

# Manheim Township School District-Science - "Big Ideas" Plan paired w/PBS Programming



			repeated programming
Please scroll down to locate grade level: K-12		WITFTV (TV Station channel) WITFKids (PBS24/7 channel) <a href="https://www.witf.org/programs/tv-schedules/">https://www.witf.org/programs/tv-schedules/</a>	also Math Curriculum
			<i>*New programming/schedules begin June 1, 2020</i>
	<b>"Big Ideas"</b>	<b>May 26-May 29</b>	<b>June 1-June 5</b>
<b>Kindergarten</b>			
	<i>suggested programming:</i>		
	Monday (5/25, Memorial Day)	5/25, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> ("That's the Way the Ball Bounces"—concept: elasticity, how balls bounce)	6/1, 7:00 a.m. (WITFTV) <b>Curious George</b> ("Monkey Down Under/Bright Light, Little Monkey"—Australia: sea cows, tracking footprints of kangaroos/astronomy; Perseids—meteor showers)
		5/25, 3:30 p.m. (WITFTV) <b>Wild Kratts</b> ("Fourth Bald Eagle"—eagles, habitats and the feather: structure and function)	6/1, 8:00 (WITFTV) and 11:00 a.m. & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (Premier: One hour special--Young heroes in training learn how to master their less-than-perfected powers at Hero Elementary! Focused on Science-related curriculum.) <i>*also on 6/5, 8:00 (WITFTV) and 11:00 a.m. &amp; 7:00 p.m. (WITFKids)</i>
		5/25, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ("To Touch a Hummingbird"—hummingbirds and their ultimate flying ability)	6/1, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> ("Design Time/A Prize Surprise"—STEM: design to building/magnets)
	Tuesday	5/26, 11:30 a.m. (WITFKids) <b>Splash and Bubbles</b> ("Lights Out/Catching Some Zzzzs"—fish that have light capabilities/nocturnal animals)	6/2, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> ("Dress Up Day/Bathtime"—silk caterpillars and how they make silk thread/how animals keep clean)
		5/26, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> ("My Shrinking Shoes"—concept of growing and how it is difficult to detect)	6/2, 6 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ("What's a Satellite? /Satellite Selfies"—explores satellites in space and how they help earth with communication, info about weather, etc.)
		5/26, 4:30 p.m. (WITFKids) <b>Dinosaur Train</b> ("Adventure Camp: Zip Lining/Adventure Camp: Canyon Hiking"—levels of the rainforest ecosystem/Mesozoic Era canyon and fossils)	6/2, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ("Build It Beaver"—beavers; dam builders and how dams transform landscapes and creating habitats for other wildlife)

<b>Kindergarten (con't)</b>	Wednesday	5/27, 8:30 a.m. (WITFTV) and 5/27, 7:30 p.m. & 5/29, 8:00 p.m. (WITFKids) <b>Molly of Denali</b> (“ <i>Busy Beavers/The Night Watchers</i> ” –how dams divert water/nocturnal animals)	6/3, 7:00 a.m. (WITFTV) <b>Curious George</b> (“ <i>Color Me Monkey/Special Delivery Monkey</i> ” –mixing primary colors to create more colors/concept of counting spaces in board games)
		5/27, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> (“ <i>Save the Stump!</i> ” –Sid discovers an animal/insect habitat in stump; if a habit is destroyed, it affects animals and other habitats nearby)	6/3, 8:00 a.m. (WITFTV) & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“ <i>Tail of One Kitty/Movie Theater Meltdown</i> ” –observe, describe and compare how animals use their tails/how heating and cooling changes matter) *also on 6/5, 8:30 p.m. (WITFKids)
		5/27, 6:30 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>Aqua Frog</i> ” – life cycle of the bull frog and habitat)	6/3, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“ <i>Ants Revolution/Tide Pool Tough</i> ” –ants/ tide pool as habitat)
	Thursday	5/28, 8:00 a.m. (WITFTV) <b>Wild Kratts</b> (“ <i>Komodo Dragon</i> ” –explore Komodo Dragons and habitat)	6/4, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“ <i>The Lake Mistake/Plant Problem</i> ” – properties of matter and how temperature changes solids and liquids/plants: plant parts and what plants need to survive) *also on 6/5, 9:00 p.m. (WITFKids)
		5/28, 11:30 a.m. (WITFKids) <b>Splash and Bubbles</b> (“ <i>Pole-to-Pole, Parts 3 &amp; 4</i> ” –Narwhals, arctic habitat/food chain: krill to humpback whale) *Parts 1 & 2 on 5/29	6/4, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“ <i>Rain Game/No Sssweater is Better</i> ” –rain and rainforest habitat/snakes shed their skin)
		5/28, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> (“ <i>The Itchy Tag</i> ” –explore and learn about different textures)	6/4, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> (“ <i>Where Have All The Lizards Gone?/Conductor's Sleepover</i> ” – unbalance of ecosystem/hurricanes effect on ecosystem)
	Friday	5/29, 11:30 a.m.(WITFKids) <b>Splash and Bubbles</b> (“ <i>Pole-to-Pole, Parts 1 &amp; 2</i> ” –Antarctic habitat; fin whale, mackerel ice fish, Gentoo penguin) *Parts 3 & 4 on 5/28	6/5, 7:30 a.m. (WITFTV) <b>Wild Kratts</b> (“ <i>Mystery of the Flamingo's Pink</i> ” –flamingo are not pink because of their DNA so what's makes them pink?)
		5/29, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> (“ <i>Let There Be Light</i> ” –concept of light, various energy sources)	6/5, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“ <i>Flight of the Penguin/Let's Go Fly a Kite</i> ” –concept of flight; some birds like penguins do not fly/wind and how to fly in wind)
		5/29, 7:00 p.m. (WITFKids) and 5/25, 8:30 am. & 4:00 p.m. (WITFTV) <b>Molly of Denali</b> (“ <i>Froggy of Denali/Molly Mabrey and the Mystery Stones</i> ” –frogs and taking care of them/petroglyphs: symbols carved into stones)	6/5, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> (“ <i>Crystal and King Benefit Concert: Part One and Two</i> ”-- the effects of over fishing; biomass; aquatic ecosystems and balance)

Grade 1		May 26-May 29	June 1-June 5
	Weather vs Climate		6/1 and 6/5, 1:30 p.m. & 7:30 p.m. (WITFKids) and 6/3 8:30 a.m. (WITFTV) <b>Molly of Denali</b> (“Rocky Rescue/Canoe Journey”—Dense fog; navigating/mapping; orienteering)
			6/2, 6 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> (“What’s a Satellite? /Satellite Selfies” – explores satellites in space and how they help earth with communication, info about weather, etc.)
			6/4, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> (“Where Have All The Lizards Gone?/Conductor’s Sleepover”—unbalance of ecosystem/hurricanes effect on ecosystem)
	Types of precipitation		6/4, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“Rain Game/No Sssweater is Better”—rain and rainforest habitat/snakes shed their skin)
	Earth Science: Natural resources renewable vs nonrenewable	5/26, 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“Cave Conundrum/Daisy Colossal Fossil”—cave exploration/habitat/prehistoric fossils)	6/1, 12 p.m. (WITFKids) <b>Cyberchase</b> (“Waterwoes”—water flow and its effects when diverted, displaced; using map and spatial reasoning skills to problem solve) <i>*previously on 4/17, 4/22 Science Curriculum</i>
		5/27, 8:30 a.m. (WITFTV) and 5/27, 7:30 p.m. & 5/29, 8:00 p.m. (WITFKids) <b>Molly of Denali</b> (“Busy Beavers/The Night Watchers”—how dams divert water/nocturnal animals)	6/1, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> (“What’s at the Center of the Earth? Layers! /What’s at the Center of the Earth?”—explores earth’s layers: crust, mantle, core/fossils: trilobites; using Law of Superposition)
		5/27, 6:30 a.m. and 5/29, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“Giving Thanks Day”—food production, distribution; resourcefulness; eliminating food waste)	6/1, 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“There’s Gold in Them Thar Hills/Nature Cat and Mr. Hide”—gold as natural resource/concept of camouflage)
		5/28, 6:30 a.m. (WITFKids) <b>Cyberchase</b> (“Going Solar”—use of solar panels to collect energy during day to power sport park at night)	6/4, 1:30 p.m. & 7:30 p.m. (WITFKids) <b>Molly of Denali</b> (“Busy Beavers/The Night Watchers”—how dams divert water/nocturnal animals)
		5/29, 6:30 a.m. and 5/26, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“Blowin’ in the Wind”—measuring wind speeds in different places for comparison)	6/5, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> (“I Feel The Earth Move/Zerk Visits Earth”—earthquakes: examine plates and fault lines)

<b>Grade 1 (con't)</b>		5/29, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> (“ <i>Let There Be Light</i> ”—concept of light, various energy sources)	6/5, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“ <i>Stream and Shout/Hal’s Day Off</i> ”—explores the origins of streams/animals that live in the city; city as habitat)
			6/5, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“ <i>Flight of the Penguin/Let’s Go Fly a Kite</i> ”—concept of flight; some birds like penguins do not fly/wind and how to fly in wind, power of wind)
			6/5, 12 p.m. (WITFKids) <b>Cyberchase</b> (“ <i>Back to Canalia’s Future</i> ”—change in water levels of canals; water conservation)
			6/5, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> (“ <i>Crystal and King Benefit Concert: Part One and Two</i> ”— the effects of over fishing; biomass; aquatic ecosystems and balance)
	Recycling	5/26, 4:00 p.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“ <i>Super Cleaner Uppers/Itty Bitty Water</i> ”—natural garbage (composting) versus man-made garbage/water conservation)	6/2, 12 p.m. (WITFKids) <b>Cyberchase</b> (“ <i>Space Waste Odyssey, Part 1</i> ”—managing trash and waste using creative problem solving and math/science skills)
			6/3, 12 p.m. (WITFKids) <b>Cyberchase</b> (“ <i>Space Waste Odyssey, Part 2</i> ”—managing trash and waste using creative problem solving and math/science skills)
			6/4, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> (“ <i>Space Junk/Scientific Sean</i> ”—man-made space junk creates hazards; how to clean-up/Using Scientific Method to solve distance/size issues making paper airplanes)
	Life Science-genetics and heredity		
	Plant life-seed to adult plant	5/26, 4:30 p.m. (WITFKids) <b>Dinosaur Train</b> (“ <i>Adventure Camp: Zip Lining/Adventure Camp: Canyon Hiking</i> ”—levels of the rainforest ecosystem/Mesozoic Era canyon and fossils)	6/4, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“ <i>The Lake Mistake/Plant Problem</i> ”— properties of matter and how temperature changes solids and liquids/plants: plant parts and what plants need to survive) <i>*also on 6/5, 9:00 p.m. (WITFKids)</i>
		5/26, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>Flight of the Pollinators</i> ”—how animals and insects help	

		plants make seeds through pollination)	
<b>Grade 1 (con't)</b>		5/27, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“A Garden Grows in Botlyn”—use math skills to plot out and plant a garden)	
		5/29, 4:30 p.m. (WITFKids) <b>Dinosaur Train</b> (“Adventure Camp: Rafting/Adventure Camp: Mountain Climbing”—explore concept of “tree line”: why trees do not grow on top of mountains)	
<b>Grade 2</b>		<b>May 26- May 29</b>	<b>June 1-June 5</b>
	<i>Life Science:</i> Plants	5/26, 4:30 p.m. (WITFKids) <b>Dinosaur Train</b> (“Adventure Camp: Zip Lining/Adventure Camp: Canyon Hiking”—levels of the rainforest ecosystem/Mesozoic Era canyon and fossils)	6/1, 8:00 (WITFTV) and 11:00 a.m. & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>Premier: One hour special--Young heroes in training learn how to master their less-than-perfected powers at Hero Elementary! Focused on Science-related curriculum.</i> ) <i>*also on 6/5, 8:00 (WITFTV) and 11:00 a.m. &amp; 7:00 p.m. (WITFKids)</i>
		5/27, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“A Garden Grows in Botlyn”—use math skills to plot out and plant a garden)	6/4, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“The Lake Mistake/Plant Problem”—properties of matter and how temperature changes solids and liquids/plants: plant parts and what plants need to survive) <i>*also on 6/5, 9:00 p.m. (WITFKids)</i>
		5/29, 4:30 p.m. (WITFKids) <b>Dinosaur Train</b> (“Adventure Camp: Rafting/Adventure Camp: Mountain Climbing”—explore concept of “tree line”: why trees do not grow on top of mountains)	
	Animals (habitats)	5/25, 8:00 a.m. (WITFTV) <b>Wild Kratts</b> (“The Last, Largest Lobster”—lobsters, habitats and lifecycle)	6/1, 7:00 a.m. (WITFTV) <b>Curious George</b> (“Monkey Down Under/Bright Light, Little Monkey”—Australia: sea cows, tracking footprints of kangaroos/astronomy; Perseids—meteor showers)
		5/25, 3:30 p.m. (WITFTV) <b>Wild Kratts</b> (“Fourth Bald Eagle”—eagles, habitats and the feather: structure and function)	6/1, 7:30 a.m. (WITFTV) and 6/3, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> (“Road Runner”—Road Runner bird and Sonoran Desert habitat)

<b>Grade 2 (con't)</b>	<b>Animals (habitats) (con't)</b>	5/25, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>To Touch a Hummingbird</i> ”—hummingbirds and their ultimate flying ability)	6/1, 2:30 p.m. & 6:30 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>Tortuga Tune Up</i> ”—Sea turtles and habitat)
		5/26, 8:00 a.m. (WITFTV) <b>Wild Kratts</b> (“ <i>Golden Snub Nosed Monkey Man</i> ”—how these monkeys have special adaption to deal with cold mountain habitats)	6/1, 5:00 p.m. (WITFKids) and 6/3, 9:30 a.m. (WITFTV) <b>Let’s Go Luna</b> (“ <i>Nature Calls/Story Story</i> ”—wild animals in Alaska, sharing habitat, space with people)
		5/26, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“ <i>The Cyberchase The Movie Part 1</i> ”—a geyser destroys animals’ habitats, what are the solutions to rescue the animals and ecosystem).	6/1, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>Platypus Café</i> ”—Platypus, habitat in in Australia) <i>*previously on 4/21 Science Curriculum</i>
		5/26, 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“ <i>Cave Conundrum/Daisy Colossal Fossil</i> ”—cave exploration/habitat/prehistoric fossils)	6/2, 7:30 a.m. (WITFTV) <b>Wild Kratts</b> (“ <i>Gila Monsters Under My House</i> ”—Gila Monster, type of lizard and habitat in Sonoran Desert)
		5/26, 6:30 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>The Gecko Effect</i> ”—how gecko lizards use physics and adaption to climb and stick to any surface)	6/2, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“ <i>A Prickly Problem/A Shedtime Story</i> ”—porcupines and their quills/shedding fur—how and why)
		5/27, 8:00 a.m. (WITFTV) <b>Wild Kratts</b> (“ <i>Blue Heron</i> ”—blue herons, habitat, concept: body form shaped by hunting strategy)	6/2, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>Build It Beaver</i> ”—beavers; dam builders and how dams transform landscapes and creating habitats for other wildlife)
		5/27, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“ <i>The Cyberchase Movie Part 2</i> ”—a geyser destroys animals’ habitats, explores solutions to rescue the animals and ecosystem.)	6/3, 8:00 a.m. (WITFTV) & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“ <i>Tail of One Kitty/Movie Theater Meltdown</i> ”—observe, describe and compare how animals use their tails/how heating and cooling changes matter) <i>*also on 6/5, 8:30 p.m. (WITFKids)</i>
		5/27, 8:30 a.m. (WITFTV) and 5/27, 7:30 p.m. & 5/29, 8:00 p.m. (WITFKids) <b>Molly of Denali</b> (“ <i>Busy Beavers/The Night Watchers</i> ”—how dams divert water/nocturnal animals)	6/3, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“ <i>Trees Company/Now You See Me</i> ”—trees as habitat/geckos and how they use camouflage, run, climb)
		5/27, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> (“ <i>Save the Stump!</i> ”—Sid discovers an animal/insect habitat in stump; if a habit is destroyed, it affects animals and other habitats nearby)	6/3, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“ <i>Ants Revolution/Tide Pool Tough</i> ”—ants/ tide pool as habitat)
		5/27, 4:00 p.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> (“ <i>Amazing Eyes/Water Walkers</i> ”—how three different animals use their eyes/water striders and habitat)	6/4, 1:30 p.m. & 7:30 p.m. (WITFKids) <b>Molly of Denali</b> (“ <i>Busy Beavers/The Night Watchers</i> ”—how dams divert water/nocturnal animals)

<b>Grade 2 (con't)</b>	<b>Animals (habitats) (con't)</b>	5/27, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ("Sea Horse Rodeo"—sea horses and habitat)	6/4, 8:30 am. (WITFTV) <b>Molly of Denali</b> ("Froggy of Denali/Molly Mabrey and the Mystery Stones"—frogs, habitat and taking care of them/petroglyphs: symbols carved into stones)
		5/27, 6:30 p.m. (WITFKids) <b>Wild Kratts</b> ("Aqua Frog"—life cycle of the bull frog and habitat)	6/4, 7:30 a.m. (WITFTV) <b>Wild Kratts</b> ("Snow Runners"—animals that adapt to winter weather: hares, lynx)
		5/28, 11:30 a.m. (WITFKids) <b>Splash and Bubbles</b> ("Pole-to-Pole, Parts 3 & 4"—Narwhals, Arctic habitat/food chain: krill to humpback whale) *Parts 1 & 2 on 5/29	6/4, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> ("Rain Game/No Sssweater is Better"—rain and rainforest habitat/snakes shed their skin)
		5/28, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ("Speaking Dolphinese"—how Dolphins communicate)	6/4, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ("Man Oh Mangrove/Northern Lights Sights"—spiny lobster, habitat mangrove/Aurora Borealis)
		5/28, 6:30 p.m. (WITFKids) <b>Wild Kratts</b> ("Rainforest Stew"—explore tropical rainforest habitat)	6/4, 12 p.m. (WITFKids) <b>Cyberchase</b> ("Creech's Creature Quandary"—construction of a bike path affects creature's habitats; how can they coexist?)
		5/28, 8:00 a.m. (WITFTV) <b>Wild Kratts</b> ("Komodo Dragon"—explore Komodo Dragons and habitat)	6/4, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> ("Where Have All The Lizards Gone?/Conductor's Sleepover"—unbalance of ecosystem/hurricanes effect on ecosystem)
		5/29, 11:30 a.m.(WITFKids) <b>Splash and Bubbles</b> ("Pole-to-Pole, Parts 1 & 2"—Antarctic habitat; fin whale, mackerel ice fish, Gentoo penguin) *Parts 3 & 4 on 5/28	6/4, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ("Puffin Rescue"—puffins and their habitat)
		5/29, 6:00 p.m. (WITFKids) and 6/3, 7:30 a.m. (WITFTV) <b>Wild Kratts</b> ("Little Howler"—wolves; how they communicate, social relationships)	6/5, 7:30 a.m. (WITFTV) <b>Wild Kratts</b> ("Mystery of the Flamingo's Pink"—flamingo are not pink because of their DNA so what's makes them pink?)
		5/29, 7:00 p.m. (WITFKids) and 5/25, 8:30 am. & 4:00 p.m. (WITFTV) <b>Molly of Denali</b> ("Froggy of Denali/Molly Mabrey and the Mystery Stones"—frogs, habitat and taking care of them/petroglyphs: symbols carved into stones)	6/5, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ("Stream and Shout/Hal's Day Off"—explores the origins of streams/animals that live in the city; city as habitat)
			6/5, 2:30 p.m. & 6:30 p.m. (WITFKids) <b>Wild Kratts</b> ("Blowfish Blowout"—coral reef habitat)
			6/5, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> ("Crystal and King Benefit Concert: Part One and Two"-- the effects of over fishing; biomass; aquatic ecosystems and balance)
			6/5, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ("Polar Bears

			<i>Don't Dance</i> —how animals move in different environments; concept of buoyancy, traction)
<b>Grade 2 (con't)</b>	Animals that benefit Humans (i.e. bees)	5/26, 6:00 p.m. (WITFKids) <b>Wild Kratts</b> ( <i>Flight of the Pollinators</i> )—how animals and insects help plants make seeds through pollination)	6/2, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> ( <i>Dress Up Day/Bathtime</i> )—silk caterpillars and how they make silk thread/how animals keep clean)
		5/28, 4:00 p.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> ( <i>A Sweet Deal/King of Swing</i> )—honeyguide birds help humans locate bee nests)	
<b>Grade 3</b>		<b>May 26-May 29</b>	<b>June 1-5</b>
	<i>Earth Science:</i> Earth and Moon Matter	5/26, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>Solar System Bake Off/Kid Kart Derby</i> )—planets in solar system: terrestrial and gas; focus on Saturn/building an electric engine; ion drive engines can propel spacecraft ten times faster than chemical rockets)	6/1, 8:00 (WITFTV) and 11:00 a.m. & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>Premier: One hour special--Young heroes in training learn how to master their less-than-perfected powers at Hero Elementary! Focused on Science-related curriculum.</i> ) <i>*also on 6/5, 8:00 (WITFTV) and 11:00 a.m. &amp; 7:00 p.m. (WITFKids)</i>
		5/27, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>What's Up With Saturn's Rings/Sunspot's Night Out</i> )—explores Saturn's rings—made of ice and how they revolve around planet/ North Star used as navigation due to fixed location in sky)	6/1, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> ( <i>What's at the Center of the Earth? Layers! /What's at the Center of the Earth?</i> )—explores earth's layers: crust, mantle, core/fossils: trilobites; using Law of Superposition)
		5/28, 6:30 a.m. (WITFKids) <b>Cyberchase</b> ( <i>Going Solar</i> )—use of solar panels to collect energy during day to power sport park at night)	6/1, 5:30 p.m. (WITFKids) <b>Nature Cat</b> ( <i>There's Gold in Them Thar Hills/Nature Cat and Mr. Hide</i> )—gold as natural resource/concept of camouflage)
		5/28, 8:00 a.m. & 9 p.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>Ice Moon Enceladus/What Goes Up</i> )...--explore Saturn's ice moon/concept of gravity)	6/2, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>Saved the Bell/The Right Stuff</i> )—science concept of sound: vibrating matter makes sounds/materials have different properties) <i>*also on 6/5, 8:00 p.m. (WITFKids)</i>
			6/2, 12 p.m. (WITFKids) <b>Cyberchase</b> ( <i>Space Waste Odyssey, Part 1</i> )—managing trash and waste using creative problem solving and math/science skills)
			6/3, 8:00 a.m. (WITFTV) & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>Tail of One Kitty/Movie Theater Meltdown</i> )—observe, describe and

			compare how animals use their tails/how heating and cooling changes matter) <i>*also on 6/5, 8:30 p.m. (WITFKids)</i>
<b>Grade 3 (con't)</b>			6/3, 12 p.m. (WITFKids) <b>Cyberchase</b> ( <i>"Space Waste Odyssey, Part 2"</i> —managing trash and waste using creative problem solving and math/science skills)
			6/4, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>"The Lake Mistake/Plant Problem"</i> —properties of matter and how temperature changes solids and liquids/plants: plant parts and what plants need to survive) <i>*also on 6/5, 9:00 p.m. (WITFKids)</i>
			6/4, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ( <i>"Man Oh Mangrove/Northern Lights Sights"</i> —spiny lobster, habitat mangrove/science of Aurora Borealis)
			6/4, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"Space Junk/Scientific Sean"</i> —man-made space junk creates hazards; how to clean-up/Using Scientific Method to solve distance/size issues making paper airplanes)
			6/5, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"I Feel The Earth Move/Zerk Visits Earth"</i> —earthquakes: examine plates and fault lines)
			6/5, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ( <i>"Stream and Shout/Hal's Day Off"</i> —explores the origins of streams/animals that live in the city; city as habitat)
			6/5, 12 p.m. (WITFKids) <b>Cyberchase</b> ( <i>"Back to Canalia's Future"</i> —change in water levels of canals; water conservation)
	Simple & Compound machines	5/26, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"Solar System Bake Off/Kid Kart Derby"</i> —planets in solar system: terrestrial and gas; focus on Saturn/building an electric engine; ion drive engines can propel spacecraft ten times faster than chemical rockets)	6/1, 10:30 a.m. (WITFKids) <b>Cat in the Hat Knows A Lot About That!</b> ( <i>"Design Time/A Prize Surprise"</i> —STEM: design to building/magnets)
			6/2, 6 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"What's a Satellite? /Satellite Selfies"</i> —explores satellites in space and how they help earth with communication, info about weather, etc.)

Grade 4		May 26-May 29	June 1-5
	<i>Earth Science:</i> Properties of Matter	5/26, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> (“Solar System Bake Off/Kid Kart Derby” –planets in solar system: terrestrial and gas; focus on Saturn/building an electric engine; ion drive engines can propel spacecraft ten times faster than chemical rockets)	6/1, 8:00 (WITFTV) and 11:00 a.m. & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>Premier: One hour special--Young heroes (4<sup>th</sup> Graders) in training learn how to master their less-than-perfected powers at Hero Elementary! Focused on Science-related curriculum.)</i> *also on 6/5, 8:00 (WITFTV) and 11:00 a.m. & 7:00 p.m. (WITFKids)
		5/27, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> (“What’s Up With Saturn’s Rings/Sunspot’s Night Out” –explores Saturn’s rings—made of ice and how they revolve around planet/ North Star used as navigation due to fixed location in sky)	6/1, 12 p.m. (WITFKids) <b>Cyberchase</b> (“Waterwoes” –water flow and its effects when diverted; using map and spatial reasoning skills to problem solve) *previously on 4/17, 4/22 Science Curriculum
		5/28, 8:00 a.m. & 9 p.m. (WITFKids) <b>Ready Jet Go!</b> (“Ice Moon Enceladus/What Goes Up”...--explore Saturn’s ice moon/concept of gravity)	6/1, 3:00 p.m. (WITFKids) <b>Dinosaur Train</b> (“What’s at the Center of the Earth? Layers! /What’s at the Center of the Earth?” –explores earth’s layers: crust, mantle, core/fossils: trilobites; using Law of Superposition)
			6/1, 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“There’s Gold in Them Thar Hills/Nature Cat and Mr. Hide” –gold as natural resource/concept of camouflage)
			6/2, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“Saved the Bell/The Right Stuff” –science concept of sound: vibrating matter makes sounds/materials have different properties) *also on 6/5, 8:00 p.m. (WITFKids)
			6/2, 12 p.m. (WITFKids) <b>Cyberchase</b> (“Space Waste Odyssey, Part 1” –managing trash and waste using creative problem solving and math/science skills)
			6/3, 12 p.m. (WITFKids) <b>Cyberchase</b> (“Space Waste Odyssey, Part 2” –managing trash and waste using creative problem solving and math/science skills)
			6/4, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“Man Oh Mangrove/Northern Lights Sights” –spiny lobster, habitat mangrove/science of Aurora Borealis)

			6/4, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"Space Junk/Scientific Sean"</i> —man-made space junk creates hazards; how to clean-up/Using Scientific Method to solve distance/size issues making paper airplanes)
<b>Grade 4 (con't)</b>			6/5, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"I Feel The Earth Move/Zerk Visits Earth"</i> —earthquakes: examine plates and fault lines)
			6/5, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ( <i>"Stream and Shout/Hal's Day Off"</i> —explores the origins of streams/animals that live in the city; city as habitat)
			6/5, 12 p.m. (WITFKids) <b>Cyberchase</b> ( <i>"Back to Canalia's Future"</i> —change in water levels of canals; water conservation)
	Changes of matter		6/3, 8:00 a.m. & 8:00 p.m. <b>Hero Elementary</b> ( <i>"Tail of One Kitty/Movie Theater Meltdown"</i> —observe, describe and compare how animals use their tails/how heating and cooling changes matter) <i>*also on 6/5, 8:30 p.m. (WITFKids)</i>
			6/4, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>"The Lake Mistake/Plant Problem"</i> —properties of matter and how temperature changes solids and liquids/plants: plant parts and what plants need to survive) <i>*also on 6/5, 9:00 p.m. (WITFKids)</i>
	Energy	5/26, 6:00 a.m. (WITFKids) <b>Cyberchase</b> ( <i>"The Cyberchase Movie Part 1"</i> —a geyser destroys animals' habitats, explores solutions to rescue the animals and ecosystem.)	
		5/27, 6:00 a.m. (WITFKids) <b>Cyberchase</b> ( <i>"The Cyberchase Movie Part 2"</i> —a geyser destroys animals' habitats, explores solutions to rescue the animals and ecosystem.)	
		5/28, 6:30 a.m. (WITFKids) <b>Cyberchase</b> ( <i>"Going Solar"</i> —use of solar panels to collect energy during day to power sport park at night)	

		5/29, 6:30 a.m. and 5/26, 6:00 a.m. (WITFKids) <b>Cyberchase</b> (“ <i>Blowin’ in the Wind</i> ”—measuring wind speeds in different places for comparison)	
	Electricity	5/26, 6:30 p.m. (WITFKids) <b>Wild Kratts</b> (“ <i>The Gecko Effect</i> ”—how gecko lizards use physics, including electrical charges, and toe pad structure to climb and stick to any vertical surface)	
		5/29, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> (“ <i>Let There Be Light</i> ”—concept of light, various energy sources)	
<b>Grade 5</b>		<b>May 26-May 29</b>	<b>June 1-5</b>
	Earth Science	5/26, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> (“ <i>Solar System Bake Off/Kid Kart Derby</i> ”—planets in solar system: terrestrial and gas; focus on Saturn/building an electric engine; ion drive engines can propel spacecraft ten times faster than chemical rockets)	6/1, 8:00 (WITFTV) and 11:00 a.m. & 8:00 p.m. (WITFKids) <b>Hero Elementary</b> ( <i>Premier: One hour special--Young heroes (4<sup>th</sup> Graders) in training learn how to master their less-than-perfected powers at Hero Elementary! Focused on Science-related curriculum.) *also on 6/5, 8:00 (WITFTV) and 11:00 a.m. &amp; 7:00 p.m. (WITFKids)</i> )
		5/27, 8:00 a.m. & 9:00 p.m. (WITFKids) <b>Ready Jet Go!</b> (“ <i>What’s Up With Saturn’s Rings/Sunspot’s Night Out</i> ”—explores Saturn’s rings—made of ice and how they revolve around planet/ North Star used as navigation due to fixed location in sky)	6/1, 5:30 p.m. (WITFKids) <b>Nature Cat</b> (“ <i>There’s Gold in Them Thar Hills/Nature Cat and Mr. Hide</i> ”—gold as natural resource/concept of camouflage)
		5/28, 6:30 a.m. (WITFKids) <b>Cyberchase</b> (“ <i>Going Solar</i> ”—use of solar panels to collect energy during day to power sport park at night)	6/2, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“ <i>Saved the Bell/The Right Stuff</i> ”—science concept of sound: vibrating matter makes sounds/materials have different properties) <i>*also on 6/5, 8:00 p.m. (WITFKids)</i>
			6/2, 12 p.m. (WITFKids) <b>Cyberchase</b> (“ <i>Space Waste Odyssey, Part 1</i> ”—managing trash and waste using creative problem solving and math/science skills)
			6/3, 12 p.m. (WITFKids) <b>Cyberchase</b> (“ <i>Space Waste Odyssey, Part 2</i> ”—managing trash and waste using creative problem solving and math/science skills)
			6/4, 8:00 a.m. (WITFTV) and 8:00 p.m. (WITFKids) <b>Hero Elementary</b> (“ <i>The Lake Mistake/Plant Problem</i> ”—properties of matter and how temperature changes)

			solids and liquids/plants: plant parts and what plants need to survive) <i>*also on 6/5, 9 p.m. (WITFKids)</i>
<b>Grade 5 (con't)</b>			6/4, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ( <i>"Man Oh Mangrove/Northern Lights Sights"</i> —spiny lobster, habitat mangrove/science of Aurora Borealis)
			6/4, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"Space Junk/Scientific Sean"</i> —man-made space junk creates hazards; how to clean-up/Using Scientific Method to solve distance/size issues making paper airplanes)
			6/5, 6:00 a.m. (WITFTV) and 11:30 a.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"I Feel The Earth Move/Zerk Visits Earth"</i> —earthquakes: examine plates and fault lines)
			6/5, 11:00 a.m. & 5:30 p.m. (WITFKids) <b>Nature Cat</b> ( <i>"Stream and Shout/Hal's Day Off"</i> —explores the origins of streams/animals that live in the city; city as habitat)
			6/5, 12 p.m. (WITFKids) <b>Cyberchase</b> ( <i>"Back to Canalia's Future"</i> —change in water levels of canals; water conservation)
	Forces and Motion	5/25, 12 p.m. (WITFKids) <b>Sid the Science Kid</b> ( <i>"That's the Way the Ball Bounces"</i> —concept: elasticity, how balls bounce)	6/1, 12 p.m. (WITFKids) <b>Cyberchase</b> ( <i>"Waterwoes"</i> —water flow and its effects when diverted; using map and spatial reasoning skills to problem solve) <i>*previously on 4/17, 4/22 Science Curriculum</i>
		5/26, 6:30 p.m. (WITFKids) <b>Wild Kratts</b> ( <i>"The Gecko Effect"</i> —how gecko lizards use physics, including electrical charges, and toe pad structure to climb and stick to any vertical surface)	
		5/28, 8:00 a.m. & 9 p.m. (WITFKids) <b>Ready Jet Go!</b> ( <i>"Ice Moon Enceladus/What Goes Up"</i> ...--explore Saturn's ice moon/concept of gravity)	

Grade 6		May 26-May 29	June 1-5
		<b><u>Afternoon Science Programming for middle school students</u></b>	<b><u>Afternoon Science Programming for middle school students</u></b>
		5/28, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —What are we? (Professor Stephen Hawking challenges three ordinary people to find out what we really are.)	6/1, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore travels to Madagascar and the Florida Keys to photograph endangered animals.)
		5/28, 3 p.m. (WITFTV) <b>Native America</b> —From Caves to Cosmos (Ancient wisdom and modern science are combined to shed light on who were America's First Peoples.) <i>*also ELA Curriculum</i>	6/2, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore photographs the Iberian lynx in Spain and the Yangtze giant softshell turtle in China.)
		5/28, 4 p.m. (WITFTV) <b>Native America</b> —Nature to Nations (Explore the rise of great American nations, lost cities in Mexico, a temple in Peru and more.) <i>*also ELA Curriculum</i>	6/3, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore searches for insects to his Photo Ark collection and animals in Budapest and Prague.)
		5/29, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —Where are we? (Renowned scientist Stephen Hawking challenges three ordinary people to think like a genius.)	6/4, 2 p.m. (WITFTV) <b>8 Days: to the Moon and Back</b> (Join Apollo 11 on its historic journey. The first moon landing is recreated with mission audio, astronaut conversations, footage and CGI.) <i>*1.5 hours</i>
		5/29, 3 p.m. (WITFTV) <b>Native America</b> —Cities of the Sky (Scientists explore pyramids and 3D-scan a lost city of monumental mounds on the Mississippi River.) <i>*also ELA Curriculum</i>	6/4, 3:30 p.m. (WITFTV) <b>America's Forests with Chuck Leavell</b> (The people of Oregon are embracing new ways of engaging with the woods all around them.)
		5/29, 4 p.m. (WITFTV) <b>Native America</b> —New World Rising (Horse-mounted Comanche warriors and secret messages encoded in Aztec manuscript are explored.) <i>*also ELA Curriculum</i>	6/5, 2 p.m. (WITFTV) <b>The Farthest—Voyager In Space</b> (Launched in 1977, NASA's epic Voyager missions revolutionized our understanding of our galaxy.) <i>*2 hours</i>
	Also Math Curriculum	STEM Programming	STEM Programming
	Physics Simple Machines Electricity Magnetism	5/28, 5:00 p.m. (WITFTV) <b>The Robot Doctor</b> (Episode 103: "Robot Measurements—How Do I measure?" – Looking at different ways to measure distances, speeds, time and other items important to robots.) <i>*Episode 102 will repeat followed by Episode 103, each episode runs 14 minutes</i>	6/4, 5:00 p.m. (WITFTV) <b>The Robot Doctor</b> (Episode 104: "Robot Localization: Where am I?"— How a robot can keep track of its position as it moves and how to update that position with math using ranges to known landmarks.) <i>*Episode 103 will repeat followed by Episode 104, each episode runs 14 minutes</i>

	<i>Online Resource for Middle School Sciences</i>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>
<b>Grade 7</b>		<b>May 26-May 29</b>	<b>June 1-5</b>
		<b><u>Afternoon Science Programming for middle school students</u></b>	<b><u>Afternoon Science Programming for middle school students</u></b>
		5/28, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —What are we? (Professor Stephen Hawking challenges three ordinary people to find out what we really are.)	6/1, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore travels to Madagascar and the Florida Keys to photograph endangered animals.)
		5/28, 3 p.m. (WITFTV) <b>Native America</b> —From Caves to Cosmos (Ancient wisdom and modern science are combined to shed light on who were America's First Peoples.) <i>*also ELA Curriculum</i>	6/2, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore photographs the Iberian lynx in Spain and the Yangtze giant softshell turtle in China.)
		5/28, 4 p.m. (WITFTV) <b>Native America</b> —Nature to Nations (Explore the rise of great American nations, lost cities in Mexico, a temple in Peru and more.) <i>*also ELA Curriculum</i>	6/3, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore searches for insects to his Photo Ark collection and animals in Budapest and Prague.)
		5/29, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —Where are we? (Renowned scientist Stephen Hawking challenges three ordinary people to think like a genius.)	6/4, 2 p.m. (WITFTV) <b>8 Days: to the Moon and Back</b> (Join Apollo 11 on its historic journey. The first moon landing is recreated with mission audio, astronaut conversations, footage and CGI.) <i>*1.5 hours</i>
		5/29, 3 p.m. (WITFTV) <b>Native America</b> —Cities of the Sky (Scientists explore pyramids and 3D-scan a lost city of monumental mounds on the Mississippi River.) <i>*also ELA Curriculum</i>	6/4, 3:30 p.m. (WITFTV) <b>America's Forests with Chuck Leavell</b> (The people of Oregon are embracing new ways of engaging with the woods all around them.)
		5/29, 4 p.m. (WITFTV) <b>Native America</b> —New World Rising (Horse-mounted Comanche warriors and secret messages encoded in Aztec manuscript are explored.)	6/5, 2 p.m. (WITFTV) <b>The Farthest—Voyager In Space</b> (Launched in 1977, NASA's epic Voyager missions revolutionized our understanding of our galaxy.) <i>*2 hours</i>

		<i>*also ELA Curriculum</i>	
	Life Science: Ecology Ecosystems		
	<i>Online Resource for Middle School Sciences</i>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>
<b>Grade 8</b>		<b>May 26-May 29</b>	<b>June 1-5</b>
		<b><u>Afternoon Science Programming for middle school students</u></b>	<b><u>Afternoon Science Programming for middle school students</u></b>
		5/28, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —What are we? (Professor Stephen Hawking challenges three ordinary people to find out what we really are.)	6/1, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore travels to Madagascar and the Florida Keys to photograph endangered animals.)
		5/28, 3 p.m. (WITFTV) <b>Native America</b> —From Caves to Cosmos (Ancient wisdom and modern science are combined to shed light on who were America's First Peoples.) <i>*also ELA Curriculum</i>	6/2, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore photographs the Iberian lynx in Spain and the Yangtze giant softshell turtle in China.)
		5/28, 4 p.m. (WITFTV) <b>Native America</b> —Nature to Nations (Explore the rise of great American nations, lost cities in Mexico, a temple in Peru and more.) <i>*also ELA Curriculum</i>	6/3, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore searches for insects to his Photo Ark collection and animals in Budapest and Prague.)
		5/29, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —Where are we? (Renowned scientist Stephen Hawking challenges three ordinary people to think like a genius.)	6/4, 2 p.m. (WITFTV) <b>8 Days: to the Moon and Back</b> (Join Apollo 11 on its historic journey. The first moon landing is recreated with mission audio, astronaut conversations, footage and CGI.) <i>* 1.5 hours</i>
		5/29, 3 p.m. (WITFTV) <b>Native America</b> —Cities of the Sky (Scientists explore pyramids and 3D-scan a lost city of monumental mounds on the Mississippi River.) <i>*also ELA Curriculum</i>	6/4, 3:30 p.m. (WITFTV) <b>America's Forests with Chuck Leavell</b> (The people of Oregon are embracing new ways of engaging with the woods all around them.)

		5/29, 4 p.m. (WITFTV) <b>Native America</b> —New World Rising (Horse-mounted Comanche warriors and secret messages encoded in Aztec manuscript are explored.) <i>*also ELA Curriculum</i>	6/5, 2 p.m. (WITFTV) <b>The Farthest—Voyager In Space</b> (Launched in 1977, NASA's epic Voyager missions revolutionized our understanding of our galaxy.) <i>*2 hours</i>
	Climate Science: Human Impact		
	<i>Online Resource for Middle School Sciences</i>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>
<b>High School 9-12</b>		<b>May 26-May 29</b>	<b>June 1-5</b>
		<b><u>Afternoon Science Programming for high school students</u></b>	<b><u>Afternoon Science Programming for high school students</u></b>
		5/28, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —What are we? (Professor Stephen Hawking challenges three ordinary people to find out what we really are.)	6/1, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore travels to Madagascar and the Florida Keys to photograph endangered animals.)
		5/28, 3 p.m. (WITFTV) <b>Native America</b> —From Caves to Cosmos (Ancient wisdom and modern science are combined to shed light on who were America's First Peoples.) <i>*also ELA Curriculum</i>	6/2, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore photographs the Iberian lynx in Spain and the Yangtze giant softshell turtle in China.)
		5/28, 4 p.m. (WITFTV) <b>Native America</b> —Nature to Nations (Explore the rise of great American nations, lost cities in Mexico, a temple in Peru and more.) <i>*also ELA Curriculum</i>	6/3, 2 p.m. (WITFTV) <b>Rare—Creatures of the Photo Ark</b> (Joel Sartore searches for insects to his Photo Ark collection and animals in Budapest and Prague.)
		5/29, 2 p.m. (WITFTV) <b>Genius By Stephen Hawking</b> —Where are we? (Renowned scientist Stephen Hawking challenges three ordinary people to think like a genius.)	6/4, 2 p.m. (WITFTV) <b>8 Days: to the Moon and Back</b> (Join Apollo 11 on its historic journey. The first moon landing is recreated with mission audio, astronaut conversations, footage and CGI.) <i>* 1.5 hours</i>
		5/29, 3 p.m. (WITFTV) <b>Native America</b> —Cities of the Sky (Scientists explore pyramids and 3D-scan a lost city of monumental mounds on the Mississippi River.)	6/4, 3:30 p.m. (WITFTV) <b>America's Forests with Chuck Leavell</b> (The people of Oregon are embracing new ways of engaging with the woods all around them.)

		<i>*also ELA Curriculum</i>	
		5/29, 4 p.m. (WITFTV) <b>Native America</b> —New World Rising (Horse-mounted Comanche warriors and secret messages encoded in Aztec manuscript are explored.) <i>*also ELA Curriculum</i>	6/5, 2 p.m. (WITFTV) <b>The Farthest—Voyager In Space</b> (Launched in 1977, NASA's epic Voyager missions revolutionized our understanding of our galaxy.) <i>*2 hours</i>
	Also Math Curriculum	<b>STEM Programming</b>	<b>STEM Programming</b>
		5/28, 5:00 p.m. (WITFTV) <b>The Robot Doctor</b> (Episode 103: “Robot Measurements—How Do I measure?” – Looking at different ways to measure distances, speeds, time and other items important to robots.) <i>*Episode 102 will repeat followed by Episode 103, each episode runs 14 minutes</i>	6/4, 5:00 p.m. (WITFTV) <b>The Robot Doctor</b> (Episode 104: “Robot Localization: Where am I?” – How a robot can keep track of its position as it moves and how to update that position with math using ranges to known landmarks.) <i>*Episode 103 will repeat followed by Episode 104, each episode runs 14 minutes</i>
	<b>WITF Radio (FM 89.5) Listening Programs</b>	Fridays, 2-4 p.m. Ideas Exchange (WITF Radio FM 89.5) <b>Science Friday</b> (two 1- hour segments) <a href="https://www.sciencefriday.com/">https://www.sciencefriday.com/</a> Covering the outer reaches of space to the tiniest microbes in our bodies, Science. Friday is the source for entertaining and educational stories about science, technology, and other cool stuff.	Fridays, 2-4 p.m. Ideas Exchange (WITF Radio FM 89.5) <b>Science Friday</b> (two 1- hour segments) <a href="https://www.sciencefriday.com/">https://www.sciencefriday.com/</a> Covering the outer reaches of space to the tiniest microbes in our bodies, Science. Friday is the source for entertaining and educational stories about science, technology, and other cool stuff.
	<i>Online Resource for High School Sciences</i>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>	PBS Learning Media <a href="https://witf.pbslearningmedia.org/">https://witf.pbslearningmedia.org/</a>
<b>Biology</b>	Photosynthesis Cellular Respiration Cell Division Meiosis/Mitosis		
	Genetics/DNA	5/26, 8:00 p.m. (WITFTV) <b>Finding Your Roots—Beyond the Pale</b> (Jeff Goldblum, radio host Terry Gross and comedian Marc Maron learn about their Jewish heritages through genetics, DNA)	
		5/27, 9:00 p.m. (WITFTV) <b>NOVA—Last B-24</b> (Underwater Archaeologists investigate a B-24 Liberator bomber that crashed into the sea in 1940. From the recovery of the remains to the subsequent forensics and DNA analysis of the	

		remains in the laboratory, the story of the Tulsamerican is riveting and emotional).	
	Evolution		
	Ecology	5/27, 8:00 p.m. (WITFTV) <b>Nature--Sex, Lies and Butterflies</b> (Explore the astounding abilities of butterflies 360 vision, deceptive camouflage, chemical weaponry and fantastic flight. Look beyond their bright colors and fragile beauty and follow them on one of the greatest migrations on earth.)	
	Ecology		
<b>Chemistry</b>	Stoichiometry		
	Acids/Bases		
	Chemical Reactions		
	Gases		
	Solutions		
<b>Physics</b>			
	Newton's Law Projectile Motion		
	Forces Momentum and Energy		
	Magnets		
	Waves		
	Sound Light		
	Electromagnetic Spectrum		