Eugene School District 4J - Kindergarten 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 ● Observing Trees ● Observing Leaves ● Observing Weather ● Trees through the Seasons	**Physical Science** ● Getting to Know Wood ● Getting to Know Paper ● Getting to Know Fabric ● Getting Things to Move	**Life Science** ● Goldfish and Guppies ● Water and Land Snails ● Big and Little Worms ● Pill Bugs and Sow Bugs

KEY CONCEPTS

Earth Science (Trees and Weather) - The **Trees and Weather Module** provides students with solid experiences to help them develop an understanding of what plants (and animals) need to survive and the relationship between their needs and where they live. By monitoring local weather, students experience the patterns and variations in weather and come to understand the importance of weather forecasts to prepare for severe weather.

Physical Science (Materials and Motion) - Students investigate the anchor phenomenon that objects are made of materials—wood, paper, and fabric—and how material properties determine their use. Students use those materials to engineer structures, applying physical science ideas of energy transfer. The guiding questions for the module are what is made of wood, paper, and fabric, and how are the properties of those materials useful to us? Students come to understand that humans use natural resources for everything they do and that people impact the world around them.

Life Science (Animals 2 by 2) - The **Animals Two by Two Module** provides students with close and personal interaction with some common land and water animals. The animals and their survival needs are the engaging anchor phenomena. Students study the phenomena by observing and describing the structures of fish, birds, snails, earthworms, and isopods. The guiding questions for the module are how are animal structures similar and different? and what do animals need to live and grow?

Eugene School District 4J - Kindergarten 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
Physical Science ● Getting to Know Wood ● Getting to Know Paper ● Getting to Know Fabric ● Getting Things to Move	**Earth Science** ● Observing Trees ● Observing Leaves ● Observing Weather ● Trees through the Seasons	**Life Science** ● Goldfish and Guppies ● Water and Land Snails ● Big and Little Worms ● Pill Bugs and Sow Bugs

KEY CONCEPTS

Earth Science (Trees and Weather) - The **Trees and Weather Module** provides students with solid experiences to help them develop an understanding of what plants (and animals) need to survive and the relationship between their needs and where they live. By monitoring local weather, students experience the patterns and variations in weather and come to understand the importance of weather forecasts to prepare for severe weather.

Physical Science (Materials and Motion) - Students investigate the anchor phenomenon that objects are made of materials—wood, paper, and fabric—and how material properties determine their use. Students use those materials to engineer structures, applying physical science ideas of energy transfer. The guiding questions for the module are what is made of wood, paper, and fabric, and how are the properties of those materials useful to us? Students come to understand that humans use natural resources for everything they do and that people impact the world around them.

Life Science (Animals 2 by 2) - The **Animals Two by Two Module** provides students with close and personal interaction with some common land and water animals. The animals and their survival needs are the engaging anchor phenomena. Students study the phenomena by observing and describing the structures of fish, birds, snails, earthworms, and isopods. The guiding questions for the module are how are animal structures similar and different? and what do animals need to live and grow?