### GSE Sixth Grade Earth Science Curriculum Map

These are bundles of core ideas from the Georgia Standards of Excellence related to an anchoring phenomenon.

This document is part of a framework that includes lessons and resources.

<table>
<thead>
<tr>
<th>Instructional Segment</th>
<th>Solar System and Beyond</th>
<th>Earth-Moon-Sun</th>
<th>Earth’s Changing Landscape</th>
<th>Water in Earth’s Processes</th>
<th>Climate and Weather</th>
<th>Human Energy Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Time</td>
<td>8 weeks</td>
<td>4 weeks</td>
<td>7 weeks</td>
<td>7 weeks</td>
<td>7 weeks</td>
<td>3 weeks</td>
</tr>
</tbody>
</table>

#### Crosscutting Concepts

- Cause & Effect
- System & System Models
- Matter & Energy
- Scale, Proportion & Quantity

#### Anchoring Phenomenon

- Celestial Objects from Different Perspectives
  - A Total Eclipse in Georgia
  - Tides on the Georgia Coast
  - What to wear?

- Georgia’s Landscape
- Ellison’s Cave: GPB, Georgia Rocks!
- Weathering & Erosion photos

- A Study of Water on Earth
- Photo of snowcapped mountain and clouds
- Barrier Islands of Georgia

- Georgia Weather/Climate Patterns
- Thunder and Lightning
- Visuals of a tornado

- Adjusting solar panels to improve efficiency
- Energy Resources - Living in a Solar House

#### Core Ideas

- origins of the universe
- Milky Way galaxy
- engineering/technology
- gravity
- inertia
- formation of the solar system
- structure of the solar system

- lunar cycle (eclipses)
- day/night
- seasons
- elliptical orbit
- tilt of Earth
- revolution/rotation
- direct/indirect sunlight
- gravity
- tides
- Earth’s surface

- geologic time scale
- rock strata
- plate tectonics
- rock cycle
- thermal energy transfer
- mineral formation
- land features
- catastrophic events
- weathering
- erosion

- water cycle
- thermal energy transfer
- weathering
- erosion
- deposition
- waves, currents
- sunlight
- gravity
- density
- temperature
- salinity

- ocean and atmosphere patterns
- water cycle
- air masses
- unequal heating & rotation of Earth
- natural hazards
- global climate change
- weathering
- erosion
- deposition

#### Science and Engineering Practices

- Developing and using models
- Asking questions and defining problems
- Analyzing and interpreting data

- Developing and using models
- Constructing explanations
- Analyzing and interpreting data

- Planning and carrying out investigations
- Constructing explanations/arguments
- Analyzing and interpreting data
- Asking questions
- Developing a model

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- Analyzing and interpreting data
- Asking Questions

- Planning and carrying out investigations
- Constructing explanations
- Analyzing and interpreting data

#### GSE code

| S6E1 a-e | S6E2 a-c | S6E3 d | S6E5 d | S6E5 a-h | S6E3 a-c | S6E4 a-e | S6E3 b, d; S6E4 c, d, e; S6E5 d, e | S6E6 a-c |