



Fourth Grade Curriculum Pacing Guide

Crosscutting Concepts: Patterns; Cause and Effect; Systems & System Models
 Introduction to Weather and Phases of the Moon - Collecting Data through the Year

Estimated Time Instructional Segment - 4 week Introduction and then All Year

Anchoring Phenomenon	Standard	Instructional Segments	Disciplinary Core Ideas	Science and Engineering Practices	Instructional Notes
What is the International Space Station? International Space Station	S4E2. b S4E4. a, c	Weather and Moon Phases: Collecting Data through the Year	Frameworks of K-12 Science Education: <i>By the end of grade 5</i> ESS1.B: EARTH AND THE SOLAR SYSTEM <ul style="list-style-type: none"> The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily and seasonal changes in the length and direction of shadows; phases of the moon; and different positions of the sun, moon, and stars at different times of the day, month, and year. The patterns of an object’s motion in various situations can be observed and measured; when past motion exhibits a regular pattern, future motion can be predicted from it. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.) 	<ul style="list-style-type: none"> Asking questions Developing and using models Constructing explanations Analyzing and interpreting data from charts, maps, and weather instruments Obtaining, evaluating, and communicating information 	Backgrounder (includes safety alerts) By the end of this unit, students are using the following language in their speaking and writing during EXPLAIN or ELABORATE. <ul style="list-style-type: none"> weather temperature air pressure precipitation cirrus clouds stratus clouds cumulus clouds nimbus clouds thermometer rain gauge barometer wind vane anemometer phases of the moon full moon

			<p>ESS2.D: WEATHER AND CLIMATE</p> <ul style="list-style-type: none"> Weather is the minute-by-minute to day-by-day variation of the atmosphere's condition on a local scale. Scientists record the patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. Climate describes the ranges of an area's typical weather conditions and the extent to which those conditions vary over years to centuries. 		<ul style="list-style-type: none"> quarter moon gibbous moon crescent moon new moon
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This instructional segment will connect to the Stars, Moon and Planets segment.