

First Thoughts—Solar & Lunar Eclipses

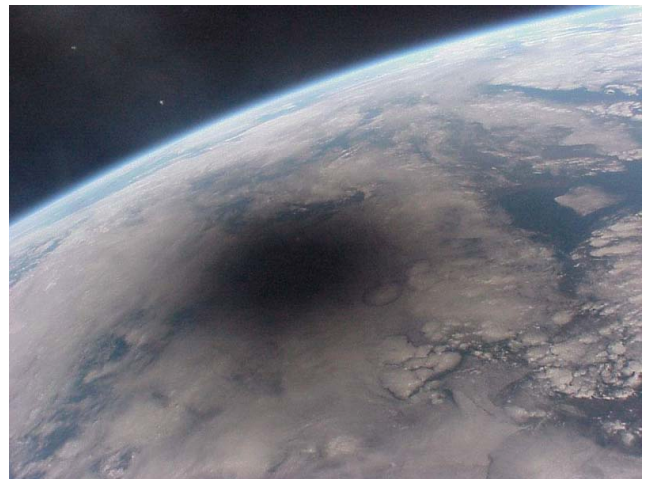
The clocklike precision and regularity of the behaviors of the Sun and Moon seem unchangeable. The Sun rises, travels westward, and sets. Likewise, the Moon rises and travels westward every day. Over the course of a month, the Moon travels west to east in its orbit and passes through its phases from new to full and back again. But on rare occasion, the Sun will rise and gradually be extinguished, resulting in complete darkness in the middle of the day, and then be uncovered, returning daylight to Earth. And every so often the Moon will rise, then fade from view in a similar way, and reappear in an hour or two.

We can only imagine the terror felt by people in ancient civilizations who witnessed such awe-inspiring events. According to their cultural stories, many believed that their gods were being swallowed up by some unknown entity or force. As these events had no explanation, people often viewed them as “signs” or portents of doom.

In this part of the unit, you will explore eclipses, the disappearing acts of the Sun and the Moon. As you proceed, keep in mind the following Essential Question:

What causes solar and lunar eclipses?*First Thoughts-Making Claims*

1. Describe or draw your current ideas about how the black spot in the photo appeared on Earth’s surface during a solar eclipse.



2. Describe or draw what we see from Earth during a solar eclipse.
3. Describe or draw your current ideas about what we see from Earth during a lunar eclipse.
4. Explain why we don't see a solar or lunar eclipse every month.