

New York State Science Learning Standards Solar System Odyssey

4th Grade

- **4-ESS3-1.** Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Disciplinary Core Ideas:

- ESS3.A: Natural Resources

Crosscutting Concepts:

- Cause and Effect
- Systems and System Models
- Scale, Proportion, and Quantity
- Science is a Human Endeavor
- Influence of Science, Engineering, and Technology on the Natural World
- Scientific Knowledge Assumes an Order and Consistency in Natural Systems

5th Grade

- **5-LS1-1.** Support an argument that plants get the materials they need for growth chiefly from air and water.

Disciplinary Core Ideas:

- LS2.1.C: Organization for Matter and Energy Flow in Organisms
- ESS3.C: Human Impacts on Earth Systems

Crosscutting Concepts:

- Cause and Effect
- Energy and Matter
- Systems and System Models
- Scale, Proportion, and Quantity
- Science Addresses Questions About the Natural and Material World
- Influence of Science, Engineering, and Technology on the Natural World
- Scientific Knowledge Assumes an Order and Consistency in Natural Systems



Middle School

- **MS-ESS1-3.** Analyze and interpret data to determine scale properties of objects in the Solar System.
- **MS-ESS3-1.** Construct a scientific explanation based on evidence for how the uneven distribution of earth's mineral, energy, and groundwater resources are the result of past and current geologic processes.
- **MS-ESS3-5.** Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Disciplinary Core Ideas:

- ETS1.B: Developing Possible Solutions
- ESS1.B: Earth and the Solar System
- ESS3.A: Natural Resources
- ESS3.D: Global Climate Change
- ESS3.C: Human Impacts on Earth Systems

Crosscutting Concepts:

- Cause and Effect
- Stability and Change
- Systems and System Models
- Scale, Proportion, and Quantity
- Influence of Science, Engineering, and Technology on the Natural World
- Scientific Knowledge Assumes an Order and Consistency in Natural Systems