

Name _____

Eclipse Enigma: Unraveling the Mystery of Solar Eclipses

Short Answer Key

1. **Total Solar Eclipse:** Moon completely covers the Sun. **Partial Solar Eclipse:** Moon covers only a portion of the Sun. **Annular Solar Eclipse:** Moon covers the center of the Sun, leaving a ring of sunlight around the edges.
2. The Earth, Moon, and Sun must be in perfect alignment, with the Moon positioned precisely between the Earth and the Sun. This alignment matters because it determines whether a solar eclipse will be total, partial, or annular.
3. The path of totality is where a total solar eclipse is visible, and it allows observers to witness the complete darkening of the Sun's disk and the appearance of the solar corona. People travel to the path of totality to experience this rare and awe-inspiring event.
4. Specialized eclipse glasses or solar filters are necessary to protect the eyes from harmful solar radiation during a solar eclipse.
5. The alignment of the Earth, Moon, and Sun during a solar eclipse results in a New Moon because the side of the Moon facing the Earth is not illuminated, making it appear completely dark.

