STEVE ROTFELD PRODUCTIONS

# XPLORATION STATION
# TeleExitos TV – Episode Descriptions

## "XPLORATION ANIMAL SCIENCE"
EPISODES 1-26

**Xploration Animal Science**

Produced specifically for the 13-16 demographic, this is an animal series with a uniquely scientific approach. While most animal shows look at the behavior of animals, **Xploration Animal Science** goes one step further to look at *how* and *why* an animal is able to excel in its environment. This series uses animation, graphics, and scientific analysis from animal experts to give viewers more understanding than ever before of these amazing creatures. A series that all animal lovers will watch and learn from.

**Xploration Animal Science** is a half-hour weekly E/I series produced with the intention of increasing and expanding our target audience' interest in the field of STEM education.

**Episode 1: Animal Athletes**
In this episode, we'll examine some of the animal kingdom's fastest sprinters, like the Cheetah. Also, the mysteries of animal intelligence are revealed as we take a look at Dolphins and Orangutans.

**Episode 2: The Predators**
In this episode, we examine some of the world's most fearsome predators. Find out why Owls are the only birds that can fly without making any sound. And how the Leopard uses its amazing night vision to catch its prey.

**Episode 3: Arctic Animals**
In this episode, we'll feature animals that live in the freezing arctic. Learn how the Polar Bear has developed special adaptations that help it survive in the most unforgiving climate imaginable. And why the Wolverine is able to hunt so efficiently in the snow.

**Episode 4: Man's Best Friend**
In this episode, we examine the science behind man's best friend – the dog. Find out what makes a greyhound so fast. See how a bloodhound's nose really works, and the reason that border collies are so intelligent is revealed.

**Episode 5: Primarily Primates**
In this episode we meet human's closest relatives – primates. See what makes a chimpanzee one of the most intelligent primates. Find out why the spider monkey is such an amazing climber and feel the power of the howler monkey's howl.

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**Episode 6: Surf and Turf**
In this episode we'll find out how sharks use electro-sensors to detect their prey. Also, discover the skunk's stinky defense mechanism. And domestic versus wild – see how the striped zebra matches up against its cousin the horse.

**Episode 7: Incredible Animals**
In this episode we'll see the amazing strength of the leaf cutter ant. Find out how fast can a pronghorn really run, and how the desert camel is able to survive in such extreme conditions.

**Episode 8: Journey to Africa**
In this episode we meet the animals of Africa. We'll see how the zebra able to use its stripes as camouflage against its colorblind nemesis. Explore the engineering of a giraffes neck, and feel the power of a hyena jaws.

**Episode 9: In Flight**
In this episode we'll examine the life cycle of a butterfly and delve into the mechanics of how a bird is able to take flight. Plus, the mystery of how a Venus Flytrap catches its prey is revealed.

**Episode 10: Predator and Prey**
In this episode, we find out how the Jaguar's spots create a disruptive pattern that makes them harder for prey to see. We'll also learn how a bee sting really works, and how a salmon is able to migrate thousands of miles to spawn.

**Episode 11: Fabulous Felines**
In this episode, we examine the science of the cat. We'll learn about the evolution of cats throughout the world, featuring the Saber-tooth Tiger. Find out how cat senses stack up against other animals. And take a pop quiz that reveals some incredible feline facts.

**Episode 12: Australian Animals**
In this episode we travel to the land down under - Australia. Learn the science behind the one of the world's largest natural wonders, the Great Barrier Reef. See the ferocity of the Tasmanian devil, and meet the cute and cuddly Koala Bear.

**Episode 13: Animals on the Farm**
In this episode we go down on the farm to explore the science of the cow's 4-chambered stomach. Learn about the mysterious muscle disorder that makes certain types of goats faint. Plus, find out what horsepower really is.

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**Episode 14: South America's Coolest Creatures**
This show features some of the coolest creatures from the continent of South America. Find out how the Jaguar's jaws are able to crush bone. And why the Galapagos Tortoise can grow to nearly 1,000 lbs.

**Episode 15: Creatures of North America**
This show features some of the coolest creatures from the continent of North America. Find out how Canada Geese can fly over 600 miles in a single day. And how the Beaver is able to build dams stretching over 2,000 ft.

**Episode 16: Europe's Coolest Creatures**
This show features some of the coolest creatures from the continent of Europe. Find out why the Mongoose is immune to cobra venom. And why 80% of the Dragonfly's brain is used to process what it sees.

**Episode 17: Asia's Coolest Creatures**
This episode features some of the coolest creatures from the continent of Asia. Find out how the Snow Leopard is able to survive in the Himalayan Mountains. And why the Komodo Dragon is the largest lizard on earth.

**Episode 18: Animals of the Land and Sea**
This episode features a variety of animals found on land, and in the sea. Find out why the Seahorse swims like an underwater hummingbird. And how the Thomson's Gazelle is able to outrun a Cheetah.

**Episode 19: Extreme Animals**
This episode features a variety of animals found on land, and in the sea. Find out how sharks are able to sleep while they swim. And how the Arctic Fox survives in temperatures that can drop to 70 below.

**Episode 20: How Animals Survive**
This episode features a variety of animals found on land, and in the sea. Find out how the peregrine falcon can fly at speeds over 200 miles per hour. And how the alpaca is able to survive at altitudes above 15 thousand feet.

**Episode 21: Siberian Tiger**
This episode features a variety of animals found on land, and in the sea. Find out how the badger is able to dig tunnels up to 13 feet deep. And why the Siberian tiger is the largest cat in the world.

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**Episode 22: Animals that Amaze**
This episode features a variety of animals found on land, and in the sea. Find out why spider silk is 5 times stronger than steel. And how the vulture is able to digest some of the world's most deadly bacteria.

**Episode 23: Surprisingly Dangerous**
This episode features a variety of animals found on land, and in the sea. Find out how the box turtle can live for up to 100 years. And why the red lionfish is considered one of the most dangerous animals in the world.

**Episode 24: Poisonous Puffer fish**
This episode features a variety of animals found on land, and in the sea. Find out why the Puffer fish is one of the most poisonous animals on earth. And see how the hummingbird is able to flap its wings up to 70 times per second.

**Episode 25: Animals with Super Senses**
This episode features a variety of animals found on land, and in the sea. Find out how the Beluga Whale uses echolocation to find food. And how an owl can detect the heartbeat of a mouse from 100 feet away.

**Episode 26: Keystone Species**
This episode features a variety of animals found on land, and in the sea. Find out how the anteater is able to eat nearly 10,000 insects every day. And why the walrus is considered a keystone species in the Pacific Northwest.

# "XPLORATION DIY SCI"

EPISODES 101-213

**Xploration DIY SCI**

Produced primarily for the 13-16 target audience, **XPLORATION DIY Sci** will inspire and educate audiences of all ages. Host, science educator, and leader in the field of professional educational training - Steve Spangler – encourages the discovery of scientific concepts through experiments viewers can do at home. With a fun, relaxed attitude, Steve will take viewers through step-by-step demonstrations of do-it-yourself experiments that amaze but which also relate back to solid principles of science.

For instance, Steve Spangler became nationally-known with a video showing him dropping the candy "Mentos" into a bottle of diet soda. It erupts in a geyser of soda. On **XPLORATION DIY Sci**, Spangler demonstrates the experiment and also explains the science of why, on a molecular level, the soda reacts that way to the candy.

**XPLORATION DIY Sci** is a half-hour weekly E/I series produced with the intention of increasing and expanding our target audience' interest in the field of STEM education. This series will help kids understand how they can discover the principles of science with items they can find in their very own home.

**Episode 101 - PRESSURE**
Host Steve Spangler shows experiments you can do at home that prove the power of air pressure. It all leads to an eye-popping demonstration where Steve makes a 55-gallon steel drum implode.

**Episode 102 - SODA**
Host Steve Spangler is famous for being the scientist who popularized throwing Mentos in a bottle of soda to create a gushing soda geyser. He "supersizes" that stunt with a hundred soda bottles! Plus, other demonstrations you can do at home that reveal the secrets of soda.

**Episode 103 - INERTIA**
Ever wonder how to pull a tablecloth out from under the dishes of a set table? Host Steve Spangler shows you how to do it, along with other experiments you can do at home that prove the laws of inertia. It all leads to a demonstration of how to build your own hovercraft!

**Episode 104 - FLUIDS**
Host Steve Spangler shows you how to walk on water! Plus, other unbelievable experiments you can do at home that all explore the question, "What is a fluid?"

**Episode #105 – THE POWER OF AIR**
Host Steve Spangler shows you how to make your own automatic toilet paper launcher, using the same science principles that keep an airplane in the air. Plus, how you can create a do-it-yourself smoke ring bazooka and a high-speed ping pong ball launcher.

**Episode #106 – ROCKETS**
You can be a do-it-yourself NASA, with simple rockets you can make at home from stuff you can buy at the hardware store. Host Steve Spangler shows you how to make high-flying rockets using soda bottles, balloons, vinegar and straws.

**Episode #107 – KITCHEN CHEMISTRY**
There's a whole laboratory in your kitchen! Host Steve Spangler shows you how to make crazy creations like soap soufflé and "elephant toothpaste" from stuff you can buy at the supermarket.

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EPISODES 101-213

**Episode #108 – GAS**
It may be invisible, but it can put out a fire, change your voice and soak your friends when you use it in a prank. It's the power of gas. And host Steve Spangler shows you to harness that power at home. Then, Steve locks 25 people in a truck with a thousand mini-rockets filled with water and Alka-Seltzer. What could go wrong?

**Episode #109 – WEATHER**
Host Steve Spangler shows you how to create "weather" inside your own home… from a tank filled with smog to a room-sized tornado.

**Episode #110 - SOUND**
You have an orchestra in your closets! Host Steve Spangler shows you how to make wacky musical instruments from household items like glasses, pipes and even your car.

**Episode #111 - MAGNETS**
Host Steve Spangler shows you offbeat and practical ways you can use magnets… from how to make putty that eats magnets to how you can find rocks from Outer Space on your roof.

**Episode #112 – SCIENCE MAGIC**
You can be a magician… if you know some science. Host Steve Spangler reveals the science secrets to famous magic tricks, including how to walk on glass without slicing up your feet.

**Episode #113 - EGGS**
Host Steve Spangler reveals amazing science tricks you can do with an ordinary egg. He shows how to fold up an egg and put it in your pocket. And you'll find out the secret to walking on eggs without a runny mess.

**Episode #201 – MUSEUM SCIENCE**
Mummies, dinosaurs and germs… Host Steve Spangler comes up with experiments you can do yourself, based on what's on display at the Denver Museum of Nature & Science. Plus, find out what happens when you mix 10,000 ping-pong balls with buckets of explosives.

**Episode #202 – CRAZY SCIENCE TRICKS**
Host Steve Spangler shows you wacky experiments where the science is smart, but the tricks are crazy. Like, how to make a can of potato chips fly. Or, how to survive a swinging bowling ball on a rope, aimed right at your head!

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**Episode #203 – FOOD SCIENCE**
Host Steve Spangler shows you science you can eat! Discover new ways to create colorful, sweet dessert toppings, slimy spaghetti and even ice cream.

**Episode #204 – MORE SCIENCE MAGIC**
What's the secret to lying on a bed of nails? How can you magically restore broken glass? Host Steve Spangler shows you amazing magic tricks all based on science.

**Episode #205 – DIY TOYS**
You can create the world's most amazing bubbles. Or a Mystery Can that seems to move on its own. Host Steve Spangler shows you toys you can make at home, all based on science.

**Episode #206 – ELECTRICITY**
Find out how to create a fire… with lemons! Discover how to survive touching 50,000 volts of electricity. Host Steve Spangler has experiments you can do at home, all based on the science of electricity.

**Episode #207 – COLOR SCIENCE**
Steve Spangler reveals the secrets of color, with amazing experiments you can do at home. He'll show you how to create clouds of color with do-it-yourself rainbow powders. Plus, what ink manufacturers don't want you to know about how they create colors.

**Episode #208 - HARDWARE**
Here are amazing projects – based on science – that you can build yourself, all with things you can buy at a hardware store. Host Steve Spangler shows how to create your own t-shirt launcher. Plus, discover the substance that makes jelly slide off bread and paint slide off a human body.

**Episode #209 – SUPERMARKET SCIENCE**
Fill a glass with water and make the water disappear! How to do it? Well, the secret is inside a product that's on the shelves of your local supermarket. Host Steve Spangler roams the supermarket for things you can use to create your own science magic.

**Episode #210 – SPOOKY SCIENCE**
Host Steve Spangler shows how every day can be a spooky day with scary tricks and magic effects all based on science. Stage your own zombie party, complete with eerie, smoking beverages; supernatural bubbles and fake blood.

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EPISODES 101-213

**Episode #211 – FAVORITE EXPERIMENTS**
Steve Spangler reveals the secrets to science tricks and stunts that will amaze your friends. They're all some of his favorite experiments – like explosive bubbles you can hold in your hand and freezing water with your mind!

**Episode #212 – BACKYARD SCIENCE**
Host Steve Spangler relaxes in his backyard with science tricks and inventions you can create outdoors. He exposes the secret to opening a car door with the power of your brain. And he reveals how to balance a ball on a spray of water.

**Episode #213 – THE DIY SCI CONTEST**
Steve Spangler hosts the DIY SCI Contest for the most exciting demonstration of "Newton's Third Law" – for every action there's an equal and opposite reaction. The winner performs a supersized version of the experiment with Steve on this special edition of the show.

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