

FOSS and SEEd Standards Alignment Kindergarten

Strand K.1: WEATHER PATTERNS

Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather to identify patterns over time. Weather scientists forecast severe weather so that communities can prepare for and respond to these events. Sunlight warms Earth's surface.

STANDARD	FOSS
K.1.1 Obtain, evaluate, and communicate information about local, observable weather conditions to describe <u>patterns over time</u> . Emphasize the students' collection and sharing of data. Examples of data could include sunny, cloudy, windy, rainy, cold, or warm. (ESS2.D)	<i>Trees and Weather</i> Investigation 3: Observing Weather Investigation 4: Trees through the Seasons
K.1.2 Obtain, evaluate, and communicate information on the effect of forecasted weather <u>patterns</u> on human behavior. Examples could include how humans respond to local forecasts of typical and severe weather such as extreme heat, high winds, flash floods, thunderstorms, or snowstorms. (ESS3.B)	<i>Trees and Weather</i> Investigation 3: Observing Weather
K.1.3 Carry out an investigation using the five senses, to determine the <u>effect</u> of sunlight on different surfaces and <u>materials</u> . Examples could include measuring temperature, through touch or other methods, on natural and man-made materials in various locations throughout the day. (PS3.B)	<i>Trees and Weather</i> Investigation 3: Observing Weather <i>Materials and Motion</i> Investigation 3: Getting to Know Fabric
K.1.4 Design a solution that will reduce the warming <u>effect</u> of sunlight on an area. <u>Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare and test designs.</u> (PS3.B, ETS1.A, ETS1.B, ETS1.C)	<i>Materials and Motion</i> Investigation 3: Getting to Know Fabric

Strand K.2: LIVING THINGS AND THEIR SURROUNDINGS

Living things (plants and animals, including humans) depend on their surroundings to get what they need, including food, water, shelter, and a favorable temperature. The characteristics of surroundings influence where living things are naturally found. Plants and animals affect and respond to their surroundings.

STANDARDS	FOSS
<p>K.2.1 Obtain, evaluate, and communicate information to describe <u>patterns</u> of what living things (plants and animals, including humans) need to survive. Emphasize the similarities and differences between the survival needs of all living things. Examples could include that plants depend on air, water, minerals, and light to survive, or animals depend on plants or other animals to survive. (LS1.C)</p>	<p><i>Animals Two by Two</i> Investigations 1: Goldfish and Guppies Investigations 2: Water and Land Snails Investigations 3: Big and Little Worms Investigations 4: Pill Bugs and Sow Bugs</p> <p><i>Trees and Weather</i> Investigation 1: Observing Trees Investigation 2: Observing Leaves Investigation 4: Trees through the Seasons</p>
<p>K.2.2 Obtain, evaluate, and communicate information about <u>patterns</u> in the relationships between the needs of different living things (plants and animals, including humans) and the places they live. Emphasize that living things need water, air, and resources and that they live in places that have the things they need. Examples could include investigating plants grown in various locations and comparing the results or comparing animals with the places they live. (LS2.B, ESS3.A)</p>	<p><i>Animals Two by Two</i> Investigations 1: Goldfish and Guppies Investigations 2: Water and Land Snails Investigations 3: Big and Little Worms Investigations 4: Pill Bugs and Sow Bugs</p> <p><i>Trees and Weather</i> Investigation 1: Observing Trees Investigation 4: Trees through the Seasons</p>
<p>K.2.3 Obtain, evaluate, and communicate information about how living things (plants and animals, including humans) <u>affect</u> their surroundings to survive. Examples could include squirrels digging in the ground to hide their food, plant roots breaking concrete, or humans building shelters. (ESS2.E)</p>	<p><i>Animals Two by Two</i> Investigations 1: Goldfish and Guppies Investigations 2: Water and Land Snails Investigations 3: Big and Little Worms Investigations 4: Pill Bugs and Sow Bugs</p> <p><i>Trees and Weather</i> Investigation 1: Observing Trees Investigation 2: Observing Leaves</p>
<p>K.2.4 Design and communicate a solution to address the <u>effects</u> that living things (plants and animals, including humans) experience while trying to survive in their surroundings. <u>Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare designs.</u> Emphasize students working from a plant, animal, or human perspective. Examples could include a plant growing to get more sunlight, a beaver building a dam, or humans caring</p>	<p><i>Materials and Motion</i> Investigation 1: Getting to Know Wood Investigation 2: Getting to Know Paper Investigation 3: Getting to Know Fabric</p>

for the Earth by reusing and recycling natural resources.
(ESS3.C, ETS1.A, ETS1.B, ETS1.C)

Strand K.3: FORCES, MOTION, AND INTERACTIONS

The motion of objects can be observed and described. Pushing or pulling on an object can change the speed or direction of an object's motion and can start or stop it. Pushes and pulls can have different strengths and different directions. A bigger push or pull makes things go faster and when objects touch or collide, they push on one another and can change motion.

STANDARDS	FOSS
K.3.1 Plan and conduct an investigation to compare the <u>effects of different strengths or different directions of forces on the motion of an object.</u> Emphasize forces as a push and pull on an object. The idea of strength should be kept separate from the idea of direction. Non-contact forces, such as magnets and static electricity, will be taught in Grades 3 through 5. (PS2.A, PS2.B, PS2.C, PS3.C)	<i>Materials and Motion</i> Investigation 4: Getting Things to Move
K.3.2 Analyze data to determine how a design solution <u>causes</u> a change in the speed or direction of an object with a push or a pull. <u>Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare and test designs.</u> Examples of problems requiring a solution could include having a marble or other object move a certain distance, follow a particular path, or knock down other objects. (PS2.A, PS2.B, PS2.C, PS3.C, ETS1.A, ETS1.B, ETS1.C)	<i>Materials and Motion</i> Investigation 4: Getting Things to Move