

RCS High School Science Unit Plans

Subject: Earth Science Unit: Lithosphere # of Days 14

Essential Standards: 2.1 Clarifying Objective(s): 2.1.1, 2.1.2, 2.1.3, 2.1.4

<p>Big Ideas in NOUNS and ADJECTIVES (Vocabulary) Rock Cycle: Igneous, sedimentary, metamorphic, magma, lava, asthenosphere, crust, core, lithosphere, weathering, layers Plate Tectonics: convergent, divergent, transform, volcanism, earthquakes, faults, convection, mantle, trench, ridge, seafloor spreading, magnetometer, sonar, Pangaea, Appalachain mountains, subduction, mantle convection, ridge push, gravity pull Earthquakes/Volcanoes: focus, epicenter, seismograph, P waves, S waves, Ring of Fire, Richter, Moment-Magnitude, Mercalli, strike slip, normal, reverse, tsunamis Weathering/erosion: silt, sand, clay, chemical weathering, physical weathering, climatic effects, topographical effects, soil, landslides, mudslides, avalanche, glaciers</p>	<p>Real World Performance in VERBS (RC): Explain, predict, model (T): infer, compare, contrast, explain, predict, identify, draw (E&V): compare, contrast, infer, describe, locate, predict, analyze, shake (W&E): observe, compare, contrast, predict, analyze, explain</p>
<p>Understanding(s): Rock cycle, plate tectonics, volcanoes, earthquakes Locations of volcanoes, earthquakes , faults Weathering, erosion, mass movements, soil Geohazards</p>	<p>I Can ... Explain the rock cycle. Explain how tectonics relates to the rock cycle. Distinguish between the 3 types of plate boundaries. Explain how convection currents drive plate tectonics (continental drift & seafloor spreading). Explain the geologic feature associated with each type of plate boundary. Compare and contrast magma and lava. Predict the locations of earthquakes, volcanoes, and faults. Explain the relationship between faults and earthquakes. Locate the focus/epicenter of an earthquake. Relate the P and S waves, magnitude, and energy released. Differentiate between chemical and physical weathering. Compare and contrast sand, silt, clay. Explain the components of soil. Explain how mass movements occur. Explain the effects of topography, climate, and rock composition on weathering. Explain the difference between weathering and</p>

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	erosion.
<p>Performance Task Ideas/Activities:</p> <p>See LiveBinder</p>	<p>Websites:</p> <p>See LiveBinder</p>
Literacy Shift Ideas: (Reading/writing)	<p>21st Century Themes</p> <ul style="list-style-type: none"> ○ Global Awareness ○ Financial, Economic, Business & Entrepreneurial Literacy ○ Civic Literacy ○ Health Literacy ○ Environmental Literacy
Assessments	<p>Additional Info:</p> <p>1 day: Rock Cycle</p> <p>11 days: Plate Tectonics and Earthquakes/volcanoes</p> <p>3 days: Weathering and Erosion</p>