Lessons: Earth Science Life Science Physical Science ETS	<u>Grade</u>	State ID NGSS TASS	<u>Description</u>	<u>Standard</u>
		1		
Planet Hunt	3	3.ESS1	. Using a game, students will basically use a scavenger hunt to learn about the planets.	*Use data to categorize the planets in the solar system as inner or outer planets according to their physical properties
Playdough Earth	3	3.ESS1	Students will use play dough earth models to experience the layers and the various matter components	*Use data to categorize the planets in the solar system as inner or outer planets according to their physical properties
Incredible Journey	3	3.ESS2	A game that explains the flow of water in our earths cycle	*Explain the cycle of water on earth  *Associate major cloud types with weather conditions  *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate.  *Incorporate weather data to describe major climates in different regions of the world.
Saturation rain	3	3.ESS2	Experiment to show saturation	*Explain the cycle of water on earth *Associate major cloud types with weather conditions *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate. *Incorporate weather data to describe major climates in different regions of the world.
Cloud ID	3	3.ESS2	Using various materials, students will create various cloud patterns and match using a cloud view finder.	*Explain the cycle of water on earth *Associate major cloud types with weather conditions *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate. *Incorporate weather data to describe major climates in different regions of the world.
Weather data & predictions	3	3.ESS2	Using weather tools, students will record data and make predictions	*Explain the cycle of water on earth *Associate major cloud types with weather conditions *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate. *Incorporate weather data to describe major climates in different regions of the world.
Water cycles & phases of matter	3	3.ESS2	Use experiments to compare the various phases/matter forms	*Explain the cycle of water on earth *Associate major cloud types with weather conditions *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate. *Incorporate weather data to describe major climates in different regions of the world.
Weather vs Climate	3	3.ESS2	Research and explain the difference	*Explain the cycle of water on earth

# Take A Walk on the Wildside Outdoor Science Program 3rd Grade

## **Curriculum Standards/Activity**

			between climate and weather. Record date and learn about the folklores of weather	*Associate major cloud types with weather conditions *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate. *Incorporate weather data to describe major climates in different regions of the world.
Seasonal/Climate Patterns	3	3.ESS2	Using game like activities and experiments, students will visually see how the water cycle works-record data and make predictions based on weather patterns and climate.	*Explain the cycle of water on earth *Associate major cloud types with weather conditions *Use tables, graphs and tools to describe precipitation, temperature and wind to determine local weather and climate. *Incorporate weather data to describe major climates in different regions of the world.
Global RRR	3	3.ESS3	Using a trash timeline to understand the breakdown of various items. RRR clean trash to represent a world solution.	*Explain how natural hazards impact humans and the environment. *Design solutions to reduce the impact of natural hazards on the environment
Erosion	3	3.EES3	An experiment to reflect human impact on natural elements	*Explain how natural hazards impact humans and the environment. *Design solutions to reduce the impact of natural hazards on the environment
Natural Disasters & Engineering	3	3.EES3	RRR clean trash to represent a world solution	*Explain how natural hazards impact humans and the environment. *Design solutions to reduce the impact of natural hazards on the environment
Macro Mayhem			By collecting/studying organisms taken from the Little Bigby Creek, students can determine the health of the creek.	*Analyze internal/external structures that aquatic/land animals/plants have to support survival, growth, behavior, reproduction.
Crawfish Crawl	3	3.LS1	Experiments with various tools and elements to experience how various crawfish use their body parts to survive (optional dissection)	*Analyze internal/external structures that aquatic/land animals/plants have to support survival, growth, behavior, reproduction.
Owl Pellets	3	3.LS1	Experiments with various tools and elements to experience how various owls use their body parts to survive (dissection assimilies)	*Analyze internal/external structures that aquatic/land animals/plants have to support survival, growth, behavior, reproduction.

Hungry Caterpillar	3	3.LS1	A study/game that replicates the book and explains the life cycle	*Analyze internal/external structures that aquatic/land animals/plants have to support survival, growth, behavior, reproduction.
Monarch Life Cycle	3	3.LS1	Using various craft supplies, students will gain a greater understanding of the monarch life cycle	*Analyze internal/external structures that aquatic/land animals/plants have to support survival, growth, behavior, reproduction.
Food Chain	3	3.LS2	Through the experience of an active game, students recreate surviving in a food chain dominoes.	* Construct an argument to explain why some animal's benefit from forming groups.
Quick Frozen Critters	3	3.LS2 3.LS4 3.ETS1	Placed in a prey/predator situation, students discover the difficulties of managing survival and with standing human impact.	* Construct an argument to explain why some animal's benefit from forming groups.  *Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them survive in land/aquatic biomes.  *Explain how changes to an environment's biodiversity influence human resources.  *Design a solution to a real-world problem that includes specified criteria for constraints
Oh Turkey	3	3.LS2 3.LS4 3.ETS1	Placed in a prey/predator situation, students discover the difficulties of managing survival and with standing human impact, population control. TWRA	* Construct an argument to explain why some animal's benefit from forming groups.  *Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them survive in land/aquatic biomes.  *Explain how changes to an environment's biodiversity influence human resources.  *Design a solution to a real-world problem that includes specified criteria for constraints

Forestry	3	3.LS2 3.LS4 3.ETS1	Observation of the natural elements while hiking a trail	* Construct an argument to explain why some animal's benefit from forming groups.  *Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them survive in land/aquatic biomes.  *Explain how changes to an environment's biodiversity influence human resources.  *Design a solution to a real-world problem that includes specified criteria for constraints
Organisms	3	3.LS2 3.LS4	Observation/research various forms of fungi/algae/lichens/moss	* Construct an argument to explain why some animal's benefit from forming groups.  *Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them survive in land/aquatic biomes.  *Explain how changes to an environment's biodiversity influence human resources.
Fossils & the changing Earth	3	3.LS4 3.EYS2	A scavenger hunt for fossils, ID and prediction of what/why	*Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them survive in land/aquatic biomes.  *Explain how changes to an environment's biodiversity influence human resources.  *Identify and demonstrate how technology can be used for different purposes
Heredity, Survival, Selection	3	3.LS4	Experience animal like situations through games	*Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them

				*Explain how changes to an environment's biodiversity influence human resources.  *Identify and demonstrate how technology can be used for different purposes
Monarch Maps	3	3.LS4 3.ETS2	The study of the travel patterns of a monarch- migration paths	*Explain the cause/effect relationship between a naturally changing environment and an organism's ability to survive.  *Infer that plant/animal adaptations help them survive in land/aquatic biomes.  *Explain how changes to an environment's biodiversity influence human resources.  *Identify and demonstrate how technology can be used for different purposes
Find the Penny	3	3.PS1	What are the properties of a penny? Do they react to other elements? Create a find the penny game based on physical properties.	*Describe the properties of solids, liquids, gas- and identify that matter is made up of particles too small to be seen.  *Differentiate between changes caused by heating or cooling that can be reversed/not reversed.  *Describe and compare the physical properties of matter including color, texture, shape, length, mass, temperature, volume, state, hardness, flexibility.
Bartholomew's Secret	3	3.PS1	Using various kitchen items, students will experience Bartholomew's secret	*Describe the properties of solids, liquids, gas- and identify that matter is made up of particles too small to be seen.  *Differentiate between changes caused by heating or cooling that can be reversed/not reversed.  *Describe and compare the physical properties of matter including color, texture, shape, length, mass, temperature, volume, state, hardness, flexibility.

Water cycles	3	3.PS1	Using various tools, students will recreate the water cycle.	*Describe the properties of solids, liquids, gas- and identify that matter is made up of particles too small to be seen.  *Differentiate between changes caused by heating or cooling that can be reversed/not reversed.  *Describe and compare the physical properties of matter including color, texture, shape, length, mass, temperature, volume, state, hardness, flexibility.
Cloud ID & saturation	3	3.PS1	Using charts, students will ID clouds. Students will recreate cloud formations. Using household items, students will experiment with saturation.	*Describe the properties of solids, liquids, gas- and identify that matter is made up of particles too small to be seen.  *Differentiate between changes caused by heating or cooling that can be reversed/not reversed.  *Describe and compare the physical properties of matter including color, texture, shape, length, mass, temperature, volume, state, hardness, flexibility.
Material Properties	3	3.PS1	Experiments with various items to learn and compare/contrast properties.	*Describe the properties of solids, liquids, gas- and identify that matter is made up of particles too small to be seen.  *Differentiate between changes caused by heating or cooling that can be reversed/not reversed.  *Describe and compare the physical properties of matter including color, texture, shape, length, mass, temperature, volume, state, hardness, flexibility.
Catapults	3	3.2.PS2 3.PS3	By using pvc pipes and elastic bands, students will create a catapult and play a life size angry bird	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.  *Recognize that energy is present when objects move; describe the effects of energy transfer from one object to another.

Energy stick ball	3		An activity/game with circuits	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.  *Recognize that energy is present when objects move; describe the effects of energy transfer from one object to another.
Rockets	3	3.PS2 3.PS3	Using household items, students will design a working rocket	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.  *Recognize that energy is present when objects move; describe the effects of energy transfer from one object to another.
Jitterbugs	3	3.PS3	Using household items - design a jitterbug	*Apply scientific ideas to design, test and refine a device that converts electrical energy using an open/closed simple circuit.
Gravitational ride	3	3.PS2 3.PS3	Experience Potential/kinetic gravitational energy and the transfer of energy by riding a zipline	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.  *Recognize that energy is present when objects move; describe the effects of energy transfer from one object to another.
Animal Ziplining	3	3.PS2	Using toys and cables, students will create a movable zipline.	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Car races	3	3.P23	Using various sizes if cars and inclines with multiple styles of elements creating friction, students analyze the data and determine what variables create the fastest/slowest speed	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.  *Recognize that energy is present when objects move; describe the effects of energy transfer from

				one object to another.
Nitro	3	3.PS2 3.PS3	Participating in a team building activity using our low ropes course, students will experience the push/pull motion	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Whale watch	3	3.PS2	Using a low ropes course student will not only experience life lessons but also the cause and effect between two forces	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Meat Grinder	3	3.PS2	Using a low ropes course student will not only experience life lessons but also the cause and effect between two forces	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Kentucky Swing	3	3.PS2	Using a low ropes course student will not only experience life lessons but also the cause and effect between two forces	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Newton's Cradle	3	3.PS3	Using a low ropes course student will not only experience life lessons but also the cause and effect between two forces	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Force Boomers	3	3.PS3	Using a low ropes course student will not only experience life lessons but also the cause and effect between two forces	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.
Crashes & Collisions	3	3.PS3	Using junk drawer STEM- students will design, build, compare, refine to prevent collisions/crashes	*Explain cause and effect of magnetism  *Solve a problem by applying the use of interactions between two forces, ex. Magnets.

Monarch Maps (seasonal)		3.ETS1	Study of the flight of the monarch and developing safer alternatives.	*Design a solution to a real-world problem that includes specified criteria for constraints
Landscaping models		3.ETS1	Students will create a plan on how to work together to create a landscape to prevent erosion	*Design a solution to a real-world problem that includes specified criteria for constraints  *Identify and demonstrate how technology can be used for different purposes
Humpty Dumpty II	3	3.ETS1	A revised version of an egg drop	*Design a solution to a real-world problem that includes specified criteria for constraints  *Identify and demonstrate how technology can be used for different purposes
Jenga Tower	3	3.ETS1 3.ETS2	Using massive wood blocks, students play the game Jenga	*Design a solution to a real-world problem that includes specified criteria for constraints  *Identify and demonstrate how technology can be used for different purposes
The Birds	3	3.ETS1 3.ETS2	Using binoculars, students play bingo and discuss/create other options to binoculars	*Design a solution to a real-world problem that includes specified criteria for constraints  *Identify and demonstrate how technology can be used for different purposes
Rockets	3	3.ETS1 3.ETS2	Using paper/pvc pipes, students will create a functionable rocket that will be launched with an air compressor.	*Design a solution to a real-world problem that includes specified criteria for constraints  *Identify and demonstrate how technology can be used for different purposes
Global Trash monsters/Human footprints	3	3.ETS2	Using clean trash students will design a replica of a tool to solve a world problem	*Design a solution to a real-world problem that includes specified criteria for constraints  *Identify and demonstrate how technology can be used for different purposes