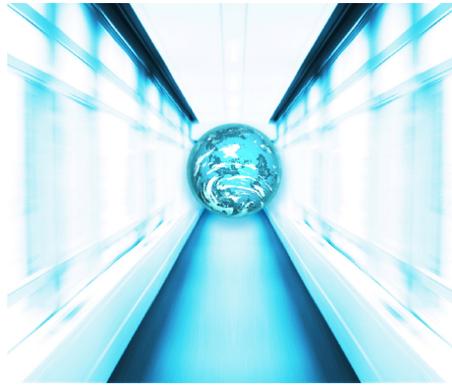


▶ Grade 5 Science

The goal of fifth grade science instruction is for all students to develop scientific proficiency. Throughout all units students will ask questions, make predictions, design and conduct experiments, and gather data to analyze and apply the results. The end result is the ability to think and reason through scientific inquiry and use the scientific process. The following outline provides an overview of what students should know and be able to do by the end of fifth grade.



Physical Science



Force and Motion

- Measure and calculate speed.
- Investigate and identify evidence of an object's inertia and explain their observation in terms of the object's tendency to resist a change in motion.
- Investigate variables that change an object's speed, direction, or both.
- Identify and describe forces that cause change in motion.



Physical Science

Energy

Heat

- Identify where heat energy is transferred and show the direction that it flows.

Electricity and Magnetism

- Investigate charged objects (static electricity) and describe observations in terms of behavior of charges and equilibrium.
- Identify objects that demonstrate and utilize a magnetic force field acting over a distance.
- Distinguish between objects affected by magnetic force and by other forces.
- Investigate devices that demonstrate electricity and magnetism.
- Identify the relationship between devices and the magnetic or electric effects they produce.

Light & Sound

- Design demonstrations that represent the characteristics of light energy transfer.
- Generate a sound and identify the path of vibration from the source to the ear.

Life Science



Interdependence within Ecosystems

- Develop a model that shows how the flow of energy from the sun is transferred to organisms as food in order to sustain life.
- Develop a model for a food web of a local aquatic and local terrestrial environment.
- Experiment with a closed system, describe how an environmental change affects the system.
- Identify the recycling role of decomposers in a variety of situations.
- Identify examples of good and poor management of natural resources.
- Explain how overpopulation of living things can de-grade an environment due to increased use of resources.

Earth Science

Universe, Earth, Environment

Solar System

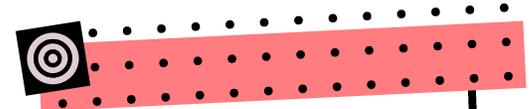
- Create a diagram or model of the orbit of the earth around the sun and the moon around the earth.
- Explain why the sun and moon appear to be the same size when seen from the earth.
- Relate this phenomenon to lunar and solar eclipses.
- Predict the effect of gravitational forces between pairs of objects.

Water Cycle

- Diagram, label, and explain the process of the water cycle.

Earth's Changing Surface

- Explain the process of how rocks are formed.
- Create a model of the earth's structure to explain the nature of the layers.
- Identify examples of geologic changes on the earth's surface, where possible, in the local environment.
- Plot locations of volcanoes and earthquakes and explain the relationship between location and plate movement.
- Explain the processes that occur when rocks are changed from one form to another.
- Determine the relative age of fossils within sedimentary rocks from their location in the strata.



PARENT RESOURCE



Science Grade 5

Hartford School District
73 Highland Ave
White River Junction, VT 05001

Phone: 802-295-8600