The Amazon's future is in our hands and its complexities must be respected.]

Airdate: 9/26/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FINDING THE LOST WORLDS [EDD232]

Today on Earth Odyssey, host Dylan Dreyer leads us on an incredible adventure to the lost worlds of India. Known as the Seven Sisters, the Northern region of India is comprised of seven relatively unexplored and isolated states bordered by the Himalayas to the north and the Indian Ocean to the south. These seven states of India are among the least explored places on Earth. First up, we'll learn about the local inhabitants of these lost worlds of India. Although the local humans thrive among the rich forested mountains, they aren't immune to attacks from the animals they share their home with. The Indian elephant's migratory routes extend throughout the region, but their ancient paths have been seriously interrupted by the local people. Here we'll discover that elephant herds consist of about fifteen elephants on average and are typically led by the oldest female. Elephants eat an estimated fifty-six tons of food per year, totaling roughly three hundred and thirty pounds per day. As homes and crops are devastated, tensions between humans and elephants escalate. As crops spread and villages grow, further clashes seem inevitable. Here we'll learn how the local people live and work alongside these massive creatures in harmony. Next, we'll embark on a hunting journey with a local tribe and learn more about the cultural rituals of these native people. We'll also find out that traditional folk songs and dances are essential ingredients of the local culture. These celebrations are inspired by a creature that is an icon throughout Northeast India, the great hornbill. Finally, we'll discover more about the legendary great hornbill bird species. Hornbills have a long curved bill which is often brightly colored and quite heavy. Hornbills are the only birds whose first two neck bones are fused together to help support the weight of their beak. Research suggests the hornbill's impressive beak may have formed to amplify their territorial calls. Here we'll discover that hornbills primarily eat fruit but supplement their diet with small mammals, insects, and even snakes. We'll also learn that the hornbill's wings are so loud, they can be heard from long distances, even up to half a mile away.

[Educational Message: Today we witnessed an incredible connection between animals and humans that's rarely seen in the wild. Without many other places on Earth like these lost worlds, it's important to protect some of the last remaining ancient traditions our world has.]

Airdate: 9/26/2020

Time:

Duration: 30:00

CONSUMER 101

CONQUERING THE USED CAR PURCHASE [CNR226]

Host Jack Rico and the experts at the testing labs will show us how to avoid online privacy traps, what to look for when buying a used car, and the future of vacuuming. First up, we'll meet with a privacy expert to learn how we can protect ourselves from hackers and scammers online. We'll discover that some hackers use a tactic called "phishing" in order to lure their victims. These "phishing" emails are designed to mimic official email accounts and websites, tricking people into giving up their passwords, credit card numbers, and other personal information. We'll learn that you should always confirm the legitimacy of these email accounts and websites before giving away any personal information. Next, Jack joins an auto expert to learn some tips on how to buy the best used car. We'll find out that when speaking to a dealer about buying a car, you should never reveal how much money you want to spend. We also learn that you should never let a car dealer rush you into a sale, always take your time to think it over first. We'll also find out that it's important to inspect the vehicle for any defects or damage before buying. It's also important to have a mechanic that you trust check the vehicle thoroughly for any other hidden issues. Finally, we'll check out the science behind the next generation of smart home helpers, robotic vacuums. We'll meet with expert vacuum testers to learn more about how the robot vacuums are scientifically measured in a controlled environment. In order to ensure consistency and accuracy, testers use a controlled weight of a variety of different sized debris for the vacuums to pick up. Following the test, the debris picked up by the vacuums is weighed in order to determine how effective the vacuums performed. We'll also see how experts use sensor technology to generate a map of the vacuum's path to determine how well it covers the space of a room.

[Educational Message: In this episode, we learned the importance of protecting your online privacy. Hackers and scammers are improving their techniques each day and it's important we stay ahead of them. We must always use online apps and websites responsibly and carefully in order to protect our personal data and privacy.]

Airdate: 9/26/2020

Time:

Duration: 30:00

ROOTS LESS TRAVELED

CONNECTING TO THE PAST [RLT108]

Today on Roots Less Traveled, Host Faruq Tauheed takes us back to look at some of our most memorable moments. First, we'll follow Rob and Michelle to Mexico City. Their journey includes a trip to the ornate National Palace where they learn that their second cousin Ernesto gave the keys to Mexico City to President John F. Kennedy. Rob and Michelle also discover that their third cousin Manual Uruchurtu died on the Titanic, after giving up his seat on a lifeboat to a woman in need. Next, we go to Cuba where uncle and nephew Al & Jr. bond while learning that Al's grandfather Joseph Barlow owned thirty-two blocks in downtown Havana. We'll learn that Joseph Barlow once owned the Barlow-Cuba Company of Havana. Appraised at over \$4 million during the early 1900's, the Barlow-Cuba Company was an extremely successful business. But due to an unfortunate turn of fate, Joseph Barlow lost his riches in a political coup. Finally, we go on a historical Tennessee adventure with mother and son Sharee and DeVonn. At a visit to the Tennessee Supreme Court, Sharee and DeVonn will learn that their four-times great grandfather Larkin Ford was part of an 1840s landmark Tennessee court case. Larkin Ford was a slave whose owner granted him his freedom and left him property in his will years before the Emancipation Proclamation declared an end to slavery in the United States. Although the will was contested, the court ultimately ruled in Larkin

Ford's favor, and he went on to become a delegate in the Republican Party, helping to elect African American officials into Tennessee government.

[Educational Message: By learning more about our past, we can learn more about ourselves and where we come from. In this episode, we witnessed several stories of family members discovering incredible information about their historical roots that was previously unknown. By filling in the gaps of their history, these family members are able to forge stronger connections with each other in the present.]

NBC NETWORK NON-BROADCAST EFFORTS

July - September, 2020

NBCUniversal's *The More You Know* website:

Since 1989, *The More You Know* has brought the nation's most important social issues to the forefront, and remains a trusted voice for sharing knowledge to improve lives and inspire action. *The More You Know's* comprehensive website (themoreyouknow.com) includes in-depth resource and referral information on the campaign's important focus issues including:

- HEALTH – fighting childhood obesity, encouraging nutrition and physical fitness
- ENVIRONMENT – encouraging everyday actions that reduce environmental impact
- EDUCATION – recruiting new teachers and promoting their long-lasting impact
- DIGITAL LITERACY & INTERNET SAFETY - sharing online safety tips and information
- DIVERSITY – embracing differences and promoting inclusion, tolerance and respect

Also featured on site is The More You Know Learning series' *Growing Up Online*, a free eBook on digital literacy and Internet Safety. *Growing Up Online* is an important tool to initiate conversation with children about online safety. The eBook is a media-rich, two-part learning resource that provides easy-to-use information about navigating the digital world in a unique and engaging way. Part one includes safety tips, discussion questions and key takeaways for parents and teachers. Part two features four entertaining video comic books for children, focused on real situations that come up when kids go online.

Additional content on the site includes public service announcements, behind-the-scenes videos, a general overview, a talent directory, and a list of the campaign's accolades such as the prestigious Emmy and Peabody awards.

Note Regarding FCC's Video Description Rules: The programs supplied in **The More You Know** block are video-described to provide a better viewing experience for blind or visually impaired children.

4th QUARTER 2020
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
October 1, 2020 – December 31, 2020

In the 4th Quarter of 2020, NBC continued airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the four shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. There continued to be two half hours of *Earth Odyssey with Dylan Dreyer*. Beginning in the 4th Quarter of 2020, stations had the option of airing the final hour of the block (*The Voyager with Josh Garcia* and *Vets Saving Pets*) on their primary channel or on their secondary D2/D3 channel.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

A NEW LEAF

A New Leaf is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Hosted by Daisy Fuentes, A New Leaf will follow everyday people on the cusp of key life inflection points, using family history, genealogy, and sometimes DNA analysis to help guide them on their journey of self-discovery. Along the way, viewers will learn about different cultures as our featured guest uncovers new information about their family's heritage. Each week, A New Leaf will teach viewers the importance of appreciating and understanding their family history in order to make important decisions to enact positive changes in their lives.

THE VOYAGER WITH JOSH GARCIA

The Voyager with Josh Garcia is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. The Voyager with Josh Garcia takes viewers on an exciting and immersive journey around the globe with world traveler and host, Josh Garcia. Each episode gives audiences access to the world's most incredible destinations as Josh seeks out the truly authentic experiences one can only find when shown by a knowledgeable and passionate guide. In each episode, Josh

learns how to prepare an authentic, regional meal, visits a local artisan to learn about their trade and craft, and samples the culture while learning about the heritage of the region's population, showing viewers what is so unique about each city he visits. The Voyager with Josh Garcia brings viewers on an enthralling adventure to explore the people and cultures that make our world so breathtaking.

1st QUARTER 2021
EDUCATIONAL OBJECTIVES and SHOW SUMMARIES
[AGE TARGET 13-16]
January 1, 2021 – March 31, 2021

In the 1st Quarter of 2021, NBC will continue airing The More You Know Educational/Informational programming block, designed for older adolescent children, ages 13-16. Each of the six shows has a hosted format, featuring non-fiction, informative programming that extends NBC's iconic The More You Know brand to Saturday mornings. The audience views inspiring stories about the environment, social change, health and wellness, and community engagement. Two new series will be joining the lineup and one former series will be returning in the 1st Quarter of 2020. New series *Wild Child* will be replacing the second half hour of *Earth Odyssey with Dylan Dreyer* and *One Team: The Power of Sports* will be replacing *The Champion Within*. Returning series *Roots Less Traveled* will be replacing *A New Leaf*. Stations will continue to have the option of airing the final hour of the block (*The Voyager with Josh Garcia* and *Vets Saving Pets*) on their primary channel or on their secondary D2/D3 channel.

EARTH ODYSSEY WITH DYLAN DREYER

Earth Odyssey with Dylan Dreyer is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Earth Odyssey with Dylan Dreyer will take viewers on an incredible journey to the wildest points on the globe, uncovering the connection between the environment, the wildlife, and the human beings that surround them. Hosted by Meteorologist Dylan Dreyer, Earth Odyssey with Dylan Dreyer will reveal a new destination each week, ranging from Africa, Indochina, the Middle East, and many untamed islands around the world. Audiences will come face-to-face with fascinating native animals, some cute and some dangerous, while educating teen viewers with amazing facts about nature and wildlife. Earth Odyssey with Dylan Dreyer gives audiences a captivating look at the symbiosis between all living things, in the most larger-than-life places on Earth.

WILD CHILD

Wild Child is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Wild Child will take viewers on an adventure to meet the cutest, most curious, most fascinating baby animals on the planet. Along the journey, audiences will witness the incredible bond that exists within the animal kingdom between parents and their children. Hosted by Sheinelle Jones, Wild Child will reveal how these untamed youngsters are born, how they play, and how they learn to survive in the wild. Each week, viewers will witness a wide variety of wild animal children in their first years on Earth as they overcome environmental challenges and threats from predators.

THE VOYAGER WITH JOSH GARCIA

The Voyager with Josh Garcia is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. The Voyager with Josh Garcia takes viewers on

an exciting and immersive journey around the globe with world traveler and host, Josh Garcia. Each episode gives audiences access to the world's most incredible destinations as Josh seeks out the truly authentic experiences one can only find when shown by a knowledgeable and passionate guide. In each episode, Josh learns how to prepare an authentic, regional meal, visits a local artisan to learn about their trade and craft, and samples the culture while learning about the heritage of the region's population, showing viewers what is so unique about each city he visits. The Voyager with Josh Garcia brings viewers on an enthralling adventure to explore the people and cultures that make our world so breathtaking.

VETS SAVING PETS

Vets Saving Pets is a live action, half-hour television program designed to meet the educational and informational needs of children aged 13-16. Vets Saving Pets examines the interpersonal stories of veterinary professionals working to save the lives of animals in need of urgent medical care. Vets Saving Pets takes place at the Emergency Veterinary Trauma Center in Toronto, one of the busiest veterinary facilities in Canada. Each week, viewers will be exposed to new emergency cases that will teach audiences about a wide array of specialties within veterinary medicine such as critical care, oncology, cardiology, neurology, anesthesiology, dermatology, dentistry, and surgery. Audiences will witness first-hand the dedication and determination of these veterinary specialists as they work tirelessly to save their animal patients.

“CORE PROGRAMMING”

**PROGRAMMING FURNISHED BY THE NBC NETWORK THAT IS SPECIFICALLY
DESIGNED TO SERVE THE EDUCATIONAL AND INFORMATIONAL NEEDS OF CHILDREN
16 AND UNDER
[AGE TARGET 13-16]
October 1, 2020 – December 31, 2020**

Airdate: 10/3/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VIETNAM [EDD101]

Today on Earth Odyssey, host Dylan Dreyer takes us on an excursion to the lush tropical landscape of Vietnam. Situated on the Easternmost rim of the Indochina Peninsula, we'll discover that Vietnam is one of the most bio-diverse countries in the world. We'll learn that Vietnam's dense tropical forests cover almost half of the country, and that approximately 10 percent of the world's animal species live in this region. But we'll discover how this environment was not always thriving. In the 1960's, the Vietnam War destroyed almost one-fifth of the rainforests, leaving scores of animals fighting against extinction. But today, Mother Nature has fought back and these tropical jungles are once again thriving. Next, we'll travel into the lowlands in search of yellow-cheeked gibbons. These monkeys are famous for the loud, odd sounding melodies they use to mark their territories. We'll discover that these monkeys are also some of the best tree swingers on the planet, reaching speeds of up to 25 miles an hour as they swing up to 50 feet from branch to branch. Next, we'll meet one of the rarest species of primates who were once thought to be extinct, the Hatinh Langur. We will learn about their strange social structures, their eating habits, and how they have made an unlikely home in the limestone caves in the cliffs of Halong Bay. Finally, we'll travel to the Son

Tra Primary Forest, home to the red shanked douc, one of the most beautiful and colorful monkeys in the world. We'll discover that these highly social primates live in groups of up to 15 members. Despite the fact that they were almost driven into extinction, they now thrive because their home has been deemed a No-Entry Zone to the public since the end of the Vietnam War.

[Educational Message: The rainforests of Vietnam are an example of the true resilience of the natural world. Plants and animals have made an incredible resurgence since the Vietnam War. We must always protect our environment for generations to come.]

Airdate: 10/3/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

HEBRIDES [EDD102]

Today on Earth Odyssey, host Dylan Dreyer takes us on an adventure to the mysterious Hebrides archipelago off the Northern coast of Scotland. Known as "Europe's Last Wilderness" and isolated from the mainland, this island chain has become the perfect breeding ground for millions of creatures. First up, we'll travel to the Outer Hebrides chain that hosts one of the largest gatherings of grey seals on the planet. We'll discover that each year over 35,000 of these aquatic mammals arrive on the isolated shores to mate and give birth to new pups. Here we'll learn that more than 9,000 pups are born in this region each year. Next, we'll journey inland to the Island of Rum to witness one of the largest deer in the world, the red deer. We'll learn that adult males typically weigh around 450 pounds and stand nearly 6 and a half feet tall. We'll witness as these massive bucks fight aggressively with their mighty antlers to win mating rights for the island's female population. Finally, we explore one of the region's most mysterious animals, Ancient Man. We'll discover that it is believed man reached the islands over 6,000 years ago during the Iron Age. We'll learn that these ancient humans brought along with them primitive sheep that still roam the countryside today. We'll also explore the ancient stone dwellings that were carved into the landscape, and see towering stone monuments whose mystical origins still baffle experts today.

[Educational Message: The world we recognize today is billions of years in the making. The amazing plants and animals living on Earth deserve our respect and protection.]

Airdate: 10/3/2020

Time:

Duration: 30:00

A NEW LEAF

A FAMILY LOSS [ANL106]

Today on A New Leaf, after the sudden loss of his mother, Craig Victor vowed to learn more about his family tree, for himself and his siblings. With the help of host Daisy Fuentes, Craig starts digging into his family history. He soon discovers several things about his ancestors that he didn't know, and can't wait to share them with his family. As Craig embarks on his journey to discover more about his past, he would like to know more about his parents' relatives and their family's journey to America. Craig soon discovers that his family on his mother's side were in the garment business in New York City during the early 1900's. Inspired by this revelation, Craig visits a working textile factory to learn more about what life was like for garment workers during that time. Craig discovers that early textile factories were unventilated and extremely hot due to the large machinery, which lead to the term "sweatshop." However, after a tragic fire that became one of the deadliest workplace disasters in history, new reforms and regulations would change

the industry and create safer work environments for Americans. Moved by these fascinating historical facts of his family's past, Craig now has the information he needs to share with his siblings.

[Educational Message: Connecting with your family past can help ground you in the present. After losing both of his parents, Craig was determined to fill in the gaps of his history and learn more about his family tree. By discovering the fascinating details of his past ancestors, Craig is now able to share this information with his siblings. This experience will help provide a new outlook on life and strengthen his bond with his siblings.]

Airdate: 10/3/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

COOL CABO [VJG302]

Host Josh Garcia spends the day ashore in Cabo San Lucas, Mexico. First, he visits an artisanal glass factory and tries his hand at this art form with the help of a master glassblower. Glass can be recycled to produce new glass. Once the recycled glass is washed and crushed, it's melted by 2,000 degrees of heat until it takes on a pliable state. Glass is an amorphous solid, neither a solid nor a liquid. Josh observes as the hot, pliable glass is blown, shaped, and cut into art. Next, Josh kayaks with a guide to the famous El Arco landmark that sits on top of an underwater mountain range that contributes to the marine life. The Sea of Cortés supports more than 900 varieties of fish. Five hundred years ago, El Arco became an important navigational tool for ships traveling from the Far East running low on their water supply. Sailors knew that finding the arch was an indicator that fresh water was near. Finally, Josh visits a chef at his organic farm where he learns how to prepare a traditional salsa molcajete. Molcajete is a traditional stone mortar and pestle. Josh picks the ingredients himself from the farm, including onions and vine-ripe tomatoes. Salsa can be traced back to Aztec marketplaces as early as the mid 1300s. Josh prepares the ingredients once they are roasted to be ground in the molcajete, and then the salsa is ready to eat. Josh then shares in preparing a full, traditional Oaxacan meal. Oaxaca is a state in southern Mexico known for its indigenous cultures.

[Educational Message: Trying an outdoor activity for the first time might seem intimidating, but if you learn correct form and safety from a professional, you'll have the tools to get started.]

Airdate: 10/10/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GALAPAGOS [EDD103]

Today on Earth Odyssey, host Dylan Dreyer takes us on an adventure to the Galapagos Islands. A volcanic hotspot off the coast of South America, the Galapagos Islands are a living museum and showcase of evolution. We'll learn more about the 19th century botanist Charles Darwin, and how he used the Galapagos Islands as his own laboratory. We'll follow Charles Darwin's trail to see how he studied the evolution of animals and plants on these islands. We'll take a closer look at the bizarre and beautiful species that Darwin studied, from the prehistoric giant tortoises to the blue footed boobies. On our journey, we will see how each species adapts and finds a way to survive, despite the unforgiving conditions of these volcanic islands. Next, we'll find that some islands in the Galapagos are still harboring active volcanoes. We'll get an up-close look at the volatile world of Fernandina, Galapagos' youngest island. Fernandina's plants and animals

must cope with the constant threat of volcanic eruptions. Living within a hostile land environment, we'll meet the only lizard in the world that's learned to fish for its dinner, the marine iguana. To brave the ocean currents, these cold-blooded reptiles spend time warming their bodies on sun-kissed rocks before taking the plunge. Each fishing trip for these creatures is a race against time. We'll discover how marine iguanas evolved over time to make the most of their underwater meal. Finally, we'll hop over to the older Galapagos islands with less volcanic activity. We'll learn how their stable environment is creating an opportunity for a more diverse and abundant wildlife scene.

[Educational Message: We witnessed first-hand how Dr. Charles Darwin's visit to the Galapagos Islands shaped our understanding of our natural world. Adaptation and evolution play an important role in our survival. We must always seek knowledge to understand more about the world around us.]

Airdate: 10/10/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CHINA [EDD104]

Today on Earth Odyssey, host Dylan Dreyer takes us on an exploration of a hidden oasis known as the Yunnan, in Southwest China. We'll discover that this remarkable region consists of lush valleys, tropical forests, and some of the most rugged mountain peaks on earth. With its wide array of landscape and climates, we'll learn that it is the perfect home for approximately half of China's birds and mammals. With a vast range of climates, we'll discover how these creatures have learned to adapt and survive in vastly different environments. First, we'll begin our journey in the lowland forests of the Yunnan, home to one of the biggest monkeys in Asia, the Chinese stump tailed macaque. We'll discover how these highly social primates live in groups of around fifty individuals, and how the fertile evergreen forest provides all the food and water they need to survive. We'll follow these fascinating primates to learn about their eating habits, their social structure, and their daily fight for survival. Next, we'll make a trek up to the top of the Hengduan Mountains to meet a mysterious group of primates who inspired the legend of the abominable snowman. In truth, these strange looking primates are actually known as snub-nosed monkeys. We'll discover how these creatures have adapted and learned to survive in the frigid, snowy mountains. Not to mention, we'll witness how snub-nosed monkeys are some of the most breathtaking tree swingers on Earth. Here we'll learn how there are four types of primate locomotion such as vertical clinging, quadrupedal, brachiation, and bipedalism. Finally, we will meet a group of fishermen who, for a thousand years, have trained and used the hunting skills of cormorant birds to help them fish the mighty rivers of the Yunnan.

[Educational Message: Nature can be an unforgiving environment, and we must always respect its beauty and power. We should always seek to learn new ways to adapt to changes in our world in order to thrive and survive.]

Airdate: 10/10/2020

Time:

Duration: 30:00

A NEW LEAF

A FAMILY REUNION [ANL107]

Today on A New Leaf, Lauren and her husband have given their young sons a real connection to their dad's Trinidadian roots, but Lauren wants them to know her family history, too. With help from host Daisy

Fuentes, Lauren can finally clear up the mystery surrounding her great-grandfather's adoption, and discover a surprising heritage, which amazes generations young and old at her family reunion. As Lauren begins her journey of discovery, she would like to know more details about her great-grandfather, as well as her potential Native American or Mexican roots. After diving deep in her family history, Lauren discovers that her great-grandfather was actually from New Mexico. Once living as part of the Genizaros community, Lauren confirms her great-grandfather was of Spanish and Native American descent. Moved by this revelation, Lauren visits with a historian to learn more about her connection to the Genizaros community. We'll discover that historians estimate that Genizaros accounted for as much as one-third of New Mexico's population in the late 18th century. Lauren will learn that her great-grandfather and other relatives were likely sheep herders. Here Lauren will get a glimpse into the past and learn more about daily life during that time.

[Educational Message: By discovering more about our past we can connect more with the present. Lauren sought to find out more about her roots so that she could share it with her family. A better understanding of your past can help you form stronger bonds with your family in the present.]

Airdate: 10/10/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

MEDIEVAL MALTA [VJG313]

Host Josh Garcia voyages to the island country of Malta, where his ship docks in the beautiful capital of Valletta. First he visits a spice shop and learns how a Moroccan spice blend has influenced Maltese cuisine. Ras el Hanout is an Arabic phrase meaning "a mixture of spices." Then, Josh gets a lesson in the sport of abseiling on Malta's coastal cliffs. The name of the sport abseiling comes from the German word, "abseil," meaning "to rope down." Josh learns safety protocols around this sport, and learns how to use a locking carabiner, a coupling link with a spring-loaded safety closure. Josh completes his training before abseiling his way to descend the 180 foot Blue Grotto, also called "Il-Hnejja," meaning "the arch" in Maltese. The Blue Grotto is a collection of sea caves known for colorful reflections on the walls and water. Then, he meets a local chef who teaches him how to make Malta's classic fish soup—Aljotta. Aljotta comes from the Italian word "aglio," meaning garlic. Malta has been conquered by many different groups of people over its history, and Malta has adapted to many cultures as a result. From the Turks to the French to the Italians to the North Africans, those influences are all present in Malta's cuisine. Finally, at Fort St. Angelo, Josh tours the palace museum to learn about the history of the Knights of Malta, who ruled from 1530-1798. The Knights of Malta's most famous defense against the Ottomans is known as the Great Siege of Malta in 1565. Josh suits up for a lesson in historic sword-fighting to learn the basics these knights left as a tradition.

[Educational Message: Nature is the earth's original technology. For example, historically, the limestone cliffs that surround this island country are nature's natural barrier, creating coves and caves for exploration and passage by water into the island.]

Airdate: 10/17/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CARIBBEAN [EDD105]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to the Caribbean Islands. We'll discover that the Caribbean Islands are a string of more than 7,000 islands between North America and South America. First up, we'll learn about the violent beginnings of the Caribbean Islands, and how volcanic eruptions shaped the land many years ago. We'll witness how the fertile volcanic soil on the islands soon created lush, tropical forests full of wildlife. Next, we'll learn more about the leatherback sea turtles that call the Caribbean home. The largest of all sea turtle species, we'll discover that the leatherback can grow to roughly six feet in length and weigh as much as a small car. Next, we'll learn how sunken ships get a second life as man-made reefs for numerous species of coral and marine life. We'll also discover how the Caribbean Islands are located in "Hurricane Alley," making this region more vulnerable to powerful natural events. We'll find out where the animals retreat to when they are caught up in the storms, and how they rebuild once the weather passes. Next, we'll meet the National Bird of Trinidad, the scarlet ibis, and find out where their unique color comes from. Here we'll learn that the scarlet ibis gets its unique color from its diet, which consists primarily of crabs rich in the pigment, carotene. We'll discover that the scarlet ibis is actually born with grey feathers, earning its flashy red color over time. Finally, we'll learn about the hummingbirds that are found throughout the Caribbean Islands. We'll discover that their hearts work like an engine, beating up to five hundred times per minute. To keep their energy up, they need to feed constantly. Always on the move, we'll learn that hummingbirds will consume almost three times their body weight every day.

[Educational Message: A habitat of extreme climates and conditions requires clever adaptation and determination for survival. We should always respect and appreciate the beauty and power of nature.]

Airdate: 10/17/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

TURKEY [EDD106]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to Turkey. Wedged in between Europe and the Middle East, we'll discover why Turkey is a country of extreme temperatures and landscapes. In Turkey, conditions can quickly deteriorate with heavy downpours, blinding snowstorms, and even burning heat. We'll find out how this country's largest land mammal, the brown bear, copes with such a hostile environment. Here we'll learn that two layers of fur protect the brown bears from harsh weather. Next, we'll go rock climbing with Turkey's Anatolian wild goats, considered one of the best mountaineers in the world. We'll follow a group of wild goats as they trek alongside thousand-foot cliffs. Here we'll discover how the wild goats have uniquely adapted hooves and eyesight that allow them to traverse these great heights. Next, we'll journey to the wetlands of Turkey and witness a thriving ecosystem fed by the rich minerals of the volcanic earth. Here we'll find some of the most colorful birds in the world, including the bright pink greater flamingos. We'll witness first-hand how these long-limbed birds fish for shrimp in the salty waters. Here we'll learn how the flamingos get their name from "Flamenco," a Latin word meaning fire. Finally, we'll visit the wild beaches of Turkey and learn more about the loggerhead sea turtles that nest in these areas. We'll discover that while the sandy beaches are a popular nesting spot for the turtles, there are numerous predators lurking, such as ghost crabs. As the baby loggerhead turtles finally hatch, it's a race to the open ocean waters before the crabs can catch up.

[Educational Message: We are constantly faced with new challenges and environments in our lives. Living in extreme climates requires strength and adaptation in order to ensure survival of future generations.]

Airdate: 10/17/2020

Time:

Duration: 30:00

A NEW LEAF

A GOLDEN FAMILY ANNIVERSARY [ANL108]

Today on A New Leaf, Heidi Ashcraft and her husband Daniel are about to celebrate their fiftieth wedding anniversary. She'd like to honor the occasion by sharing information about her ancestors with her children. But since her mother was adopted, there's a lot she doesn't know about her family tree. With Daisy's help, she digs deep into the past and even learns a few things about her surprising Swedish roots. As Heidi prepares for her journey of discovery, she hopes to uncover the identity of her biological grandfather, as well as learn about her DNA and ethnicity. After a deep dive into her family tree, Heidi discovers a wealth of information about her roots. After confirming the identity of grandfather, Heidi learns that he had twelve children before he died. Finally, with the help of a DNA test, Heidi is able to confirm that her ethnicity is predominantly German and Swedish. Inspired by the revelation of her Swedish roots, Heidi and Daniel visit with a genealogist to learn more about Swedish culture. Here we will discover more about the traditional foods and clothing of Swedish people. Finishing off their day with a traditional Swedish dance, Heidi and Daniel are thrilled to share this new information and experience with their family and friends.

[Educational Message: Learning more about her family's past has provided Heidi with a new focus and journey to continue on in life. Heidi embarked on this quest to share these revelations and enrich the lives of the children and grandchildren. Learning about our past can help strengthen our present.]

Airdate: 10/17/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

MONKEYING AROUND [VJG222]

Host Josh Garcia heads to the country of Panama and transits through its famous canal, an impressive feat of modern engineering. Upon arriving, he tours the historic district of Panama City, exploring the area's beautifully preserved, old-world charm. Josh learns how the city continues to change and reinvent itself with time. Panama City is the only capital city that has a rainforest within its city limits, and Josh visits Monkey Island, where he gets up-close and personal with the country's most adorable, and sometimes mischievous, inhabitants. The white-faced capuchin is the main species that lives on this island, and is believed to be one of the most intelligent monkeys in the world. Finally, he meets the Embera people, an indigenous tribe, currently living in the Chagres National Park located 25 miles from Panama City. Josh tours their structures and learns about their traditional lifestyle in the remote regions of Panama's rainforest. The Embera tribe has lived in this exact location for over fifty-five years, and in Panama for about five hundred years.

[Educational Message: The Panama Canal is an engineering marvel, built on the narrowest part of Central America, allowing for a direct line of travel from the Atlantic to Pacific Ocean. Visiting remote locations to learn about a simpler way of life can help you gain a new appreciation for modern conveniences we often take for granted.]

Airdate: 10/24/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

SRI LANKA [EDD107]

Today on Earth Odyssey, host Dylan Dreyer takes us to the island nation of Sri Lanka, located near the Southern tip of India. Although roughly the size of Pennsylvania, Sri Lanka is packed with enough wildlife to rival a vast continent. Because of its unique climate, we'll find a staggering array of creatures both large and small. Here we'll learn how Sri Lanka is home to both the world's largest land and aquatic mammals, the elephant and the blue whale. First, we'll travel to the Lowland plains, which cover more than two thirds of the island of Sri Lanka. We'll discover that this region is home to over 2,000 wild elephants, one of the largest populations on Earth. Here we'll learn more about the elephant's habitat and how they prepare for the upcoming dry season. We'll also discover that, with their specialized feet, elephants can communicate with each other using seismic signals, or ground vibrations. Next, we'll journey to Yala National Park where we'll learn more about the spotted deer that inhabit the area. Here we'll learn how the spotted deer have adapted their bodies and behaviors to the tempestuous Sri Lanka climate. We'll also learn about the unique relationship between the spotted deer and native monkeys living in the park. Allies of the deer, grey langurs warn the deer of approaching predators like the ferocious Sri Lankan leopard. Next, we'll see how toque macaques have taken to the ruins of Polonnaruwa. Once the capital of Sri Lanka, Polonnaruwa is home to Parakrama Samudraya, the largest ancient man-made lake in Sri Lanka. Here we'll follow a group of toque macaques and learn more about the strict social system and hierarchy adhered to within each group. Finally, we'll learn more about mugger crocodiles and the unique relationship they have with painted storks. Here we'll discover the fascinating symbiotic relationship that exists between these two very different animals.

[Educational Message: In Sri Lanka we find examples of animals working together to ensure their survival. Symbiotic relationships are essential to many organisms and ecosystems. Relationships like these provide a balance that can only be achieved by working together.]

Airdate: 10/24/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CAMBODIA [EDD108]

Today on Earth Odyssey, host Dylan Dreyer takes us to the watery kingdom of Cambodia. Bordered by the countries Thailand, Laos, and Vietnam, Cambodia is part of a region known as Indochina. Cambodia is home to an incredibly diverse group of wildlife, including over 120 species of mammal. Most of Cambodia is low-lying plains, with mountains in the north, and hills to the east. Nearly 2,500 miles long, the Mekong River feeds the largest inland body of water in Southeast Asia, the Tonle Sap. Home to giant carp, giant catfish, and stingrays, we learn that the Mekong River boasts more large fish species than any other river on Earth. First, we'll visit with a group of Asian elephants, which reside primarily in the eastern plains of Cambodia. Here we'll learn how elephants forage for food using a specially adapted finger-like appendage at the tips of their trunks. We'll also discover how the migration routes of elephants have been drastically impacted by human expansion and development. Next, we'll travel to the ancient Kingdom of Angkor, a city once inhabited by more than a million human residents over 800 years ago. Today, these ruins are now inhabited by troops of macaques that have made this ancient city their home. Here we'll learn about some of the amazing habits and behaviors of these wild macaques. We'll discover that in addition to cleaning their food before eating, some macaques have been observed seasoning their food with salt water. Above the

ancient ruins of Angkor, the black-shanked doucs can be seen swinging from branch to branch. We'll learn that this rare and endangered species can only be found in Cambodia and neighboring Vietnam. Next, we'll visit with an Asiatic black bear that resides in the forests of Cambodia. Nicknamed the "moon bear," the Asiatic black bear sports a creamy white mark on its chest in the shape of a crescent moon. Able to walk up to a quarter mile on two legs, we'll learn that moon bears are the most bipedal of any bear species. Finally, we'll meet face-to-face with the elusive Indochinese tiger as it makes a brief appearance before retreating into the forest.

[Educational Message: Our society can have a big impact on the nature and wildlife that surrounds us. We must find ways to protect our surrounding nature and wildlife for future generations.]

Airdate: 10/24/2020

Time:

Duration: 30:00

A NEW LEAF

A DEDICATION TO DANCE [ANL101]

Today on A New Leaf, college student Nadia needs to choreograph a dance audition for her next big step - graduate school. Nadia wants to dedicate the dance to her mom, and incorporate her African American ancestry, but they need help with the details. Once they unlock the truth about her mom's paternal side, Nadia is able to hear from her ancestors...in their own words. Training to become a ballerina since a very young age, we will witness Nadia's passion and dedication as she perfects her dance performance. We'll learn that training to become a professional ballerina can take as long as fifteen years and will require much hard work. Nadia is also hoping to incorporate her African American heritage in her dance routine. We'll visit with an expert on African American culture and learn more about Nadia's roots as she prepares for her upcoming dance performance. After filling in the gaps about her family history and ancestors, Nadia is now prepared to express her true self, through dance.

[Educational Message: By learning about our past we're better able to understand ourselves and where we come from. In this episode, we witnessed Nadia and her mom uncover incredible and emotional facts about their ancestors and family history. By learning more about her family roots, Nadia now has a greater connection to her family and culture.]

Airdate: 10/24/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

AWESOME AUCKLAND [VJG322]

Host Josh Garcia sails to one of the most visited cities in the Southern Hemisphere, Auckland, New Zealand, which lives up to its reputation as being a multicultural, laid-back urban environment that celebrates the great outdoors. Nicknamed the "City of Sails," its harbors are filled with yachts of all sizes. To get the lay of the land, Josh meets with a group of Maori dancers who proudly carry on one of their ancient traditions, the haka. The greatest concentration of Maori, an indigenous Polynesian people, resides in Auckland. It's believed the Maori explorer, Kupe, first made landfall on the North Island around 1,000 years ago. Josh learns some of the basic moves of the haka and tries them out with these Maori dancers. Then, Josh climbs high to the top of Auckland's famous Harbour Bridge where he gets a spectacular guided view of the city. The Harbour Bridge spans the Waitemata Harbour, connecting the northern area with downtown Auckland. The Waitemata Harbour covers an area of 70 square miles. The bridge itself is just over three quarters of a mile and summits at about 200 feet. It took four years and a team of 1,000 to build the bridge which opened in 1959. Next, he visits a local farm where he learns why New Zealand is famous

for its sheep and he's challenged to test his skills as a sheep herder. Finally, Josh learns why it takes a team to sail a racing yacht when he has a lesson in sailboat racing on board New Zealand's most famous racing sailing yacht. The kiwi bird is the national symbol of New Zealand and a popular nickname for a New Zealander. Given the popularity of sailing in New Zealand, some are even nicknamed yachtie. New Zealand sailors compete and win races all over the world, and it takes years of training and conditioning to sail competitively.

[Educational Message: Trying out a new activity and sticking with it can be an incredibly rewarding experience. If you are new to something, don't shy away from what you don't know, but instead jump in and you might surprise yourself with what you can learn in the moment.]

Airdate: 10/31/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GHATS [EDD109]

Today on Earth Odyssey, host Dylan Dreyer takes us to the Western Ghats Mountains of India. The Western Ghats Mountains stretch nearly a thousand miles from Mumbai to the southern tip of India, running parallel to India's west coast. While this mountain range covers only six percent of India's landmass, it provides a home to more than thirty percent of its plant and animal species. We'll first meet the lion-tailed macaque, a rare primate that can only be found in the rainforests of the Western Ghats. Here we'll learn that the lion-tailed macaque's dark body and gray mane makes it difficult to spot in the shadows of the jungle. Next, we'll meet the largest venomous snake to inhabit the earth, the king cobra. Growing over fifteen feet long, king cobras are the only snakes in the world that build nests for their eggs and young. We'll also discover that king cobra's diet consists solely of other snakes. Next, we'll travel to the woodland plains on the eastern side of the Western Ghats Mountains. Here we'll follow along on a hunt with a pack of Indian wild dogs. We'll learn that Indian wild dogs live in tight knit groups and adhere to a strict hierarchy. We'll witness how these packs work and communicate as a team when securing their next meal. Finally, we'll travel along the rivers of the Western Ghats and discover the mighty Asian elephant. We'll learn that the largest population of wild Asian elephants can be found in this region.

[Educational Message: The Western Ghats Mountains are home to many unique and powerful animals. It takes strength and adaptation to survive in extreme climates. We must always respect the beauty and power of nature.]

Airdate: 10/31/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

FALKLANDS [EDD110]

Today on Earth Odyssey, host Dylan Dreyer shows us the rugged beauty of the Falkland Islands. Located three hundred miles off the coast of South America, the Falkland Islands are a chain of over seven hundred islands. Due to its windswept and wild landscape, we'll learn that there are no native land mammals or reptiles on the Falkland Islands. However, nature still finds a way as these islands become one of the largest breeding grounds for penguins on Earth. Here we'll learn more about the King penguin. The second largest species of penguin, the King penguin stands at three feet tall and weighs a whopping thirty-three pounds. We'll witness how King penguin parents raise their young from egg to chick in this harsh environment. We'll learn that King penguins can swim and hunt at depths of one thousand feet and can hold their breaths

for up to ten minutes. Next, we'll meet the rockhopper penguin, named for its penchant for bounding along the rocky coastlines of the Falklands Islands. With their outrageous feathered faces, the rockhoppers are the smallest but perhaps the most fearless penguin species in the Falklands. Without hesitation, they plunge from terrifying heights into the churned-up waters of the South Atlantic Ocean below. Next, we'll meet the Gentoo penguin, the fastest swimming bird in the world. We'll learn that the Falkland Islands are home to over thirty percent of all Gentoo penguins, making it the largest known population of Gentoo on Earth. Finally, we'll meet the elephant seal. The largest amphibious mammal in the world, the elephant seal can grow up to twenty feet long and weigh almost nine thousand pounds. We'll learn more about the eating habits of these mammoth creatures and how they're known to hunt in the open water for up to ten straight months.

[Educational Message: The abundant fish and pristine coastlines of the Falkland Islands provide the perfect backdrop for some of the world's most unique animals. Areas such as these that support vast numbers of wildlife must be protected. We should all do our part to protect our world's natural habitats for generations to come.]

Airdate: 10/31/2020

Time:

Duration: 30:00

A NEW LEAF

FINDING THE FUNNY IN FAMILY [ANL102]

Today on A New Leaf, stand-up comedian Anthony and his wife Jasmine would like to start a family, but Anthony doesn't know that much about his own family history. He wants information to share with his future children, and to give his comedy a personal point of view. Anthony's search uncovers incredible details about his southern ancestors, which he presents in an all-new comedy routine. Anthony embarks on his journey of discovering more about his past. Anthony soon uncovers that he has distant relatives that served in both the Civil War and Revolutionary War. This discovery leads Anthony to a historian where he learns even more about what life was like during the 1700's. After learning more about his past, Anthony now has the tools he needs to add a personal touch to his stand-up routine, and stories to share with his future children.

[Educational Message: Through a journey of self-discovery, Anthony gained a sense of pride learning where his ancestors came from. Gaining this knowledge provides Anthony with confidence about his past, and the opportunity to pass this information along to his children.]

Airdate: 10/31/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

OLYMPIC-SIZED ADVENTURE [VJG215]

Host Josh Garcia sails to Athens, Greece to explore this ancient capital city. Athens is named after Athena, the Greek goddess of wisdom and courage. Dating back more than 3,000 years, Athens is one of the oldest cities in the world. Upon arriving, he learns how traditional prayer beads have been transformed into a popular part of Greek culture, known as worry beads. Called Komboloi, translating to mean knots in a line, these traditional prayer beads originated from knotted prayer ropes used in monasteries. Although now, these are not exclusively religious, they are used to ease worry or stress. Then, he travels to the countryside and makes a signature Greek dish using vegetables from the land. Moussaka is an eggplant dish that originated in the Middle East, and is popular in Greek cuisine. Mezze are small dishes in Greek cuisine that are meant to be shared by a group, including dishes like tzatziki, hummus, and eggplant salad. Josh's final

excursion is a once-in-a-lifetime event as he meets an Olympian who teaches him to throw the javelin like a world-class athlete. At the site of the 2004 Olympic Games, Josh learns the basics of some track and field events. The Olympic Games were held every four years, and in antiquity this period was used by Greeks as a unit of time measurement.

[Educational Message: Visiting an ancient city that has been historically maintained while updated in some ways for modernity, can be an incredible experience, and in some ways can feel like a trip back in time.]

Airdate: 11/7/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GENUS GENIUS [EDD111]

Today on Earth Odyssey, host Dylan Dreyer will take us on a journey around the world. We'll first travel to the watery kingdom of Cambodia. Cambodia is home to an incredibly diverse group of wildlife, including over 120 species of mammal. We'll visit the ancient Kingdom of Angkor, a city once inhabited by more than a million human residents over 800 years ago. Today, these ruins are now inhabited by troops of macaques that have made this ancient city their home. Here we'll learn about some of the amazing habits and behaviors of these wild macaques. We'll discover that in addition to cleaning their food before eating, some macaques have been observed seasoning their food with salt water. Next, we'll travel to the Galapagos Islands. A volcanic hotspot off the coast of South America, the Galapagos Islands are a living museum and showcase of evolution. Here we'll meet the only lizard in the world that's learned to fish for its dinner, the marine iguana. To brave the ocean currents, these cold-blooded reptiles spend time warming their bodies on sun-kissed rocks before taking the plunge. Each fishing trip for these creatures is a race against time. We'll discover how marine iguanas evolved over time to make the most of their underwater meal. Finally, we'll travel to the Caribbean Islands, a string of more than 7,000 islands between North America and South America. Here we'll learn about the hummingbirds that are found throughout this region. We'll discover that their hearts work like an engine, beating up to five hundred times per minute. To keep their energy up, they need to feed constantly. Always on the move, we'll learn that hummingbirds will consume almost three times their body weight every day.

[Educational Message: It's amazing to see how plants and animals have learned how to adapt no matter how challenging the environment. In this episode, we witnessed how life finds a way in many diverse and harsh regions of the Earth. We should all find ways to adapt and thrive in our surroundings.]

Airdate: 11/7/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GANGES [EDD112]

Today on Earth Odyssey, host Dylan Dreyer takes us down the Ganges River in India. The Ganges River flows more than 1,500 miles across the northern region of India before making its way to the ocean. We'll first travel to the source of the Ganges River, the Himalayan Mountains. Here we'll learn that the Himalayan Mountain Range is the tallest and one the youngest ranges on Earth. High in the Himalayas, few animals can weather the extreme temperatures. Here we'll meet the snow leopard, an animal well adapted for the year-round freezing wilderness. With powerful legs adjusted to the steep mountains, snow leopards

can jump distances up to 50 feet. As the Ganges River makes its way down the foothills of the Himalayas, the weather warms up significantly. India's floodplains are home to one of the largest animals in the world, the Indian rhino. Here we'll learn that despite their bulky appearance, Indian rhinos are remarkably nimble and can run up to 30 miles per hour. Further down the river there's another animal that's a rare sight to see, the Gangetic river dolphin. Due to extreme low-visibility in the Ganges River, these dolphins are almost completely blind. Gangetic river dolphins rely on echolocation to locate other objects in the water, including food. Next, we'll meet a prehistoric creature over 60 million years in the making, the gharial. One of the largest crocodile species in the world, a male gharial can grow up to 20 feet long. Reaching full maturity at 10 years old, gharials can live between 40 and 60 years in the wild. Next, we'll travel to the Sundarbans, the largest expanse of mangrove swamps and forests in the world. Here we'll meet the Bengal tiger, the national animal of India. Both revered and feared, the Bengal tiger's roar is so loud it can be heard as far as two miles away. We'll discover that these great cats are among the heaviest felines on Earth and can weigh nearly 500 pounds.

[Educational Message: In this episode, we've seen how this unique waterway of the Ganges River has supported life for millions of people and animals who live in its path. This is just another amazing example of how nature truly takes care of its own.]

Airdate: 11/7/2020

Time:

Duration: 30:00

A NEW LEAF

A FAMOUS FAMILY [ANL103]

Today on A New Leaf, Joseph Carnegie is about to turn thirty, and he hopes to answer a mystery that has puzzled his father for decades: are they related to famous philanthropist and railroad tycoon Andrew Carnegie? People have asked Joseph this question his whole life, but he's never had an answer— until now. Daisy works with Joseph to go deep into the roots of his family tree, and what they learn gives them a chance to present Joseph's dad with a stunning surprise. We'll learn that Andrew Carnegie was the leading innovator of the American steel industry in the late 19th century. Joseph also wants to verify his potential Scottish roots, the same birthplace of Andrew Carnegie. Joseph visits with a historian at the Carnegie Art Museum where he learns a wealth of information about the history of Andrew Carnegie. Joseph also discovers that Andrew Carnegie devoted his late life to large scale philanthropy, donating the vast majority of his large fortune. Finally, Joseph uncovers the truth and learns that he is in fact related to Andrew Carnegie.

[Educational Message: Before Joseph learned about his family roots, he doubted his connection to the Carnegie family. Family rumors previously lead Joseph to believe his surname was made up. However, after discovering that he is related to the famous Andrew Carnegie, Joseph now feels prouder and more confident of his history. Inspired by the altruistic and philanthropic deeds of Andrew Carnegie, Joseph has never felt more connected to his past.]

Airdate: 11/7/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

TOP OF THE WORLD [VJG201]

Host Josh Garcia voyages north to Alaska and takes a train to the quaint Alaskan town of Talkeetna, in the shadow of Denali, the tallest peak in North America. Curious about Alaska's passion for sourdough, Josh first visits a local bakery where he discovers why this celebrated bread is the toast of the town. Sourdough

has been traditional in Alaska since the pioneer days, when commercial yeast wasn't available and a sourdough starter was needed for bread to rise. Sourdough is a culture and a naturally occurring yeast. Then Josh takes a flightseeing tour of Denali and explores one of its magnificent glacial peaks. Denali National Park is 6 million acres, and the Denali summit is 20,310 feet. Then, a team of Iditarod sled dogs takes Josh for the ride of his life!

[Educational Message: Across generations, cultural practices and traditions can transform and take on new functions to adapt to modern practices and ways of life. In time, something that once felt outdated could later feel significant again under a new use in modern culture.]

Airdate: 11/14/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

JAPAN [EDD113]

Today on Earth Odyssey, host Dylan Dreyer takes us to Japan's volcanic islands. Situated in the Northwest Pacific Ocean, Japan consists of about 7,000 islands with weather ranging from one extreme to the next. Known as one of the most unstable places on Earth, Japan's islands are a volcanic hotspot with more than 1,000 earthquakes shaking the region each year. These islands are now home to many species of wildlife found nowhere else in the world. First, we'll travel to the island of Honshu where we'll meet the Japanese macaque. This snow monkey is the only primate besides humans that can survive in the high elevations of this subarctic region. Here we'll witness how these snow monkeys utilize natural hot springs, called onsens, to keep warm in the bitterly cold environment. Next, we'll meet the red-crowned crane, the largest bird in Japan. Here we'll learn how the graceful and elegant mating rituals of red-crowned cranes have earned them the nickname "snow ballerinas." Next, we'll meet a highly unusual animal, the Japanese serow. Also, known as a "wolf deer," the serow is said to have the legs of a goat, the body of a deer, and the fur of a wolf. We'll discover that these rare creatures only live on three of the 7,000 Japanese Islands. Finally, we'll learn more about the custom of usho fishing, an ancient tradition that's been practiced for more than a thousand years. However, we'll discover that these fishermen don't need fishing rods to catch their fish. Using trained sea cormorants, these fishermen let the birds do the fishing for them. Here we'll follow a group of fishermen and witness how the incredible hunting skills of sea cormorant birds have been utilized by locals for centuries.

[Educational Message: Today, we've seen firsthand how Japan's ancient customs have ensured its inhabitants' survival, even in the harshest of environments. It's amazing how the knowledge has been passed down through tribes and within the animal kingdom, all working together with nature to help the next generation.]

Airdate: 11/14/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

MOTHER KNOWS BEST [EDD114]

Today on Earth Odyssey, host Dylan Dreyer will take us on a journey around the world. First, we'll travel to the lush tropical landscape of Vietnam. Here we'll venture into the lowlands in search of yellow-cheeked gibbons. These monkeys are famous for the loud, odd sounding melodies they use to mark their territories. We'll discover that these monkeys are also some of the best tree swingers on the planet, reaching speeds of up to 25 miles an hour as they swing up to 50 feet from branch to branch. We'll also meet one of the rarest

species of primates who were once thought to be extinct, the Hatinh Langur. We will learn about their strange social structures, their eating habits, and how they have made an unlikely home in the limestone caves in the cliffs of Halong Bay. Next, we'll travel to the Caribbean Islands where we'll learn more about leatherback sea turtles. The largest of all sea turtle species, we'll discover that the leatherback can grow to roughly six feet in length and weigh as much as a small car. Next, we'll travel to the island nation of Sri Lanka, located near the Southern tip of India. Although roughly the size of Pennsylvania, Sri Lanka is packed with enough wildlife to rival a vast continent. Here we'll journey to the Lowland plains, which cover more than two thirds of the island of Sri Lanka. We'll discover that this region is home to over 2,000 wild elephants, one of the largest populations on Earth. Here we'll learn more about the elephant's habitat and how they prepare for the upcoming dry season. We'll also discover that, with their specialized feet, elephants can communicate with each other using seismic signals, or ground vibrations.

[Educational Message: In this episode, we witnessed how different animals adapt to their environments. We are constantly faced with new challenges and environments in our lives. Living in extreme climates requires adaptation in order to ensure survival of future generations.]

Airdate: 11/14/2020

Time:

Duration: 30:00

A NEW LEAF

FATHER AND SON FAMILY TREE [ANL104]

Today on A New Leaf, nine-year old Remy and his dad, Steve, are teaming up to create a family tree for Remy's school project. But first, Steve needs to fill in some blanks on his side of the family. Together, they search all the way back to the Mayflower, and learn that they are related to some fascinating people who achieved remarkable things. In preparation for his school project, Remy embarks on a journey to discover more about his past. Remy is hoping to find out if their family is related to any historical figures. While Remy's dad, Steve, hopes to learn more about their family history in order to pass down to future generations. Remy and Steve soon trace their roots back to Ireland where their ancestors were farmers. Here we'll learn more about the great famine that killed potato crops across Ireland beginning in 1845. This famine forced many families to seek a new life elsewhere, including Remy's ancestors. Tracing their roots back even further, Remy discovers that his other ancestors came to America on the Mayflower. This information only fuels Remy's excitement and enthusiasm to learn more about his extended family tree.

[Educational Message: By learning about our past we're better able to understand ourselves and where we come from. Remy's passion and enthusiasm to learn more about his roots lead him on a fascinating journey. After discovering that their family traces its history all the way to the Mayflower, Remy and his father are thrilled to share this remarkable information with their friends and loved ones.]

Airdate: 11/14/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

RHYTHMS OF ARUBA [VJG306]

Host Josh Garcia sails to Aruba where he is excited to explore the island and its interesting culture and history. First, Josh heads for a lesson in the steel pan, a unique instrument responsible for the distinctive Caribbean sound. The steel drum, or steel pan, originated on the island of Trinidad in the 1930s, and was introduced to Aruba by a Trinidadian around 70 years ago. This instrument is used to create a variety of

rhythms, and musical notes are created by different sized indentations in the steel pan's surface. Steel pans are classified as idiophones, instruments that vibrate to produce sounds when struck, shaken, or scraped. Then, Josh heads to a pepper farm to learn how Aruban hot sauce is made. Josh picks fresh papaya, for an unlikely pairing, and is introduced to Madame Jeanette peppers one of the hottest peppers in the world, similar to Scotch-bonnets and habaneros. Papaya is used in Aruban hot sauce since it compliments the flavor of the peppers without masking it. Then, Josh visits Aruba's beautiful and diverse Arikok National Park where he explores the Fontein Cave with a park ranger and learns about the island's ancient people who created drawings on the walls of caves. This limestone cave was once coastline and formed over 5.2 million years ago as a result of erosion and volcanic activity. Finally, Josh visits an aloe farm to learn how this plant is grown and harvested. Aloe became so important to Aruba's identity and economy that it's now depicted on the country's coat of arms.

[Educational Message: Walking through historic sites can be a unique experience in how communication has evolved over time. For example, the way we now document stories and traditions through text were once depicted in cave drawings made with red rock.]

Airdate: 11/21/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO THE CARIBBEAN [EDD115]

Today on Earth Odyssey, host Dylan Dreyer will take us on a journey to explore the hidden beauty of the Caribbean Islands. We'll discover that the Caribbean Islands are a string of more than 7,000 islands between North America and South America. We'll learn that the Caribbean Islands are located in "Hurricane Alley," making this region more vulnerable to powerful natural events. First, we'll meet the Lesser Antillean iguana, a lizard that has now colonized much of the Eastern Caribbean Islands. On the Island of Dominica, over 10,000 iguanas occupy forests close to the shorelines. Here we'll learn how the iguanas choose where they lay their eggs and how they defend their nests from intruders. Next, we'll learn about the violent beginnings of the Caribbean Islands, and how volcanic eruptions shaped the land many years ago. We'll also witness how the fertile volcanic soil on the islands soon created lush, tropical forests full of wildlife. Next, we'll learn about the mangrove forests of the Caribbean, which serve as protection from the harsh tropical weather. We'll discover that the complicated network of the mangrove's root system creates a barrier to pounding waves and surf during storms. We'll also learn that mangrove trees are the only trees in the world that can grow in saltwater. Finally, we'll travel to Trinidad, the southernmost island in the Caribbean. Inside Trinidad's forests, the manakins thrive. We'll learn that "Manakin" refers to roughly 60 different species of birds found throughout the tropical forests of the Americas. Here we'll witness the unique mating rituals of the colorful birds as they dance on the forest branches to attract a mate. Finally, we'll meet the silky anteater. We'll discover that the silky anteater is the smallest known species of anteater, weighing less than one pound at full maturity.

[Educational Message: In this episode, we see how the tropical paradise of the Caribbean teems with a diverse and abundant array of wildlife. All of these creatures find ways to survive and thrive in one of Earth's great volcanic hotspots.]

Airdate: 11/21/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

REVISITING TURKEY [EDD116]

Today on Earth Odyssey, host Dylan Dreyer takes us on another exciting journey to Turkey. Wedged in between Europe and the Middle East, Turkey is known for its mountainous landscapes and vast wetlands that dominate the region. We'll discover that Turkey's wildlife is as biologically diverse and abundant as a small continent. First, we'll meet the spur-thighed tortoise and learn how it copes with the extreme weather. We'll also witness courtship rituals of the spur-thighed tortoises and discover how they will knock other tortoise's shells in order to express interest. Next, we'll learn about the geological history of Turkey and the volcanoes that helped shape the region. We'll visit the Fairy Chimneys of Cappadocia, which were created over 65 million years ago when Turkey suffered major volcanic eruptions. We'll discover that three volcanoes left behind volcanic ash, lava, and basalt, creating these otherworldly geological formations. Next, we'll travel down below to the Anatolian plateau where herds of sheep look for patches of green pasture under the blazing sun. Tracing back over 10,000 years, we'll learn that Turkey was one of the first places in the world where people domesticated sheep. We'll discover that shepherding is an ancient vocation that's not only still practiced today, it's celebrated. We'll also learn that the Anatolian shepherd dog has long been a companion of shepherds and can be traced back to 2000 BCE. Next, we'll travel to the alpine meadows of Turkey to discover more about honey bees. We'll witness how honey bees swarm the clover-dotted landscape, mining the alpine flowers for nutrients. We'll also learn that the honey these honey bees create is not only food, but also provides important insulation to keep their colonies warm in the cold season. Finally, we'll travel to the wetlands of Turkey where we'll meet an unusual looking creature. Here we meet the Nile soft-shell turtle, the largest known population of these turtles is found in Turkey. We'll discover that the Nile soft-shell turtle has the ability to take in oxygen so effortlessly, it can stay under water up to fifteen hours at a time.

[Educational Message: Living in a land of extremes demands more than just courage. Turkey's unyielding conditions constantly test the skills of survivability of its inhabitants. Not one day is taken for granted in this Middle-Eastern wilderness.]

Airdate: 11/21/2020

Time:

Duration: 30:00

A NEW LEAF

COMING OF AGE [ANL105]

Today on A New Leaf, in honor of her son's Bar mitzvah, the Jewish coming-of-age ritual, mom Allison decides to put together a book of their family history. But as she digs for information, she realizes how much she doesn't know. Host Daisy Fuentes helps Allison fill gaps on their family tree, and they get ready to reveal everything she's learned to her son, her parents, and all her siblings. Allison soon embarks on a journey of discovery as she hopes to get more insight into her family history and gain knowledge that she can pass down to her son and family. After a deep dive into their family tree, Allison discovers that her family has a connection to the Titanic. Allison also hopes to get in touch with her Jewish roots and learn more about the Jewish experiences before World War II. After visiting with a historian at a Jewish History Museum, Allison learns an incredible amount of information about her Jewish ancestors and the strife they endured. Now understanding more about her family's past, Allison can share this information with her son and future generations to come.

[Educational Message: At the beginning of her quest for knowledge about her past, Allison knew very little about her ancestors and family tree. Hoping to share this information with her family, Allison was determined to learn more about her family roots. On this journey, Allison uncovered many things she never knew about her past. Because of her determination to discover more, this information will live on in her family for generations.]

Airdate: 11/21/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

KICKING IT, RIO STYLE [VJG223]

Host Josh Garcia sails into the world-famous city of Rio de Janeiro, Brazil. At one of the city's colorful open-air markets, Josh discovers Brazil's vast array of exotic fruit and sinks his teeth into some of its juicy bounty. Brazil has roughly 5 biomes and each one yields different fruits. A biome is a major ecological community characterized by the animals and plants living in that region. One of these fruits is Jaboticaba, an unusual Brazilian grape tree that produces fruit directly from its trunk. Next, Josh teams up with a local soccer player who teaches him how to master Brazil's national sport. With five titles, Brazil has won the most World Cups. One technique called pedalada means "pedaling" in Portuguese. Finally, Josh goes on a thrilling adventure as he tours Rio from the sky, hang-gliding high above the city. Typically, the frame of a hang glider is composed of an aluminum alloy. Josh gets a breathtaking view of the varying landscapes of Rio de Janeiro, including the mountains and the beach.

[Educational Message: Learning local culture from the people that live in the region you are visiting can be a good way to learn something new and maybe even make a new friend.]

Airdate: 11/28/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

RETURN TO THE GALAPAGOS [EDD117]

Today on Earth Odyssey, host Dylan Dreyer takes us on another visit to the Galapagos Islands. A volcanic hotspot off the coast of South America, the Galapagos Islands are a living museum and showcase of evolution. First, we'll learn more about the volcanic origins of the Galapagos Islands. We'll discover that the Galapagos Islands consist of thirteen primary islands and over one hundred rocky reefs that jut out of the sea, each land mass created from volcanic activity. Some islands look like a wasteland, a place where nothing could survive. Others are more like a fertile playground for an incredible diversity of plants and animals. With very little human interference over thousands of years, these islands serve as a unique place for scientists to study nature. We'll learn more about the 19th century botanist Charles Darwin, and how he used the Galapagos Islands as his own laboratory. We'll follow Charles Darwin's trail to see how he studied the evolution of animals and plants on these islands. Next, we'll learn that over 70% of the Galapagos Islands' bird species cannot be found anywhere else in the world. We'll discover more about the flightless cormorant species native to the Galapagos. We'll learn that of the twenty-nine species of cormorants, the Galapagos cormorant is the only one that cannot fly. Next, we'll meet a group of Greater flamingos and learn more about their courtship rituals. We'll also learn how the flamingo's primary diet of shrimp contributes to its vibrant pink color. Finally, we'll discover more about the local frigate birds that inhabit the Santa Cruz region of the Galapagos. We'll learn that these aerial high-flyers can stay in the air for more than a week at a time. We'll also discover that Spanish sailors nicknamed frigate birds "pirate birds" due to their thieving behavior against other birds.

[Educational Message: Forged by volcanoes and left to evolve, these islands and their wildlife are a spectacular natural laboratory for scientists. It's incredible to see nature take over in a part of the world left untouched by humans.]

Airdate: 11/28/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

SUPER SPECIES OF EARTH [EDD118]

Today on Earth Odyssey, host Dylan Dreyer takes us a journey to explore the most powerful and elusive animals on Earth. First up, we'll travel to the watery kingdom of Cambodia. Bordered by the countries Thailand, Laos, and Vietnam, Cambodia is part of a region known as Indochina. Cambodia is home to an incredibly diverse group of wildlife, including over 120 species of mammal. We'll first visit with an Asiatic black bear that resides in the forests of Cambodia. Nicknamed the "moon bear," the Asiatic black bear sports a creamy white mark on its chest in the shape of a crescent moon. Able to walk up to a quarter mile on two legs, we'll learn that moon bears are the most bipedal of any bear species. Next, we'll make a trek up to the top of the Hengduan Mountains to meet a mysterious group of primates who inspired the legend of the abominable snowman. In truth, these strange looking primates are actually known as snub-nosed monkeys. We'll discover how these creatures have adapted and learned to survive in the frigid, snowy mountains. Next, we'll journey to the Western Ghats Mountains of India. Here we'll meet the largest venomous snake to inhabit the earth, the king cobra. Growing over fifteen feet long, king cobras are the only snakes in the world that build nests for their eggs and young. We'll also discover that king cobra's diet consists solely of other snakes. Finally, we'll travel to Turkey where we'll go rock climbing with Turkey's Anatolian wild goats, considered one of the best mountaineers in the world. We'll follow a group of wild goats as they trek alongside thousand-foot cliffs. Here we'll discover how the wild goats have uniquely adapted hooves and eyesight that allow them to traverse these great heights.

[Educational Message: We are constantly faced with new challenges and environments in our lives. Living in extreme climates requires strength and adaptation in order to ensure survival of future generations.]

Airdate: 11/28/2020

Time:

Duration: 30:00

A NEW LEAF

NEW BABY AND NEW FAMILY HISTORY [ANL110]

Today on A New Leaf, Jessica is overjoyed to be expecting her first baby and is eager to choose a name with family meaning. But first, she wants to confirm some roots of her family history that have always been a mystery. Jessica's search uncovers amazing details about her ancestors and a few inspired baby names to share at the gender reveal party. As Jessica prepares for her journey of discovery, she hopes to learn more about her family history to pass down to future generations. As she is pregnant with her first child, Jessica is also hoping to find a name that is representative of her Russian roots. Referencing historical passenger manifests, Jessica is able to trace her family's arrival to America at Ellis Island. Next, Jessica will meet with a historian to learn more about the journey and experiences of immigrants arriving at Ellis Island in the early 20th century. We'll learn that until the early 1920's, immigrants to the United States did not need passports or visas. Also, we'll discover that there was a rigorous health exam for all immigrants passing through Ellis Island. We'll learn that about ten percent of immigrants were marked for a medical issue and about three percent of immigrants were turned away entirely. Having gained a wealth of knowledge about her ancestors,

Jessica now has a greater understanding of her ancestors' commitment to making the journey to America. Confident about her past, Jessica is now ready to share this newfound information with her family and friends.

[Educational Message: Before this journey, Jessica had little knowledge of her ancestors and family tree. Not only was she able to share these revelations with her father, she will now have this information to pass down to future generations. Learning about our past can help strengthen our present.]

Airdate: 11/28/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

SWEET PARADISE [VJG218]

Host Josh Garcia docks in the captivating Spanish island of Mallorca. First, Josh takes a scenic ride through the countryside on a one-of-a-kind wooden train built over a century ago. The Sollar Train has been in service since 1912 and at one time was used to transport goods and passengers from Sollar to Palma. It's a narrow gauge train which refers to the width of the track being 3 feet compared to the standard 4.5 feet. Then, at a gourmet sausage lab, he learns how to make *sobrasada*, a world-famous Mallorcan delicacy. Sobrasada has been a delicacy since the 17th century and is a combination of spices and pork meat. Once it has been filled into casings, it cures for approximately six weeks. Later, Josh visits a historic bakery where he tries his hand at creating an *ensaimada*, the island's most beloved pastry. This pastry is made with lard, a cooking fat used to make pastries crumbly in texture. Ensaimada can be made to have different flavors, both sweet and savory.

[Educational Message: Traditions can be passed down through different generations of a family, and these traditions can evolve with modernity while retaining some of the original techniques. When it comes to cooking and baking, many recipes are handed down across generations, showing how certain ingredients and techniques are preserved in history through practice.]

Airdate: 12/5/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

VIETNAM [EDD101]

Today on Earth Odyssey, host Dylan Dreyer takes us on an excursion to the lush tropical landscape of Vietnam. Situated on the Easternmost rim of the Indochina Peninsula, we'll discover that Vietnam is one of the most bio-diverse countries in the world. We'll learn that Vietnam's dense tropical forests cover almost half of the country, and that approximately 10 percent of the world's animal species live in this region. But we'll discover how this environment was not always thriving. In the 1960's, the Vietnam War destroyed almost one-fifth of the rainforests, leaving scores of animals fighting against extinction. But today, Mother Nature has fought back and these tropical jungles are once again thriving. Next, we'll travel into the lowlands in search of yellow-cheeked gibbons. These monkeys are famous for the loud, odd sounding melodies they use to mark their territories. We'll discover that these monkeys are also some of the best tree swingers on the planet, reaching speeds of up to 25 miles an hour as they swing up to 50 feet from branch to branch. Next, we'll meet one of the rarest species of primates who were once thought to be extinct, the Hatinh Langur. We will learn about their strange social structures, their eating habits, and how they have made an unlikely home in the limestone caves in the cliffs of Halong Bay. Finally, we'll travel to the Son

Tra Primary Forest, home to the red shanked douc, one of the most beautiful and colorful monkeys in the world. We'll discover that these highly social primates live in groups of up to 15 members. Despite the fact that they were almost driven into extinction, they now thrive because their home has been deemed a No-Entry Zone to the public since the end of the Vietnam War.

[Educational Message: The rainforests of Vietnam are an example of the true resilience of the natural world. Plants and animals have made an incredible resurgence since the Vietnam War. We must always protect our environment for generations to come.]

Airdate: 12/5/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

HEBRIDES [EDD102]

Today on Earth Odyssey, host Dylan Dreyer takes us on an adventure to the mysterious Hebrides archipelago off the Northern coast of Scotland. Known as "Europe's Last Wilderness" and isolated from the mainland, this island chain has become the perfect breeding ground for millions of creatures. First up, we'll travel to the Outer Hebrides chain that hosts one of the largest gatherings of grey seals on the planet. We'll discover that each year over 35,000 of these aquatic mammals arrive on the isolated shores to mate and give birth to new pups. Here we'll learn that more than 9,000 pups are born in this region each year. Next, we'll journey inland to the Island of Rum to witness one of the largest deer in the world, the red deer. We'll learn that adult males typically weigh around 450 pounds and stand nearly 6 and a half feet tall. We'll witness as these massive bucks fight aggressively with their mighty antlers to win mating rights for the island's female population. Finally, we explore one of the region's most mysterious animals, Ancient Man. We'll discover that it is believed man reached the islands over 6,000 years ago during the Iron Age. We'll learn that these ancient humans brought along with them primitive sheep that still roam the countryside today. We'll also explore the ancient stone dwellings that were carved into the landscape, and see towering stone monuments whose mystical origins still baffle experts today.

[Educational Message: The world we recognize today is billions of years in the making. The amazing plants and animals living on Earth deserve our respect and protection.]

Airdate: 12/5/2020

Time:

Duration: 30:00

A NEW LEAF

SAINT'S ARRIVAL [ANL111]

Today on A New Leaf, host Daisy Fuentes pays a visit to Sylvia, who's just become a grandmother for the first time. She wants to be able to share family stories with her new grandson, Saint, but first there are some things she'd like to learn. Sylvia soon discovers her father's African American heritage and she learns about her ancestors' lives in the years after slavery was abolished, and how her great-great-grandfather was part of a historic secret society. Sylvia is Polynesian on her mom's side, but the rest of her family tree is a big question mark. Using DNA analysis, Sylvia is able to confirm that not only is she fifty-percent Polynesian, but she's almost twenty-five percent sub-Saharan African. Utilizing historical documents and newspaper articles, Sylvia also confirms that her great-great-grandfather was a member of the Freemasons. Here we'll learn that the Freemasons are an international organization built around the core principles of brotherhood, truth, and charity. In order to gain a better understanding about her African American roots, Sylvia meets with a historian specializing in African American history. Sylvia will learn more about the history of Freemasons in the United States and how many influential African Americans were once members of the

Freemasons. After gaining a wealth of knowledge about her ancestors and family tree, Sylvia is ready to share this new information with her family and new grandson.

[Educational Message: By discovering more about our past we can connect more with the present. Before this journey, Sylvia was unaware that she had African American roots. Now she has a newfound understanding of what life was like for her ancestors long ago. Through gaining this knowledge about her family tree, Sylvia is now able pass this information down to her family for generations to come.]

Airdate: 12/5/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

ALOHA SPIRIT [VJG301]

Host Josh Garcia sails to Oahu, Hawaii and explores the dynamic local culture. First, Josh takes a walk on the iconic Waikiki Beach and learns its history as the birthplace of surfing. The Polynesians were the first people to arrive on the island by way of canoe, and canoeing remains a popular activity on the island. Chinese, Japanese, and Phillipino influences have also made their mark on this small island's culture, especially in the popular local foods. Then, Josh learns that there's more to leis than flowers, and that traditionally they can be made out of kukui nuts, feathers, and banana leaves. The kukui nut is from the kukui tree, the official state tree of Hawaii. Different leis have different meanings; for hula leis, different leaves are used depending on who is being honored in song. Next, Josh joins a local chef to help prepare a unique take on a popular Asian-style roll. Then, Josh tests his stamina and rhythm while training to be a hula dance warrior. Hula was brought to Hawaii by Polynesians and was handed down orally through generations. This ancient style of dance is called Hula Kahiko. Ancient warriors used hula to develop Lua martial art skills. After a taste of hula warrior training, Josh witnesses an ancient hula celebrating the sun. Finally, Josh gets to paddle a canoe out of Waikiki Beach with a professional canoe racer.

[Educational Message: When many different cultures come together to define the culture of a city, you might witness a unique fusion of these cultures in the local cuisine, customs, and practices.]

Airdate: 12/12/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

GALAPAGOS [EDD103]

Today on Earth Odyssey, host Dylan Dreyer takes us on an adventure to the Galapagos Islands. A volcanic hotspot off the coast of South America, the Galapagos Islands are a living museum and showcase of evolution. We'll learn more about the 19th century botanist Charles Darwin, and how he used the Galapagos Islands as his own laboratory. We'll follow Charles Darwin's trail to see how he studied the evolution of animals and plants on these islands. We'll take a closer look at the bizarre and beautiful species that Darwin studied, from the prehistoric giant tortoises to the blue footed boobies. On our journey, we will see how each species adapts and finds a way to survive, despite the unforgiving conditions of these volcanic islands. Next, we'll find that some islands in the Galapagos are still harboring active volcanoes. We'll get an up-close look at the volatile world of Fernandina, Galapagos' youngest island. Fernandina's plants and animals must cope with the constant threat of volcanic eruptions. Living within a hostile land environment, we'll meet the only lizard in the world that's learned to fish for its dinner, the marine iguana. To brave the ocean currents, these cold-blooded reptiles spend time warming their bodies on sun-kissed rocks before taking the

plunge. Each fishing trip for these creatures is a race against time. We'll discover how marine iguanas evolved over time to make the most of their underwater meal. Finally, we'll hop over to the older Galapagos islands with less volcanic activity. We'll learn how their stable environment is creating an opportunity for a more diverse and abundant wildlife scene.

[Educational Message: We witnessed first-hand how Dr. Charles Darwin's visit to the Galapagos Islands shaped our understanding of our natural world. Adaptation and evolution play an important role in our survival. We must always seek knowledge to understand more about the world around us.]

Airdate: 12/12/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CHINA [EDD104]

Today on Earth Odyssey, host Dylan Dreyer takes us on an exploration of a hidden oasis known as the Yunnan, in Southwest China. We'll discover that this remarkable region consists of lush valleys, tropical forests, and some of the most rugged mountain peaks on earth. With its wide array of landscape and climates, we'll learn that it is the perfect home for approximately half of China's birds and mammals. With a vast range of climates, we'll discover how these creatures have learned to adapt and survive in vastly different environments. First, we'll begin our journey in the lowland forests of the Yunnan, home to one of the biggest monkeys in Asia, the Chinese stump tailed macaque. We'll discover how these highly social primates live in groups of around fifty individuals, and how the fertile evergreen forest provides all the food and water they need to survive. We'll follow these fascinating primates to learn about their eating habits, their social structure, and their daily fight for survival. Next, we'll make a trek up to the top of the Hengduan Mountains to meet a mysterious group of primates who inspired the legend of the abominable snowman. In truth, these strange looking primates are actually known as snub-nosed monkeys. We'll discover how these creatures have adapted and learned to survive in the frigid, snowy mountains. Not to mention, we'll witness how snub-nosed monkeys are some of the most breathtaking tree swingers on Earth. Here we'll learn how there are four types of primate locomotion such as vertical clinging, quadrupedal, brachiation, and bipedalism. Finally, we will meet a group of fishermen who, for a thousand years, have trained and used the hunting skills of cormorant birds to help them fish the mighty rivers of the Yunnan.

[Educational Message: Nature can be an unforgiving environment, and we must always respect its beauty and power. We should always seek to learn new ways to adapt to changes in our world in order to thrive and survive.]

Airdate: 12/12/2020

Time:

Duration: 30:00

A NEW LEAF

A COMMITMENT TO FAMILY HISTORIES [ANL112]

Today on A New Leaf, newlyweds John and Peter want to present each other with more knowledge about their families' similar Greek histories. Their search leads them to some unexpected but pleasant surprises about their Greek heritage, and to some fascinating common threads in their grandfathers' stories. Both John and Peter hope to share everything with friends and family at a big wedding celebration. Utilizing historical documents and passenger manifests, John and Peter were able to trace both of their grandfathers' journeys to America. John and Peter also discover that both of their grandfathers registered for World War I. Although a DNA analysis discovered they were less Greek than they originally thought, John and Peter

continue to bond over their shared heritage. In order to forge a deeper connection with their Greek roots, John and Peter will join a chef to learn more about Greek foods and culture. Today, John and Peter will be cooking a traditional Greek dish known as Spanakopita. After gaining a wealth of knowledge about their ancestors' journey to America as well as their Greek roots, John and Peter are now ready to share this new information with their family and friends at the wedding celebration.

[Educational Message: Before John and Peter began their journey of discovery, there were many unanswered questions about their family trees. After learning they were less Greek than they originally thought, John and Peter have now become inspired to discover more about their Italian heritage. Learning more about our past can help strengthen our present.]

Airdate: 12/12/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

ALL THE TEA IN TAIPEI [VJG203]

Host Josh Garcia sails into Taipei, Taiwan's stunning capital city, and explores its rich multi-cultural traditions. He visits a Taiwanese master skilled in the ancient art of glove puppetry. This art-form originated in China and came to Taiwan in the 17th century, where it is now vastly popular. Then Josh takes to the streets to witness a team of skilled trick top-spinners in action. Josh learns that this ancient folk game, Gan Le, has roots in a city just north of Taipei. Venturing into its famous markets, Josh dares to try the city's signature dish, stinky tofu! Stinky tofu is made by soaking tofu in a juice of fermented vegetables, meats, and fish, resulting in an aromatic, flavorful dish. Finally, he explores a majestic tea farm high above the city and learns how to make Taipei's celebrated elixir, Oriental Beauty. The process of harvesting tea begins by picking specific portions of the plant before the leaves are left out in the sun to wither to remove any excess water and to prepare the leaves for oxidation. Then the tea leaves are roasted, folded, and rolled to release the tea's natural flavors and aromas.

[Educational Message: Learning the processes of how simple, natural ingredients are harvested can bring you a deeper appreciation for these ingredients and cultural practices.]

Airdate: 12/19/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CARIBBEAN [EDD105]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to the Caribbean Islands. We'll discover that the Caribbean Islands are a string of more than 7,000 islands between North America and South America. First up, we'll learn about the violent beginnings of the Caribbean Islands, and how volcanic eruptions shaped the land many years ago. We'll witness how the fertile volcanic soil on the islands soon created lush, tropical forests full of wildlife. Next, we'll learn more about the leatherback sea turtles that call the Caribbean home. The largest of all sea turtle species, we'll discover that the leatherback can grow to roughly six feet in length and weigh as much as a small car. Next, we'll learn how sunken ships get a second life as man-made reefs for numerous species of coral and marine life. We'll also discover how the Caribbean Islands are located in "Hurricane Alley," making this region more vulnerable to powerful natural events. We'll find out where the animals retreat to when they are caught up in the storms, and how they rebuild once the weather passes. Next, we'll meet the National Bird of Trinidad, the scarlet ibis, and find out where their unique color comes from. Here we'll learn that the scarlet ibis gets its unique color from its diet,

which consists primarily of crabs rich in the pigment, carotene. We'll discover that the scarlet ibis is actually born with grey feathers, earning its flashy red color over time. Finally, we'll learn about the hummingbirds that are found throughout the Caribbean Islands. We'll discover that their hearts work like an engine, beating up to five hundred times per minute. To keep their energy up, they need to feed constantly. Always on the move, we'll learn that hummingbirds will consume almost three times their body weight every day.

[Educational Message: A habitat of extreme climates and conditions requires clever adaptation and determination for survival. We should always respect and appreciate the beauty and power of nature.]

Airdate: 12/19/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

TURKEY [EDD106]

Today on Earth Odyssey, host Dylan Dreyer takes us on a journey to Turkey. Wedged in between Europe and the Middle East, we'll discover why Turkey is a country of extreme temperatures and landscapes. In Turkey, conditions can quickly deteriorate with heavy downpours, blinding snowstorms, and even burning heat. We'll find out how this country's largest land mammal, the brown bear, copes with such a hostile environment. Here we'll learn that two layers of fur protect the brown bears from harsh weather. Next, we'll go rock climbing with Turkey's Anatolian wild goats, considered one of the best mountaineers in the world. We'll follow a group of wild goats as they trek alongside thousand-foot cliffs. Here we'll discover how the wild goats have uniquely adapted hooves and eyesight that allow them to traverse these great heights. Next, we'll journey to the wetlands of Turkey and witness a thriving ecosystem fed by the rich minerals of the volcanic earth. Here we'll find some of the most colorful birds in the world, including the bright pink greater flamingos. We'll witness first-hand how these long-limbed birds fish for shrimp in the salty waters. Here we'll learn how the flamingos get their name from "Flamenco," a Latin word meaning fire. Finally, we'll visit the wild beaches of Turkey and learn more about the loggerhead sea turtles that nest in these areas. We'll discover that while the sandy beaches are a popular nesting spot for the turtles, there are numerous predators lurking, such as ghost crabs. As the baby loggerhead turtles finally hatch, it's a race to the open ocean waters before the crabs can catch up.

[Educational Message: We are constantly faced with new challenges and environments in our lives. Living in extreme climates requires strength and adaptation in order to ensure survival of future generations.]

Airdate: 12/19/2020

Time:

Duration: 30:00

A NEW LEAF

HIDDEN FAMILY HERITAGES [ANL109]

Today on A New Leaf, three families search for their hidden heritage in this collection of amazing journeys of historical discovery. First, Steve and his son Remy trace their ancestors to create a school family tree project. Then, Nadia unlocks her mom's African American roots which inspires her dance audition for grad school. Then, Allison fills in some family history gaps as a Bar Mitzvah gift to her son, Jayden. For Remy and Steve, they soon trace their roots back to Ireland where their ancestors were farmers. Here we'll learn more about the great famine that killed potato crops across Ireland beginning in 1845. This famine forced many families to seek a new life elsewhere, including Remy's ancestors. Tracing their roots back even

further, Remy discovers that his other ancestors came to America on the Mayflower. Next, we'll follow Nadia on her journey of discovery and witness her passion and dedication as she perfects her dance performance. We'll learn that training to become a professional ballerina can take as long as fifteen years and will require much hard work. Nadia is also hoping to incorporate her African American heritage in her dance routine. We'll visit with an expert on African American culture and learn more about Nadia's roots as she prepares for her upcoming dance performance. Finally, we'll catch up with Allison and Jayden on their journey. After a deep dive into their family tree, Allison discovers that her family has a connection to the Titanic. Allison also hopes to get in touch with her Jewish roots and learn more about the Jewish experiences before World War II.

[Educational Message: At the beginning of their quests for knowledge about their past, these families knew very little about their ancestors and family tree. Hoping to share this information with other members of their family, these people were all determined to learn more about their family roots. On this journey, we uncovered many things never known about their pasts. Because of their determination to discover more, this information will live on in their families for generations.]

Airdate: 12/19/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA SANDS OF TIME [VJG319]

Host Josh Garcia arrives to the port city of Aqaba, Jordan, where he can see the coastlines of Israel, Egypt, and Saudi Arabia from Aqaba's port. Though virtually landlocked, Jordan has 17 miles of coastline which attracts divers from all over the world. The Gulf of Aqaba is at the northern end of the Red Sea, and there's a wide variety of coral reefs and other sea life that thrive in the water. To learn more about coral reefs and Jordan's conservation efforts, Josh meets with a local conservationist who takes him on a dive in the Red Sea. Coral reefs are formed by corals that secrete calcium carbonate to form a hard skeleton. Next, Josh heads north to Wadi Rum, a protected desert wilderness of red sand dunes and granite rock formations. Human existence in Wadi Rum has been traced back to prehistoric times. Josh makes the trek and meets with members of a Bedouin tribe who show him how to prepare Jordan's national dish, mansaf, and they instruct him on the proper way to eat it. The name of the dish, "mansaf," comes from the Arabic word meaning "large tray or "large dish." Mansaf is prepared with rice, meats, and yogurt, and served with a traditional bread, called "shrek," or a round unleavened flatbread. Finally, Josh visits the ancient Nabatean capital city of Petra. Built over 2,000 years ago, Petra is considered one of the most famous and important archaeological sites in the world, and a spectacular marvel of Jordan's ancient ingenuity and place in world history. Josh walks through the historic canyon in wonder and learns about the tomb carved into stone for King Aretas IV, who was the King of the Nabateans from around 9 BCE to 40 CE. King Aretas IV's tomb, known as the Treasury, is nearly 131 feet high and has two floors.

[Educational Message: When it comes to marine conservation, if we can understand what a coral reef is, we can actually enhance the pre-existing conditions of that reef in our immediate environment, allowing it to thrive.]

Airdate: 12/26/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

SRI LANKA [EDD107]

Today on Earth Odyssey, host Dylan Dreyer takes us to the island nation of Sri Lanka, located near the Southern tip of India. Although roughly the size of Pennsylvania, Sri Lanka is packed with enough wildlife to rival a vast continent. Because of its unique climate, we'll find a staggering array of creatures both large and small. Here we'll learn how Sri Lanka is home to both the world's largest land and aquatic mammals, the elephant and the blue whale. First, we'll travel to the Lowland plains, which cover more than two thirds of the island of Sri Lanka. We'll discover that this region is home to over 2,000 wild elephants, one of the largest populations on Earth. Here we'll learn more about the elephant's habitat and how they prepare for the upcoming dry season. We'll also discover that, with their specialized feet, elephants can communicate with each other using seismic signals, or ground vibrations. Next, we'll journey to Yala National Park where we'll learn more about the spotted deer that inhabit the area. Here we'll learn how the spotted deer have adapted their bodies and behaviors to the tempestuous Sri Lanka climate. We'll also learn about the unique relationship between the spotted deer and native monkeys living in the park. Allies of the deer, grey langurs warn the deer of approaching predators like the ferocious Sri Lankan leopard. Next, we'll see how toque macaques have taken to the ruins of Polonnaruwa. Once the capital of Sri Lanka, Polonnaruwa is home to Parakrama Samudraya, the largest ancient man-made lake in Sri Lanka. Here we'll follow a group of toque macaques and learn more about the strict social system and hierarchy adhered to within each group. Finally, we'll learn more about mugger crocodiles and the unique relationship they have with painted storks. Here we'll discover the fascinating symbiotic relationship that exists between these two very different animals.

[Educational Message: In Sri Lanka we find examples of animals working together to ensure their survival. Symbiotic relationships are essential to many organisms and ecosystems. Relationships like these provide a balance that can only be achieved by working together.]

Airdate: 12/26/2020

Time:

Duration: 30:00

EARTH ODYSSEY WITH DYLAN DREYER

CAMBODIA [EDD108]

Today on Earth Odyssey, host Dylan Dreyer takes us to the watery kingdom of Cambodia. Bordered by the countries Thailand, Laos, and Vietnam, Cambodia is part of a region known as Indochina. Cambodia is home to an incredibly diverse group of wildlife, including over 120 species of mammal. Most of Cambodia is low-lying plains, with mountains in the north, and hills to the east. Nearly 2,500 miles long, the Mekong River feeds the largest inland body of water in Southeast Asia, the Tonle Sap. Home to giant carp, giant catfish, and stingrays, we learn that the Mekong River boasts more large fish species than any other river on Earth. First, we'll visit with a group of Asian elephants, which reside primarily in the eastern plains of Cambodia. Here we'll learn how elephants forage for food using a specially adapted finger-like appendage at the tips of their trunks. We'll also discover how the migration routes of elephants have been drastically impacted by human expansion and development. Next, we'll travel to the ancient Kingdom of Angkor, a city once inhabited by more than a million human residents over 800 years ago. Today, these ruins are now inhabited by troops of macaques that have made this ancient city their home. Here we'll learn about some of the amazing habits and behaviors of these wild macaques. We'll discover that in addition to cleaning their food before eating, some macaques have been observed seasoning their food with salt water. Above the ancient ruins of Angkor, the black-shanked doucs can be seen swinging from branch to branch. We'll learn

that this rare and endangered species can only be found in Cambodia and neighboring Vietnam. Next, we'll visit with an Asiatic black bear that resides in the forests of Cambodia. Nicknamed the "moon bear," the Asiatic black bear sports a creamy white mark on its chest in the shape of a crescent moon. Able to walk up to a quarter mile on two legs, we'll learn that moon bears are the most bipedal of any bear species. Finally, we'll meet face-to-face with the elusive Indochinese tiger as it makes a brief appearance before retreating into the forest.

[Educational Message: Our society can have a big impact on the nature and wildlife that surrounds us. We must find ways to protect our surrounding nature and wildlife for future generations.]

Airdate: 12/26/2020

Time:

Duration: 30:00

A NEW LEAF

SURPRISING FAMILY DISCOVERIES [ANL113]

Today on A New Leaf, three remarkable people take journeys of family discovery in this special look at some of the best episodes this year. After the sudden loss of his mother, Craig discovers details about his ancestors that he never knew; Joseph hopes to finally find out if he's related to famous philanthropist Andrew Carnegie; and as Lauren clears up family stories surrounding her great-grandfather's adoption, she discovers a surprising heritage along the way. For Craig, he would like to know more about his parents' relatives and their family's journey to America. Craig soon discovers that his family on his mother's side were in the garment business in New York City during the early 1900's. Inspired by this revelation, Craig visits a working textile factory to learn more about what life was like for garment workers during that time. Next, Joseph Carnegie is hoping to find out if his family is related to Andrew Carnegie. Joseph also wants to verify his potential Scottish roots, the same birthplace of Andrew Carnegie. Joseph visits with a historian at the Carnegie Art Museum where he learns a wealth of information about the history of Andrew Carnegie. Joseph also discovers that Andrew Carnegie devoted his late life to large scale philanthropy, donating the vast majority of his large fortune. Finally, Lauren would like to know more details about her great-grandfather, as well as her potential Native American or Mexican roots. After diving deep in her family history, Lauren discovers that her great-grandfather was actually from New Mexico. Once living as part of the Genizaros community, Lauren confirms her great-grandfather was of Spanish and Native American descent. Moved by this revelation, Lauren visits a historian to learn more about her connection to the Genizaros community.

[Educational Message: By discovering more about our past we can connect more with the present. Craig, Joseph, and Lauren all sought to find out more about their roots so that they could share this information with their families. A better understanding of your past can help you form stronger bonds with your family in the present.]

Airdate: 12/26/2020

Time:

Duration: 30:00

THE VOYAGER WITH JOSH GARCIA

ALL THE MARBLES [VJG120]

Host Josh Garcia spends the day ashore in Rome, Italy and heads straight to the Roman Forum to soak in the city's immense history. He learns not only about the history, but the important role of marble in this city's ancient architecture. Then, he carves his name in a marble slab after he learns the technique involved in shaping letters and images, and it isn't as easy as it looks. Then, he steps into the kitchen to learn how to make real Italian gnocchi, which is nothing like the gnocchi he's tried before. Gnocchi are small Italian

dumplings made from potato and flour, traditionally served with sauce. Later, Josh joins a class at gladiator school and trains to compete like the ancient entertainers.

[Educational Message: Rome, Italy can feel like a living museum. Artwork and architecture abound and serve as a reminder of the remarkable innovations and triumphs of the past.]

NBC NETWORK NON-BROADCAST EFFORTS

October - December, 2020

NBCUniversal's *The More You Know* website:

Since 1989, *The More You Know* has brought the nation's most important social issues to the forefront, and remains a trusted voice for sharing knowledge to improve lives and inspire action.

The More You Know's comprehensive website (themoreyouknow.com) includes in-depth resource and referral information on the campaign's important focus issues including:

- HEALTH – fighting childhood obesity, encouraging nutrition and physical fitness
- ENVIRONMENT – encouraging everyday actions that reduce environmental impact
- EDUCATION – recruiting new teachers and promoting their long-lasting impact
- DIGITAL LITERACY & INTERNET SAFETY - sharing online safety tips and information
- DIVERSITY – embracing differences and promoting inclusion, tolerance and respect

Also featured on site is The More You Know Learning series' *Growing Up Online*, a free eBook on digital literacy and Internet Safety. *Growing Up Online* is an important tool to initiate conversation with children about online safety. The eBook is a media-rich, two-part learning resource that provides easy-to-use information about navigating the digital world in a unique and engaging way. Part one includes safety tips, discussion questions and key takeaways for parents and teachers. Part two features four entertaining video comic books for children, focused on real situations that come up when kids go online.

Additional content on the site includes public service announcements, behind-the-scenes videos, a general overview, a talent directory, and a list of the campaign's accolades such as the prestigious Emmy and Peabody awards.

JUSTICE NETWORK / TRUE CRIME NETWORK

EDUCATIONAL/INFORMATIONAL PROGRAMMING

FOR CHILDREN BETWEEN THE AGES OF 13 – 16 YEARS OLD

2020

FIRST – FOURTH QUARTERS 2020

January 5 – December 27, 2020

KING 5.2 (Justice Network*)

Primary Time Period

Primary Age Range

Animal Rescue Heroes

Sundays at 7:00A

13-16 years of age

Animal Rescue Heroes

Sundays at 7:30A

13-16 years of age

Dog Tales, Family Edition

Sundays at 8:00A

13-16 years of age

Dog Tales, Family Edition

Sundays at 8:30A

13-16 years of age

Dog Tales, Family Edition

Sundays at 9:00A

13-16 years of age

Dog Tales, Family Edition

Sundays at 9:30A

13-16 years of age

* “Justice Network” changes its name to “True Crime Network” beginning July 27, 2020.

Telco Productions, Inc.

January 1, 2018

Dear Station,

Pursuant to the Children's Television Act of 1990 and the rules and regulations of the FCC, "ANIMAL RESCUE HEROES" satisfies the FCC's Children's programming requirements and may be classified as Core Programming as defined under Section 73.671 of the Commission's Rules. "ANIMAL RESCUE HEROES" furthers the educational and informational needs of children 13 to 16 years of age with its programming content, including safety tips and information about various animals and their habitats.

"ANIMAL RESCUE HEROES" as delivered is formatted to allow for no more than 14 minutes of total commercial time per broadcast hour (7 minutes per half-hour). "ANIMAL RESCUE HEROES" does not display any Internet commercial web site address or host selling during or adjacent to the program, and is otherwise in compliance with Sections 73.670(a) through (d) of the Commission's Rules. If you have any other questions or comments, please feel free to contact us.

Sincerely,



Alex Paen
President, Telco Productions

Telco Productions, Inc.
2730 Wilshire Boulevard, Suite 200, Santa Monica, CA 90403
Telephone (310) 828.4003 Fax (310) 828.3340 Email info@telcoproductions.com



Alex Paen
Telco Productions, Inc.
2730 Wilshire Blvd., Suite 200
Santa Monica, CA 90403

Dear Alex,

I have reviewed several episodes of the program "ANIMAL RESCUE HEROES" and I am confident that the series meets the educational and informational needs of children 13 to 16 years of age with its program content. The series features real life in-the-field experiences of professional and ordinary people taking care of, treating and helping various animals, as well as exhibiting good social responsibility and promoting strong personal and community values. Episodes also include visits to all types of animal sanctuaries and zoos in the United States to explore the world of animals. Teenage viewers learn about the care and living habitats of these various animals and how they survive in the world.

"ANIMAL RESCUE HEROES" is educational, informative and entertaining, while providing information on the humanitarian efforts of dedicated individuals helping the various critters in the animal kingdom.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian A. Peña".

Brian A. Peña, MS
Adjunct Faculty
Santa Monica College

VCA Wilshire Animal Hospital

2421 Wilshire Boulevard
Santa Monica, CA 90403

Tel.: (310) 828-4587

Fax: (310) 453-1562



Dear Alex,

It's my opinion that "Dog Tales" is a valuable educational and instructional television series for children 13 to 16 years of age. The program contains information on medical and health issues for dogs, as well as providing facts and histories of various dog breeds. As a teacher, lecturer and Doctor of Veterinary Medicine, I feel "Dog Tales" educates children about all types of dogs and showcases professional and non-professional people helping and caring for dogs as well as learning the responsibilities of dog ownership. By promoting compassionate behavior towards dogs, the show provides young viewers with a positive message about "man's best friend" and how they are a major part of our world.

As an Adjunct Professor at Western University School of Veterinary Medicine, a lecturer at UCLA Extension and a practicing veterinarian, I would recommend "Dog Tales" to parents, educators and broadcasters as an excellent example of informational programming serving families and especially young viewers.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Frank Lavac', with a long, sweeping flourish extending to the right.

Frank Lavac, MS, D.V.M., Board Certified Specialist in Avian Medicine and Surgery

Wilshire Animal Hospital



International Fund for Animal Welfare

FREDERICK M. O'REGAN, PRESIDENT

Dear Alex,

We at IFAW (International Fund for Animal Welfare – www.ifaw.org) believe the educational and informative content of “Dog Tales” is suitable for children 13-16 years of age. The show highlights the compassionate care of dogs while informing young viewers about the responsibilities of dog ownership.

We also feel the show provides guidance to young people in encouraging them to become involved in animal welfare. The show contains examples of various programs administered by professional animal workers as well as volunteers helping dogs. “Dog Tales” also includes various interactions of individuals and families with dogs and how these relationships foster a better understanding of our world today.

IFAW supports “Dog Tales” as a wonderful example of what young viewers should be watching on television and we highly recommend it to parents and educators as well.

Sincerely,

Nancy Barr
Public Affairs
IFAW International Headquarters

www.ifaw.org

INTERNATIONAL HEADQUARTERS

411 Main Street
Yarmouth Port, MA 02675-1843
USA

Tel: 508 744 2121

Fax: 508 744 2129

Australia

Belgium

Canada

China

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Kenya

Mexico

Netherlands

Russia

South Africa

United Kingdom



DOG TALES

“Dog Tales” is a weekly half-hour educational/ informational series showcasing all aspects of the canine world. The series, which is appropriate for family viewing and children ages 13-16 in particular, offering useful information on all kinds of dogs and the people who love them. The program also instructs young viewers on the proper care of pets and provides safety, health and training tips that are useful for all kinds of dogs. In addition to showcasing skilled and compassionate individuals helping dogs and dogs assisting people, the program emphasizes responsible pet ownership, compassion for all living creatures and promotes strong personal and community values, all in a manner that is as entertaining as it is informative. “Dog Tales” is closed-captioned for the hearing impaired and displays the “E/I” icon throughout the broadcast.

Telco Productions, Inc.

2730 Wilshire Blvd., Suite 200, Santa Monica, CA 90403 USA

*Tel: (310) 828-4003 Fax: (310) 828-3340 e-mail: info@telcoproductions.com <http://www.telcoproductions.com>
<http://www.dogtales.tv>*

QUEST NETWORK

EDUCATIONAL/INFORMATIONAL PROGRAMMING

FOR CHILDREN BETWEEN THE AGES OF 13 – 16 YEARS OLD

2020

FIRST QUARTER 2020

January 4, 2020 Only

KING 5.3 (Quest Network)

Primary Time Period

Primary Age Range

Whaddyado	Saturday's at 7:00A	13-16 years of age
Whaddyado	Saturday's at 7:30A	13-16 years of age
Dogs with Jobs	Saturday's at 8:00A	13-16 years of age
Dogs with Jobs	Saturday's at 8:30A	13-16 years of age
Dogs with Jobs	Saturday's at 9:00A	13-16 years of age
Dogs with Jobs	Saturday's at 9:30A	13-16 years of age

FIRST - FOURTH QUARTERS 2020

January 11 – December 26, 2020

KING 5.3 (Quest Network)

Primary Time Period

Primary Age Range

Dogs with Jobs	Saturdays at 7:00A	13-16 years of age
Dogs with Jobs	Saturdays at 7:30A	13-16 years of age



QUEST NETWORK TELEVISION

Educational/Informational Programming

1st Quarter 2020

The following memo details Quest Network's Educational and Informational programming compliance in the 1st quarter of 2020. All programs are designed to meet the educational/informational requirement for children thirteen to sixteen years old. The programs are not subject to commercial limitation. Quest Network did not pre-empt any children's programming on a national basis at any time during the quarter.

January 4th, 2020

Dogs with Jobs: 10-11am ET

January 11th, 2020

Dogs with Jobs: 10-11am ET

January 18th, 2020

Dogs with Jobs: 10-11am ET

January 25th, 2020

Dogs with Jobs: 10-11am ET

February 1st, 2020

Dogs with Jobs: 10-11am ET

February 8th, 2020

Dogs with Jobs: 10-11am ET

February 15th, 2020

Dogs with Jobs: 10-11am ET

February 22nd, 2020

Dogs with Jobs: 10-11am ET

February 29th, 2020

Dogs with Jobs: 10-11am ET

March 7th, 2020

Dogs with Jobs: 10-11am ET

March 14th, 2020

Dogs with Jobs: 10-11am ET

March 21st, 2020

Dogs with Jobs: 10-11am ET

March 28th, 2020

Dogs with Jobs: 10-11am ET



QUEST NETWORK TELEVISION

Educational/Informational Programming

2nd Quarter 2020

The following memo details Quest Network's Educational and Informational programming compliance in the 2nd quarter of 2020. All programs are designed to meet the educational/informational requirement for children thirteen to sixteen years old. The programs are not subject to commercial limitation. Quest Network did not pre-empt any children's programming on a national basis at any time during the quarter.

April 4th, 2020

Dogs with Jobs: 10-11am ET

April 11th, 2020

Dogs with Jobs: 10-11am ET

April 18th, 2020

Dogs with Jobs: 10-11am ET

April 25th, 2020

Dogs with Jobs: 10-11am ET

May 2nd, 2020

Dogs with Jobs: 10-11am ET

May 9th, 2020

Dogs with Jobs: 10-11am ET

May 16th, 2020

Dogs with Jobs: 10-11am ET

May 23rd, 2020

Dogs with Jobs: 10-11am ET

May 30th, 2020

Dogs with Jobs: 10-11am ET

June 6th, 2020

Dogs with Jobs: 10-11am ET

June 13th, 2020

Dogs with Jobs: 10-11am ET

June 20, 2020

Dogs with Jobs: 10-11am ET

June 27th, 2020

Dogs with Jobs: 10-11am ET



QUEST NETWORK TELEVISION

Educational/Informational Programming

3rd Quarter 2020

The following memo details Quest Network's Educational and Informational programming compliance in the 3rd quarter of 2020. All programs are designed to meet the educational/informational requirement for children thirteen to sixteen years old. The programs are not subject to commercial limitation. Quest Network did not pre-empt any children's programming on a national basis at any time during the quarter.

July 4th, 2020

Dogs with Jobs: 10-11am ET

July 11th, 2020

Dogs with Jobs: 10-11am ET

July 18th, 2020

Dogs with Jobs: 10-11am ET

July 25th, 2020

Dogs with Jobs: 10-11am ET

August 1st, 2020

Dogs with Jobs: 10-11am ET

August 8th, 2020

Dogs with Jobs: 10-11am ET

August 15th, 2020

Dogs with Jobs: 10-11am ET

August 22nd, 2020

Dogs with Jobs: 10-11am ET

August 29th, 2020

Dogs with Jobs: 10-11am ET

September 5th, 2020

Dogs with Jobs: 10-11am ET

September 12th, 2020

Dogs with Jobs: 10-11am ET

September 19th, 2020

Dogs with Jobs: 10-11am ET

September 26th, 2020

Dogs with Jobs: 10-11am ET



QUEST NETWORK TELEVISION

Educational/Informational Programming

4th Quarter 2020

The following memo details Quest Network's Educational and Informational programming compliance in the 4th quarter of 2020. All programs are designed to meet the educational/informational requirement for children thirteen to sixteen years old. The programs are not subject to commercial limitation. Quest Network did not pre-empt any children's programming on a national basis at any time during the quarter.

October 3rd, 2020

Dogs with Jobs: 10-11am ET

October 10th, 2020

Dogs with Jobs: 10-11am ET

October 17th, 2020

Dogs with Jobs: 10-11am ET

October 24th, 2020

Dogs with Jobs: 10-11am ET

October 31st, 2020

Dogs with Jobs: 10-11am ET

November 7th, 2020

Dogs with Jobs: 10-11am ET

November 14th, 2020

Dogs with Jobs: 10-11am ET

November 21st, 2020

Dogs with Jobs: 10-11am ET

November 28th, 2020

Dogs with Jobs: 10-11am ET

December 5th, 2020

Dogs with Jobs: 10-11am ET

December 12th, 2020

Dogs with Jobs: 10-11am ET

December 19th, 2020

Dogs with Jobs: 10-11am ET

December 26th, 2020

Dogs with Jobs: 10-11am ET



Childhood Solutions, PC

Building a strong future for children, adolescents and their families.

Jill Belchic-Schwartz, PhD ■ Suzanne Grossman Goldstein, PhD ■ Mara Kaplan-Kaliner, PhD

April 8, 2009

Series Review

Program: WHADDYADO

Episodes reviewed: #7, #15

WHADDYADO, a half-hour weekly series designed to educate, inform, inspire and entertain, does an exceptional job educating teenagers. The show's target audience is between 13 and 16 years of age, the time period when children are making the transition to becoming adults. Both theory and research demonstrate that this is the stage of life where children begin to experiment with who they are who they want to be. It's a time which is typified by feeling invincible. This sense of invulnerability is commonly coupled with withdraw from parents and authority figures which leaves teenagers susceptible to poor decision making. Therefore, this time where insight and judgment are developing, but adult influence is limited, educational programming can make an immense impact on a child's decisions. WHADDYADO provides an excellent opportunity for teenagers to learn life lessons they likely are otherwise not open to receiving.

What makes WHADDYADO such a valuable resource for teenagers is that it exposes them to real life situations. The reenactments give the audience the opportunity to develop important life saving skills. By exposing the audience to perilous situations that have actually occurred, then, using interviews with the participants, and instructions from experts, teenagers are shown what the proper reaction should be when faced with similar life-threatening circumstances this show is perfectly positioned to educate its audience. Because research demonstrates that teenagers learn best from children their own age, this show is uniquely designed to get its lessons through to teenagers. It is likely that in addition to learning the life saving lessons contained in each episode, the show will also work to minimize a viewer's belief in their immortality, a priceless lesson for all teenagers.

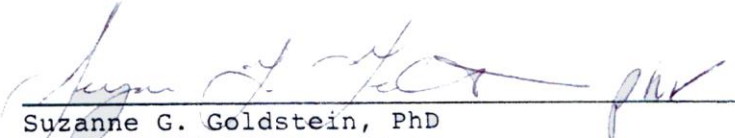
WHADDYADO's moral dilemma segment is an invaluable addition to the series. In these segments, teenagers are given a scenario which raises moral questions. They are then provided with an expert's analysis of the costs and benefits of various courses of action. This portion of the show touches on sensitive areas that I have yet to find in other television shows being dealt with in such an up front, open nature. By tackling these challenging issues head on,

WHADDYADO works to help develop the moral fiber of our nation's teenagers. These segments are a welcome educational opportunity for teenagers who are working to define themselves.

The following episode descriptions are offered to help provide concrete examples of the show's educational merit. In episode #7, a seasoned rafter gets caught in a river hydraulic and has to work out of it. The rafter compounds the problem by trying to hang onto the raft. Experts show the audience what to do if caught in the same situation: have someone throw you a rope; try to get on top of the overturned raft and curl into a ball and have the current expel you out from under the raft. In story two of that episode a young man uses his video camera as a tool in the fight against crime. He sees a man peeping into his friend's window. He calls the friend and she does not believe him. He grabs a video camera to get proof and records the peeping tom. The police are called and using the tape as evidence they are able to catch and arrest the man. Finally, in the moral dilemma segment academic dishonesty is presents and discussion of the downside of cheating on a test ensues.

In episode #15, a man is working on his car when one of the jacks gives way and the car falls on top of the man. His nephew who is nearby, hears the man's pleas for help and rushes to aid him. Small in stature, the nephew is somehow able to move the car enough for his uncle to get out. In story two of the episode a boy's leg is pierced by his bicycle brake and he removes the brake from his leg. The resulting wound is serious and the boy loses a lot of blood. Fortunately he is able to get to the hospital in time and the doctor realizing the extent of his injury is able to save his leg from permanent damage. In the tips from the expert the audience learns to: call Emergency services before doing anything; do not remove the object from the leg and to apply direct pressure to the wound. The moral dilemma involves dealing with a suspected stalker. The advice from the expert is to listen to your inner instinct, if you think you're being followed, you probably are.

As a licensed child/adolescent psychologist working in an outpatient setting with teenagers on a daily basis, I am thrilled to be able to refer families to WHADDYADO. Our teenagers need as much exposure as possible to media which helps to develop their insight and judgment both in physical and moral dilemmas. By providing teenagers with exposure to difficult situations that other teenagers have experienced and walking them through the steps to good decision making, this show's educational benefits are numerous.



Suzanne G. Goldstein, PhD
PA Licensed Psychologist



December 4, 2018

Dogs With Jobs Educational Assessment Report Letter

This letter is written in support of *Dogs With Jobs*, an engaging educational television program that highlights individual dogs from around the world and the jobs they perform. The family-friendly series features service dogs, search and rescue dogs, police dogs, herding dogs, and others. Program segments provide footage of dogs on the job, and also include stories of their rescue, training, and relationships with their owners and handlers. The thirty-minute program, designed for viewers ages 13 to 16 provides viewers with informative content using age- appropriate language, images, and stories. As a seasoned educator of over seventeen years working within K-12 schools and also within academia as a professor of education, teacher educator and curriculum content and instruction reviewer, I can attest that *Dogs With Jobs* program content not only meets but exceeds Federal Communications Commission standards for quality educational television programming for children and youth audiences.

Within each thirty-minute episode, vignettes on various dogs and the jobs they perform are introduced to the viewer. The viewer meets the dogs, and learn about the origins of the dog breed, the persons that work alongside the dogs, and the trainings and activities that the dogs receive. The narrator's upbeat, engaging tone, along with the background instrumental music and sounds, the images and the personal stories of human and animal connection, enables the viewer to learn new information in a very entertaining fashion. This type of content delivery appeals to-a diverse set of learners, specifically, auditory, visual, and intrapersonal learners, and connects directly to their cognitive processing and understanding. When content is presented using a variety of instructional methods, and connects directly to the student's learning styles, the level of knowledge comprehension and retention is greater for the learner.

In addition, age-appropriate vocabulary is used throughout the episodes, and young viewers are given the opportunity to engage in new explorative learning. When new vocabulary is introduced, clear and concise explanations as well as context clues that help

the viewer with word meaning-making are presented. For example, within the segment on Pie, a champion Bikejoring dog, the narrator provides an explanation of the word "Bikejoring" detailing the Norwegian origins of the word, which means to "travel or ride". This method of presenting new vocabulary provides the viewer with new learning through an authentic, exploratory and self-directed process.

¹ Gardner, Howard. Frames of Mind: The Theory of Multiple Intelligences. New York: Basic Books. 2011.

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