

## Processes that Shape the Earth Unit Suggested Timeline- Grade 4

Week #	Core Concepts
1	<p>The earth is made up of three layers, the crust the mantle and the core. The core heats the bottom of the mantle, causing convection. The convection currents in the mantle cause changes in the crust. (SC.D.1.2.4, 1.2.5)</p>
2	<p>Radioactive decay in the core of earth results in energy. Evidence of the heat from inside the earth is seen in volcanic activity, geothermal vents, and geothermal springs. Some changes in the earth's crust are the result of the rapid movement of the crust.</p>
3	<p><b>Precipitation, caused by the water cycle, and wind causes rocks to be broken into smaller pieces in the process called weathering. The rock is transported away through erosion. Together, these two processes are responsible for taking material from higher places and depositing it in lower places.</b> (SC.D.1.2.1)</p>
4	<p>Rocks are constantly being worn down. Soils include small rock fragments and pieces of once living things. The energy powering the water cycle comes from the sun. About 75% of the earth is covered by water.</p>
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6	<p><b>Rocks in the earth's crust vary in their form and structure based on the process that made them. The constant changing of the form and structure of rocks is called the rock cycle. The energy powering the rock cycle comes from the sun and the earth's core.</b> (SC.D.1.2.4,1.2.5)</p>
7	<p>Rocks are constantly being formed Some changes in the earth's crust are the result of slower processes such as the water and rock cycles.</p>
8	<p><b>The earth's history can be read by looking at and interpreting the features of the earth's surface and the layers of rock buried underground.</b> (SC.D.1.2.4, 1.2.5)</p>
9	<p><b>Cumulative Review: Incorporate Matter, Energy, Force and Motion and relate to Processes that Shape the Earth (Ex: what type of energy powers the water cycle, rock cycle? What forces are being applied to "Shape the Earth?" What properties of matter are changing during these processes?</b></p>

## Processes that Shape the Earth Unit Suggested Timeline- Grade 5

Week #	Core Concepts
1	<p><b>Processes that shape the Earth review:</b> Weathering, Erosion, Deposition. Layers of the Earth.</p>
2	<p><b>Processes that shape the Earth review:</b> Convection currents within the Earth's core, plate tech-tonics and history of the Earth. Rocks and minerals.</p>
3	<p><b>The Student knows that using, recycling, and reducing the use of natural resources improve and protect the quality of life. (SC.D.2.2.1)</b> Renewable and nonrenewable resources and conservation</p>
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5	<p><b>Water cycle review:</b> Precipitation, evaporation, condensation The water cycle is influenced by temperature and land formations Atmospheric pressure influences the water cycle and weather.</p>
6	
7	<p><b>Seasons and Climate review:</b> The tilt of the earth causes the change of seasons, length of daylight and the amount of energy available from the sun. The length of day and night changes throughout the year.</p>
8	<p><b>Oceanic influence on weather, seasons and climate locally and globally.</b></p>
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