### 6th Grade Earth Science

*M.S. Sci. & Soc.Sci. – 6 wk (benchmark @ 9 wk)*

<table>
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<th>Major Activities (tests, projects, tests, reports, performances)</th>
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<th>Differentiation Intervention (Skills level, SDAIE)</th>
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| **TERM #1** (6 weeks)  | - Investigation and Experimentation 6.7 a, b, d, e, - Heat 6.3 c | Introduction to Earth Science and Lab Safety  
Chapter 1: The Nature of Earth Science  
- Sections 1, 2, 3  
Tools of Earth Science  
Chapter 2: Tools, Measurements & Mapping  
Sections 1, 4  
Heat  
Chapter 3: Systems and Cycles  
Sections 1, 2, 3 (Additional Reference: Chapters 13.1, and 13.2, and 14.2)  
**Tools of Earth Science**  
- Quick Lab – see yourself  
- Topography treasure map  
Maps  
- Quick Lab – Modeling Topography (page 66)  
- Lab – Topographic Tuber (page 70)  
- Compare Topographic Map on Page 67 with pretty picture from Yosemite.  
Heat  
- Quick Lab – Modeling Convection (page 102)  
- Convection Current demo with hot and cold water – 2 Gatorade bottles with an index card  
- Convection Currents Lab – Spin a cap with your body heat | **Introduction**  
- 3xScard – How can you fit through this?  
Introduces Scientific Methods  
- Quick Lab – Using Curiosity to make Predictions (Penny Lab) page 9  
- Current Science in the News – Read and Discuss  
- Critiquing the News page 12  
- Teaching Lab Write Ups  
**Tools of Earth Science**  
- Convection Current demo with hot and cold water – 2 Gatorade bottles with an index card  
- Convection Currents Lab – Spin a cap with your body heat  
**Ch. 1**  
Skepticism  
Scientific literacy  
Scientific methods  
Hypothesis  
Data  
Controlled experiment  
First aid  
**Ch. 3**  
Crust  
Mantle  
Core  
Convection  
Convection current  
Temperature  
Heat  
Thermal energy  
Conduction  
Radiation  
Communicate  
Investigation  
Evidence  
Interpret  
Sequence  
Phenomenon  
Identify | | | | Note: Standards 6.7 c and h are ongoing throughout the year.
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<tr>
<td>TERM #3 6 weeks</td>
<td>Plate Tectonics and Earth Structure - Plate Tectonics 6.1 a-g</td>
<td>Plate Tectonics and Earth Structure Chapter 6; Plate Tectonics - Sections 1, 2, 3, 4 Chapter 7; Earthquakes - Section 3 - Page 238 and 239 Triangulation (Include info from Chapter 7, Earthquakes and Chapter 8, Volcanoes to provide more depth as time allows)</td>
<td>- Continental Collisions (page 189) - Making Magnets (page 195) - Draw tectonic plates onto a world map (see page 198) - Tectonic Ice Cubes (page 200) or Ice Cubes in a Bowl Version - Spaghetti demo (page 204) - Modeling Strike Slip Faults (page 207) Option: use blocks instead of clay. - Sea-Floor Spreading Lab (page 218) Option: create models with colored, cut and threaded papers - Disaster kit (grab bag) - Quick Lab - Locating an Epicenter (page 239) - Quick Lab - Earthquakes and Buildings (page 246) Report – Volcanoes</td>
<td>Ch. 6 Core Mantle Crust Lithosphere Asthenosphere Continental drift Sea-floor spreading Plate tectonics Tectonic plate Folding Fault Batholith Accreted terrain Ch. 7 Seismic gap tsunami</td>
<td>Ch. 6 Evidence Derive Location Distribution Layer Response Major Feature Primarily Ch. 7 Region Vary construction</td>
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<td>TERM #4 6 weeks</td>
<td>Resources 6.6 a-c</td>
<td>Resources Chapter 4: Natural Resources - Sections 1, 2, 3 Chapter 5: Energy - Sections 1, 2</td>
<td>- Explore Activity - What Is Your Classroom Made Of? (page 127) - Quick Lab - Renewable or Not? (page 129) - School to Home Activity - Is it Renewable? (page 130) - Quick Lab - Chocolate Ore (page 135) - Quick Lab - Products from Plants (page 141) Activity: Energy book Activity – oil debate - Lab - Natural Resources Used at Lunch (page 144)</td>
<td>Ch. 4 Natural resources Renewable resources Nonrenewable resources Recycling Mineral Ore Material resource Petroleum</td>
<td>Ch. 4 Energy Resource Ch. 5 Energy resources Fossil fuel Petroleum Natural gas Coal Acid precipitation Nuclear energy Wind power Chemical energy Solar energy Hydroelectric energy Biomass Gasohol Geothermal energy</td>
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<td>TERM #5 6 weeks</td>
<td>Ecology 6.5 a-e</td>
<td>Ecology Chapter 16 Interactions of Living Things - Sections 1, 2, 3 Chapter 17 Biomes and Ecosystems - Section 1 - (Add Sections 2 and/ or 3 as time allows)</td>
<td>- Explore Activity - Who Eats Whom? (Option: Use as a Smart Board Activity) (page 549) - Quick Lab - Meeting the Neighbors (page 551) - Quick Lab – How are the Organisms in a Food Chain Connected? (page 558) - Organisms and Water Resources (page 582) -PBS (videos) symbiosis -Food Chain checkers -Recyclable Art -Food Chain Menu</td>
<td>Ch. 16 Ecology Abiotic Biotic Population Community Ecosystem Biome Biosphere Herbivore Carnivore Omnivore Food chain Food web Energy pyramid Carrying capacity Prey Predator Symbiosis Mutualism Commensalisms Parasitism</td>
<td>Ch. 16 Energy Transfer Chemical Physical Categorize Resource Available Factor Range Ch. 17 Function Similar Role</td>
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