School to Home

LESSON 3

Eclipses and Tides

Directions: *Use your textbook to answer each question.*

1. The umbra is the darkest part of a shadow. The penumbra is the lighter part around the edges of a shadow.

What is the difference between being in the umbra and penumbra of the shadow the Moon casts on Earth during a solar eclipse?

2. A solar eclipse occurs when the Moon's shadow passes over Earth. A lunar eclipse occurs when the Moon moves into Earth's shadow.

Why are solar eclipses visible from a much smaller part of Earth than lunar eclipses?

3. During neap tides, high tides are lower and low tides are higher.

What causes the Moon to have less of an impact on tides at neap tides?

4. Total lunar eclipses occur only during a full moon. Total solar eclipses occur only during a new moon.