



|| Kindergarten Science Overview

The performance standards in kindergarten help students formulate answers to questions such as: What happens if you push or pull an object harder? What happens when the sun shines on different parts of the Earth? What evidence helps sort things into living vs. non-living? Where do plants and animals live and why do they live there? What is the weather like today and how is it different from yesterday? How do living things change their environments? What can I do to help the Earth?

PHYSICAL SCIENCE: 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 make things go faster and when objects touch or collide, they push on one another and can change motion. Students will investigate the effects of different strengths and different directions of pushes and pulls on the motion of an object and analyze their data to determine if a design solution will change the speed or direction of an object.

When the sun shines, we feel warm, but different Earth surfaces feel different when the sun shines on them. Some places feel warmer or cooler than others. Some places heat faster or slower than others. Students will be guided through planning and completing an investigation to collect data comparing the warmth of materials placed in the sun and the same materials placed in the shade as well as comparing different materials in the sun and different materials in the shade. Students will use their new knowledge to design and build a structure to reduce the warming effect of sunlight on an area.

LIFE SCIENCE: Some things are alive and some things are not. Students will observe multiple examples of both living and non-living things in multiple ways and use these observations to classify items as living or non-living. Living things (plants and animals) 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 found naturally. Plants and animals affect and respond to their surroundings. Students will use visual tools to describe the relationships between plants and animals and what they need to survive.

EARTH SCIENCE: Weather is the combination of sunlight, wind, snow, 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. Students will observe local weather details. With guidance, students will organize information and describe patterns and differences over a day and between



seasons. Students will ask questions and collect information about local severe weather, weather forecasting, and how people prepare for, and respond to, severe weather.

Living things have specific needs that must be met by their environment and many organisms change their environment to meet their needs. Students will use models to describe the relationships between the needs of living things and their environments. Students will use evidence to make and present a claim describing how living things change their environments to meet their needs. Students will use observations to describe how people change their environments in both positive and negative ways and communicate information about ways that people can reduce their negative impacts on the environment.

For Questions Contact

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