



6th Grade UNIT 3 OVERVIEW: The Land Beneath Our Feet

| <p align="center">Unit Outcomes</p> <p>At the end of this unit, your student should be able to:</p> | <p align="center">Key Vocabulary</p> <p align="center">Terms to deepen the student’s understanding</p> |
|--|---|
| <ul style="list-style-type: none"> ✓ Explain how the Earth is composed of layers that are stacked on top of one another because they are made of different materials with different densities. ✓ Describe how forces within the Earth form and move crustal plates and ocean basins. ✓ Identify how crustal plates interact with one another due to forces within the Earth. ✓ Summarize how soil is formed. ✓ Explain how the rock type and environmental factors contribute to the composition of soil. ✓ Explain how humans can affect the quality of soil and how this affects human health. ✓ Describe how humans can monitor and maintain soil quality. | <ul style="list-style-type: none"> ✓ Earthquakes ✓ Crustal Plates (Tectonic Plates/Plate Tectonics) ✓ Ocean basins ✓ Crust ✓ Mantle ✓ Outer & Inner Core ✓ Convection Currents ✓ Soil ✓ Parent Rock ✓ Top Soil ✓ Litter ✓ Sub Soil ✓ Bedrock ✓ Loam ✓ Humus ✓ Decomposer ✓ Convergent Boundary ✓ Divergent Boundary ✓ Transform Boundary ✓ Subduction Zone ✓ Rift Valley ✓ Trench ✓ Lithosphere ✓ Asthenosphere ✓ Crop rotation ✓ Stewardship ✓ Contour plowing ✓ Continental Drift ✓ Pangaea ✓ Seismic Waves ✓ Geology ✓ Volcano ✓ Erosion ✓ Weathering ✓ Compaction ✓ Deposition ✓ Cementation ✓ Rock Cycle ✓ Sedimentary Rock ✓ Igneous Rock (Extrusive and Intrusive) ✓ Metamorphic Rock |
| <p align="center">Key Standards Addressed</p> <p>Connections to Common Core/NC Essential Standards</p> | <p align="center">Where This Unit Fits</p> <p align="center">Connections to prior and future learning</p> |
| <p>6.E.2.1 Summarize the structure of the Earth, including the layers, the mantle and core based on the relative position, composition, and density.</p> <p>6.E.2.2 Explain how crustal plates and ocean basins are formed, move, and interact using earthquakes, heat flow, and volcanoes to reflect forces within the Earth.</p> <p>6.E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops.</p> <p>6.E.2.4 Conclude that good health of humans requires: monitoring of the lithosphere, maintaining soil quality and stewardship.</p> | <p>Coming into this unit, students should have a strong foundation in:</p> <ul style="list-style-type: none"> ✓ Comparing Earth’s land features. ✓ Understanding how the surface of the Earth changes due to slow processes such as erosion and weathering and rapid processes such as landslides volcanic eruptions and earthquakes. ✓ Identifying minerals and classifying rocks. ✓ Understanding how changes in an organism’s environment can be beneficial or harmful. ✓ Describing how humans can adapt their behavior to live in changing habitats. <p>This unit builds to the following future skills and concepts:</p> <ul style="list-style-type: none"> ✓ Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers. ✓ Explain the use of fossils, ice cores, composition of sedimentary rocks, faults and igneous rock formations found in rock layers as evidence of the history of the Earth and its changing life forms. |



6th Grade UNIT 3 OVERVIEW: The Land Beneath Our Feet

| Additional Resources Materials to support understanding and enrichment | “Learning Checks” Questions Parents Can Use to Assess Understanding |
|---|--|
| <ul style="list-style-type: none">✓ CK12 Textbook:<ul style="list-style-type: none">○ Interior Layers○ Earth’s Crust○ Earth’s Mantle○ Earth’s Core○ Plate Tectonics○ Weathering and Formation of Soil○ Human Actions and the Land✓ Discovery Education<ul style="list-style-type: none">○ Structure of Earth○ The Earth’s Structure○ Dance of the Plates○ Plate Tectonics○ Tectonic Forces○ What’s the Dirt on Soil○ Rock Cycle✓ Interactive Rock Cycle✓ Interactive Dynamic Earth✓ Interactive Volcanoes✓ Force of Nature | <ul style="list-style-type: none">✓ How does the Earth stack up? Why are Earth’s layers in this order?✓ How does the inside of Earth affect the outer layer of Earth?✓ What is the relationship between rocks, soil, and the environment?✓ How does soil quality affect humans and how do humans affect soil quality? |