



|| 2nd Grade Science Overview

The performance standards in second grade help students formulate answers to questions such as: How are materials similar and different from one another, and how do the properties of materials relate to their use? How can I use one set of parts to make a new thing? When does heating or cooling a thing change it forever and when can you get what you started with back? What do plants need to grow? How many types of living things live in a place? How do animals spread seeds or pollinate plants? How does land change and what are some things that cause land to change? How can we prevent wind and water from changing land? What are the different kinds of land and bodies of water? Where is water found on Earth as a solid, liquid, or gas?

PHYSICAL SCIENCE: All things are made of matter which exists with different forms and properties. Matter can be described and classified by its observable properties. Materials with certain properties are well-suited for specific uses. Students will plan and conduct experiments and analyze their data to classify different materials by their properties and determine which material is best for a specific purpose. Students will make observations and construct an explanation with evidence of how an object made of a certain set of pieces can be taken apart and made into something new.

Heating or cooling matter may or may not reversibly change the properties of different types of matter. Students will use evidence to make and explain claims describing when a temperature change causes a permanent change in matter and when a temperature change causes a reversible change in matter.

LIFE SCIENCE: Living things need water, air, and resources from the land to survive. Organisms live in habitats that provide these things. Students will plan and conduct an investigation to discover if plants need sunlight and water to grow. The physical characteristics of plants and animals reflect the habitat in which they live. Students will make observations of different habitats and compare the diversity of life in these habitats. Animal's behaviors that help them survive, grow, and meet their needs provide other functions in an ecosystem. Students will create a simple model that shows the relationships between the features of an animal and how plants depend on animals for seed dispersal and pollination.

EARTH SCIENCE: Earth has an ancient history of slow and gradual surface changes; however, we also see quick but powerful geologic events like volcanic eruptions, flooding, and earthquakes. Students will use information from several sources to construct an evidence-based account that Earth events can happen slowly or quickly. Water and wind play a significant role in changing Earth's surface. The effects of wind and water can cause both slow and quick changes to the surface of the Earth. Scientists and engineers design solutions to slow or prevent wind or water from



changing the land. Students will compare and evaluate design solutions to slow or prevent wind or water from changing the land by describing the problem and how the given solutions solve the problem.

The Earth has many types of features that can be seen on a map such as parks, hills, mountains, rivers, lakes, and oceans. Students will develop a model showing the shapes and types of land and water in an area and use the model to describe patterns. Water on the Earth can take the form of a solid a liquid or a gas. Students will use books and other media to identify where patterns of where water is found and what form that water is in.

For Questions Contact

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