Newburyport Public Schools

The Port Where Tradition and Innovation Converge

Newburyport Science Curriculum Framework Guide -Grade K

Focus Areas

In Grade K the focus on student learning in Science is on the following areas:

1. Earth's Systems
2. Earth and Human Activity
3. Matter and its Interactions
4. Motion and Stability
5. From Molecules to Organisms: Structures and Processes

Guiding Principles for Grade K Science

Earth and Space Science

•Using and sharing quantitative observations of weather to describe patterns.
•Constructing an argument supported by evidence for how plants and animals can change the environment.
•Obtaining and using information about weather forecasting to prepare for, and respond to, different types of local weather.
•Communicating solutions to reduce the amount of natural resources an individual uses.

Life Science

•Observing and communicating that animals and plants have needs to survive.
•Recognizing that all plants and animals grow and change over time.

Physical Science

•Investigating and communicating the idea that different kinds of materials can be a solid or liquid depending on temperature.
•Comparing the effects of different strengths or directions of pushes and pulls on the motion of an object.
•Making observations to determine that sunlight warms materials on the Earth's surface.
•Using tools and materials to design and build a model of a structure that will reduce the warming effect of sunlight on an area.

Science and Engineering Practices:

The practice standards describe behaviors that scientists engage in as they investigate, build models, and construct theories about the natural world. They are a set of practices that engineers use as they design and build models and systems to solve problems. They are the skills that provide the foundation for scientific and technical reasoning.

1. Ask Questions and Define Problems
2. Develop and Use Models
3. Plan and Carry Out Investigations
4. Analyze and Interpret Data 5. Use Mathematical and Computational Thinking
6. Construct Explanations and Design Solutions
7. Engage in Argument from Evidence
8. Obtain, Evaluate, and Communicate Information