

Science: Grade 4 Curriculum Overview

The 4th grade science curriculum focuses on the Illinois Next Generation Science Standards (NGSS). The utilization of videos, real word applications/experiences and ample opportunity for students to collaborate amongst their peers increases student engagement and academic achievement. Students are involved in engaging in hands-on activities that provide them with opportunities to think like a scientist.

Skills to be developed throughout the course:

- Inquiry skills
- Planning and Carrying out Investigations
- Design Solutions and Construct Explanations
- Identifying patterns
- Analyzing and Interpreting Data
- Locating Cause and Effect
- Use Evidence to support reasoning(s)

In Gower 4th Grade Science instruction:

Energy-

- Students will be able to use evidence to construct an explanation relating the speed of an object to the energy of that object.
- Students will be able to make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
- Students will be able to ask questions and predict outcomes from the changes in energy that occur when objects collide.

Earth Systems-

- Students will be able to identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

Waves-

- Students will be able to develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.
- Students will be able to develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.
- Students will be able to generate and compare multiple solutions that use patterns to transfer information.

Life Structures and Organisms-

- Students will be able to construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
- Students will be able to use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

Units of Study:

- Energy

- Earth Systems
- Waves
- Life Structures and Organisms

The Learning Standards for this course are the Illinois Social Science Standards.

- [NGSS](#)