

Rationale

In a world filled with the products of scientific inquiry, scientific literacy is a necessity for everyone in order to use scientific information to make wise choices. Today, the job market demands advanced skills, requiring people to be able to learn, reason, think creatively, work collaboratively, make decisions, and solve problems. An understanding of science and engineering practices are essential to building these skills.

Course Description

The Fourth Grade students will be studying about Earth's systems (processes that shape the Earth), energy, structure, function, information processing, and waves and information. In addition, the students will utilize the science and engineering practices by asking questions and defining problems, planning and carrying out investigations, and constructing explanations and designing solutions. The teacher will use a hands-on, minds-on approach to actively engage the students in constructing and revising their understanding of these concepts.

BOE 6/8/17

Course Objectives

1. The student will understand that rocks change over time because of Earth forces.
2. The student will understand that weathering, erosion, and location of mountain ranges affect the landscape of the Earth.
3. The student will understand that while humans cannot prevent natural disaster they can take steps to reduce the impact.
4. The student will understand the benefits and harmful effects of renewable and nonrenewable resources.
5. The student will understand that energy can be transferred.
6. The student will understand the conservation of energy.
7. The student will understand that plants and animals have structures and behaviors that serve various functions in growth, survival, and reproduction.
8. The student will understand that light enables organisms to see.
9. The student will understand that waves are regular patterns of motion.
10. The student will understand that patterns can be used to transfer information.