

Eugene School District 4J - 1st Grade Science Standards

PHILOSOPHY OF INSTRUCTION:

The Eugene School District recognizes the importance of science as an essential part of each student's educational experience. 4j science engages K-12 students' curiosity to think critically about relevant and authentic science and engineering practices in the evolving global community.

If our students are to live successfully in the future, they must become scientifically literate. Scientific literacy enables people to use scientific principles and processes in making personal and public decisions and to participate in discussions of scientific issues that affect society. A sound grounding in science strengthens many of the skills that people use every day such as solving problems creatively, thinking critically, working cooperatively in teams, using technology effectively, and valuing lifelong learning. To accomplish scientific literacy in every course offered, instruction will reflect the following:

- Develop inquiry-based, scientific reasoning, and critical thinking skills.
- Extend problem-solving skills using scientific methods.
- Include lab-based experiences.
- Strengthen positive attitudes about science.
- Follow a logical progression between grade levels.
- Provide relevant connections to personal and societal issues and events.
- Design and evaluate engineering solutions to real-world problems

SCOPE AND SEQUENCE

TRIMESTER 1 September - December	TRIMESTER 2 January - March	TRIMESTER 3 April - June
Earth Science <ul style="list-style-type: none">● Exploring Air● Observing the Sky● Wind Explorations● Looking for Change	Physical Science <ul style="list-style-type: none">● Sound and Vibrations● Changing Sound● Light and Shadows● Light Mirrors	Life Science <ul style="list-style-type: none">● Grass and Grain Seeds● Stems● Terrariums● Growth and Change

KEY CONCEPTS

Earth Science (Air and Weather) - In this module, young students turn their focus upward. The anchor phenomena are the air that surrounds us and the natural objects that we see in the sky. Students explore the phenomenon that objects in the sky change position in predictable ways. They explore the natural world by using simple instruments and calendars to observe and monitor change. They use new tools and methods to build on their understanding of the weather and to find out about properties of air by exploring how objects interact with air. The driving question for the module is what is all around us and what do we observe in the sky above us?

Physical Science (Sound and Light) - This module provides experiences that help students develop an understanding of how to observe and manipulate the phenomena of sound and light. They explore these dimensions of the natural world using simple tools and musical instruments. The driving question for the module is how do sound and light interact with objects?

Life Science (Plants and Animals) - This module engages students with the anchor phenomenon that young plants and animals (offspring) have structures and behaviors that help them grow and survive. The driving question for the module is how do young plants and animals survive in their habitat? Students observe firsthand the structures of plants and discover ways to propagate new plants from mature plants (from seeds, bulbs, roots, and stem cuttings). They observe and describe changes that occur as young plants grow, and compare classroom plants to those in the schoolyard. They design terrariums (habitat systems) and provide for the needs of both plants and animals living together in the classroom.

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