

**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 First Grade student will be studying about space systems (patterns and cycles), structure, function, and information processing, as well as waves, light, and sound. 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.

**Course Objectives**

1. The student will understand that they can observe, describe, and predict patterns in space systems.
2. The student will understand that animals and plants have structures and behaviors that help them survive and grow.
3. The student will observe that there can be similarities and differences between offspring and their parents.
4. The student will understand that sound can travel through vibration.
5. The student will understand how light travels.

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