

**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 Second Grade student will be studying about Earth's systems (processes that shape the Earth), interdependent relationships in ecosystems, and structures and properties of matter. In addition, the students will utilize the science and engineering practices by asking questions and defining problems, developing and using models, and analyzing and interpreting data. 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 patterns of how and why the earth has changed and that it is constantly changing.
2. The student will understand important properties of water and that water shapes the Earth's surface.
3. The student will understand that humans can design structures to solve problems related to Earth changing.
4. The student will understand that there are patterns of how things work together in an ecosystem.
5. The student will understand that plants depend on nonliving and living things for growth and reproduction.
6. The student will understand that there is great diversity among living things in different habitats.
7. The student will understand that matter can be classified by patterns in its properties.
8. The student will understand that objects can be made up of smaller pieces of matter that could be reused to make a new object.
9. The student will understand that there are reversible and irreversible changes in matter.