

Eugene School District 4J - 3rd 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">• Water Observations• Hot Water, Cold Water• Weather and Water• Seasons and Climate• Waterworks	Physical Science <ul style="list-style-type: none">• Forces• Patterns of Motion• Engineering• Mixtures	Life Science <ul style="list-style-type: none">• Origins of Seeds• Growing Further• Meet the Crayfish• Human Body

KEY CONCEPTS

Earth Science (Water and Climate) - Students are able to organize and use data to describe typical weather conditions expected during a particular season. Students are able to make a claim about the merit of a design solution that reduces the impacts of weather related hazards.

Physical Science (Motion and Matter) - Students are able to determine the effects of balanced and unbalanced forces on the motion of an object and the cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. They are then able to apply their understanding of magnetic interactions to define a simple design problem that can be solved with magnets.

Life Science (Structures of Life) - Students are expected to develop an understanding of the similarities and differences of organisms' life cycles. An understanding that organisms have different inherited traits, and that the environment can also affect the traits that an organism develops. Students are able to construct an explanation using evidence for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. Students are expected to develop an understanding of types of organisms that lived long ago and also about the nature of their environments. Third graders are expected to develop an understanding of the idea that when the environment changes some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die.

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