

SAU 15
Auburn, Candia, Hooksett
Grade 5
POWER STANDARDS
Science

EARTH

Weather

- ❖ **Students can describe the current weather and read and understand information from weather tools.**

- **S:ESS1:5:1.4** Describe weather in terms of temperature, wind speed and direction, precipitation, and cloud cover.
- **S:ESS4:5:2.3** Read and interpret data from barometers, sling psychrometers, and anemometers.

Earth's Rotation Pattern

- ❖ **Students can demonstrate the patterns of the Earth.**

- **S:ESS2:5:1.1** Recognize and describe how the regular and predictable motions of the Earth and Moon explain certain Earth phenomena, such as day and night, the seasons, the year, shadows and the tides.

LIFE - ECOLOGY

Biotic and Abiotic

- ❖ **Students can describe the biotic and abiotic factors that make up an ecosystem.**

- **S:LS2:5:1.1** Identify and describe the factors that affect the number and types of organisms an ecosystem can support, including the resources that are available, the range of temperatures, the composition of the soil, disease, the threat of predators, and competition from other organisms.

Food Webs/Producers and Consumers

- ❖ **Students can show how energy moves through food webs in an ecosystem. They will also know the difference between producers and consumers.**

- **S:LS2:5:2.1** Describe how energy is transferred through food webs in an ecosystem, and explain the roles and relationships between producers.
- **S:LS2:5:2.2** Recognize that one of the most general distinctions among organisms is between plants, which use sunlight to make their own food, and animals, which consume energy-rich foods.

Photosynthesis Process

- ❖ **Students can explain photosynthesis.**

- **S:LS2:5:2.3** Describe the process of photosynthesis and explain that plants can use the food they make immediately or store it for later use.

Human Interactions with Environment

- ❖ **Students can give examples on the different ways that humans affect the environment.**

- **S:LS3:5:1.1** Provide examples of how all organisms, including humans, impact their environment and explain how some changes can be detrimental to other organisms.

Use of Tools

- ❖ **Students can demonstrate the use of science tools.**

- **S:LS5:5:2.1** Demonstrate the appropriate use of tools, such as thermometers, probes, microscopes and computers to gather, analyze and interpret scientific and medical data.

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PHYSICAL

Sound

❖ **Students can demonstrate the pitch of a sound by using vibrations.**

- **S:PS2:5:3.1** Explain that the pitch of a sound depends on the frequency of the vibration producing it.

Energy

❖ **Students can demonstrate that heat is produced when energy is used.**

- **S:PS2:5:3.3** Recognize that energy, in the form of heat, is usually a byproduct when one form of energy is converted to another, such as when machines convert stored energy to motion.

Force

❖ **Students can demonstrate the effects of force on an object.**

- **S:PS3:5:1.2** Explain that when a force is applied to an object, the object speeds up, slows down, or goes in a different direction.
- **S:PS3:5:2.1** Explain how balanced and unbalanced forces are related to an object's motion.

HEALTH

Human Body

❖ **Students can explain ways in which the human body defends itself against disease.**

They will also know that many things influence human life.

- **S:LS4:5:2.1** Explain that the human body has ways to defend itself against disease causing organisms and describe how defenders, including tears, saliva, the skin, some blood cells and stomach secretions support the defense process.
- **S:LS4:5:3.1** Recognize that the length and quality of human life are influenced by many factors including sanitation, diet, medical care, gender, genes, environmental conditions, and personal health behaviors.