**Sixth Grade Curriculum Pacing Guide**
**Crosscutting Concepts:** Cause and Effect; Systems and System Models; Structure and Function; Patterns
**Earth-Moon-Sun**

4 week Instructional Segment

| Anchoring Phenomenon | Standard | Instructional Segment | Disciplinary Core Ideas | Science and Engineering Practices | Instructional Notes |
|---|---|---|---|---|---|
| 2017 Total Eclipse in Georgia<br><br>Tides of the Georgia Coast<br><br>What to wear? | **S6E2.** a, b, c<br>**S6E3.** d<br>**S6E5.** d | **Motions of the Earth-Moon-Sun** | Frameworks of K-12 Science Education:<br>***By the end of grade 8***<br>**ESSA1.A: The Universe and Its Stars**<br>● Patterns of the apparent motion of the sun, the moon, and the stars in the sky can be observed, described, predicted, and explained.<br>**ESSA1.B: Earth and the Solar System**<br>● The solar system consists of the sun and a collection of objects, including planets, their moons, and asteroids.<br>● Earth's spin axis is fixed in the direction over the short term but tilted relative to its orbit around the sun.<br>● The solar system can explain tides, eclipses of the sun and the moon, and the motion of the planets in the sky relative to the stars.<br>● The seasons are a result of tilt and are caused by the differential intensity of sunlight on different areas of Earth across the year. | ● Developing and using models<br>● Constructing explanations<br>● Analyze and interpret data<br>● Ask questions | Background (includes safety alerts)<br>By the end of this unit, students are using the following language in their speaking and writing during EXPLAIN or ELABORATE.<br><br>● Relative position<br>● Relative distance<br>● Gravity<br>● Lunar cycle<br>● Eclipse<br>● Day/Night<br>● Seasons<br>● Elliptical Orbit<br>● Tilt<br>● Direct/Indirect Sunlight<br>● Revolution/Rotation |

This instructional segment will connect to Cause and Effect: Earth's Changing Landscape.