



Sixth Grade Curriculum Pacing Guide

Cross-cutting Concepts: Patterns; Cause and Effect; Systems and System Models Natural Resources

3 Week Instructional Segment

Anchoring Phenomenon	Standard	Instructional Segment	Disciplinary Core Ideas	Science and Engineering Practices	Instructional Notes
The use of solar panels	S6E6. a, b, c	Human Energy Needs	<p>From A Framework for K-12 Science Education:</p> <p style="text-align: center;"><i>By the end of grade 8</i></p> <p>ESS3.A: Natural Resources</p> <ul style="list-style-type: none"> • Humans depend on Earth’s land, ocean, atmosphere, and biosphere for many different resources. • Minerals, fresh water, and biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. • These resources are distributed unevenly around the planet as a result of past geological processes. • Renewable energy resources, and the technologies to exploit them, are being rapidly developed. <p>ESS3.D: Global Climate Change</p> <ul style="list-style-type: none"> • Human activities, such as the release of greenhouse gases from burning fossil fuels, are major factors in the current rise in Earth’s mean surface temperature (global warming) • Reducing human vulnerability to whatever climate changes do occur depend on the understanding of climate science, engineering capabilities, and other kinds of knowledge, such as understanding of human behavior and on applying that knowledge wisely in decisions and activities. 	<ul style="list-style-type: none"> • Asking questions and defining problems • Constructing explanations and designing solutions • Engaging in argument from evidence • Obtaining, evaluating and communicating information 	<p>By the end of this unit, students are using the following language in their speaking and writing during EXPLAIN or ELABORATE:</p> <ul style="list-style-type: none"> • renewable and non-renewable resources • global climate change