













**Alignment Document  
Next Generation Science Skills (NGSS)  
For Kindergarten  
(K & K-2)**

## Our program aligns with the NGSS Science and Engineering Practices





-  1. Asking Questions and Defining Problems
-  2. Developing and Using Models
-  3. Planning and Carrying out Investigations
-  4. Analyzing and Interpreting Data
-  5. Using Mathematical and Computational Thinking
-  6. Constructing Explanations and Designing Solutions
-  7. Engaging in Argument from Evidence
-  8. Obtaining, Evaluating and Communicating Information

## We have recommended lessons which support the following Disciplinary Core Ideas See the list attached




### Physical Sciences

-  • Matter and Its Interactions
-  • Motion and Stability: Forces and Interactions
-  • Energy
-  • Waves and Their Applications

### Life Sciences

-  • From Molecules to Organisms: Structures and Processes
-  • Ecosystems: Interactions, Energy and Dynamics
-  • Heredity: Inheritance and Variation of Traits
-  • Biological Evolution: Unity and Diversity








### Earth and Space Sciences

-  • Earth's Place in the Universe
-  • Earth's Systems
-  • Earth and Human Activity

### Engineering, Technology and Applications of Science

-  • Engineering Design
-  • Links among Engineering, Technology, Science and Society

**We have recommended lessons which support the following Cross Cutting Concepts** See the list attached

-  1. Patterns
-  2. Cause and Effect
-  3. Scale, Proportion and Quantity
-  4. Systems and System Models
-  5. Energy and Matter
-  6. Structure and Function
-  7. Stability and Change

## Lesson recommendations

### K-PS2 Motion and Stability: Forces and Interactions

K-PS2-1	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	<a href="#">A Frantic Fall</a> <a href="#">Power of the Air</a> <a href="#">Friction on the Slopes</a> <a href="#">Cupcake Tree</a>
K-PS2-2	Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	<a href="#">Optical Illusions</a> <a href="#">Mystical Magnets</a> <a href="#">Hoseli's Journey</a> <a href="#">Lift it Up</a> <a href="#">Cupcake Tree</a>

### K-LS1 From Molecules to Organisms: Structures and Processes

K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need to survive.	<a href="#">Flowery Business</a> <a href="#">From Seed to Plant</a> <a href="#">Busy Bees</a> <a href="#">Beehive</a> <a href="#">Egg-straordinary Nest Building</a> <a href="#">What Makes a Living Thing?</a> <a href="#">Hiding in Plain Sight</a> <a href="#">Fruity Surprise</a> <a href="#">Habitat Hunting</a> <a href="#">Caring for a Pet Dog</a>
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### K-ESS2 Earth's Systems

K-ESS2-1	Use and share observations of local weather conditions to describe patterns over time.	<a href="#">Pressure In The Puddle</a> <a href="#">Whirling With The Vortex</a> <a href="#">Summer Sandcastles</a> <a href="#">Cloudy Skies</a> <a href="#">Force of the Wind</a>
K-ESS2-2	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	<a href="#">Beehive</a> <a href="#">Egg-straordinary Nest Building</a> <a href="#">Habitat Hunting</a> <a href="#">Hiding in Plain Sight</a>

## Lesson recommendations

### K-ESS3 Earth and Human Activity

K-ESS3-1	Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.	<a href="#">Flowery Business</a> <a href="#">Egg-straordinary Nest Building</a> <a href="#">Habitat Hunting</a> <a href="#">From Seed to Plant</a> <a href="#">What Makes a Living Thing?</a> <a href="#">Beehive</a> <a href="#">Busy Bees</a>
K-ESS3-2	Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	<a href="#">A Freezing Surprise</a> <a href="#">Force of the Wind</a> <a href="#">The Great Inventors of the Secret Forest</a> <a href="#">Whirling With The Vortex</a>

### K-2-ETS1 Engineering Design

K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<a href="#">A Freezing Surprise</a> <a href="#">Lift It Up!</a> <a href="#">Carousel</a> <a href="#">Safe Landing</a> <a href="#">The Great Inventors of the Secret Forest</a> <a href="#">Pi Hiding</a>
K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<a href="#">Planning An Escape</a> <a href="#">The Great Inventors of the Secret Forest</a> <a href="#">Floating Problems</a> <a href="#">Balancing Problems</a> <a href="#">Frantic Fall</a> <a href="#">Kindergarten of Shape Creatures</a> <a href="#">Cupcake Tree</a>
K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<a href="#">Floating Problems</a> <a href="#">Glue</a> <a href="#">Lift It Up!</a> <a href="#">Cave Conundrum</a> <a href="#">Safe Landing</a> <a href="#">Frantic Fall</a>

## Lesson recommendations

### K. Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment

K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need to survive.	<a href="#">Flowery Business</a> <a href="#">What Makes a Living Thing?</a> <a href="#">Puppy Playtime</a> <a href="#">From Seed to Plant</a> <a href="#">Busy Bees</a> <a href="#">Caring for a Pet Dog</a> <a href="#">Beehive</a>
K-ESS2-2.	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	<a href="#">What Makes a Living Thing?</a> <a href="#">Egg-straordinary Nest Building</a> <a href="#">The Great Inventors of the Secret</a> <a href="#">Forest</a> <a href="#">Habitat Hunting</a>
K-ESS3-1.	Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.	<a href="#">Flowery Business</a> <a href="#">Habitat Hunting</a> <a href="#">What Makes a Living Thing?</a> <a href="#">From Seed to Plant</a> <a href="#">Hiding in Plain Sight</a> <a href="#">Busy Bees</a> <a href="#">Beehive</a> <a href="#">Egg-straordinary Nest Building</a>

### K. Weather and Climate & K-PS3-1 Energy

K-PS3-1	Make observations to determine the effect of sunlight on Earth's surface.	<a href="#">Summer Sandcastles</a> <a href="#">Spooky Shadows</a>
K-PS3-2	Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	<a href="#">The Great Inventors of the Secret</a> <a href="#">Forest</a>