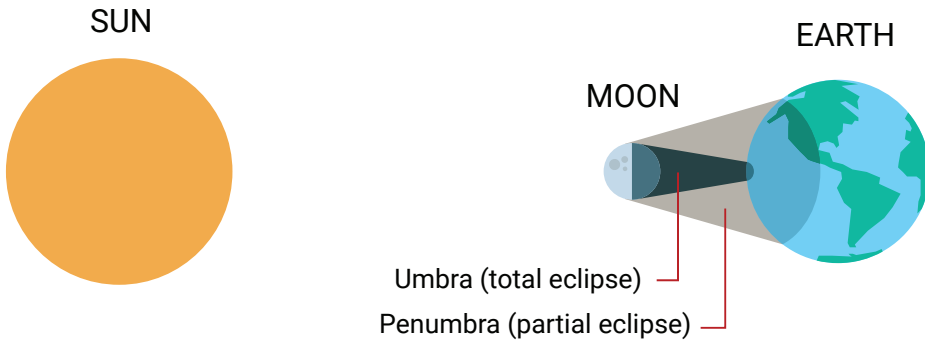
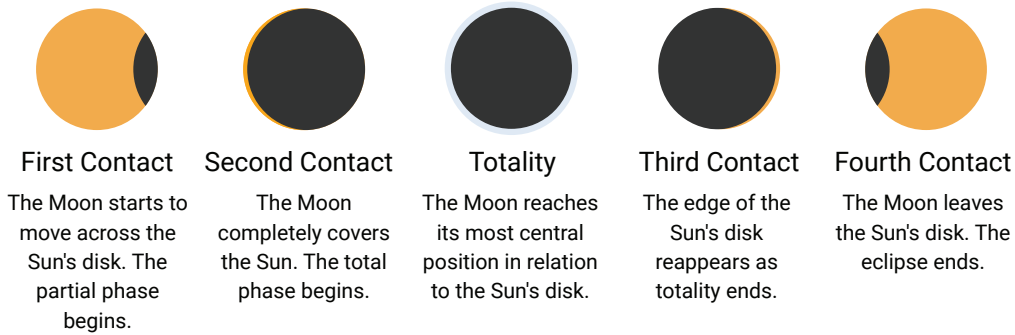


A Handy Guide to Total Solar Eclipses



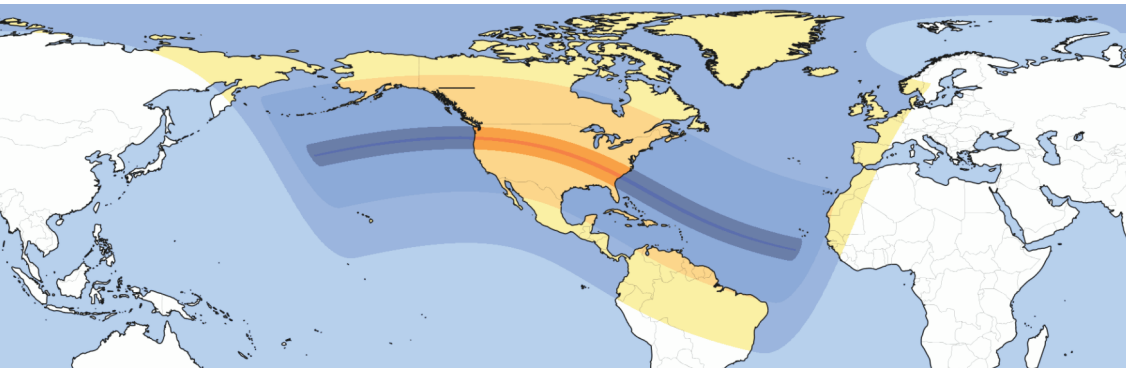
Total solar eclipses happen when the Moon passes between the Sun and the Earth, casting its umbra, the dark central portion of its shadow, on Earth. In areas around the umbra, within the penumbra, the Sun appears only partially eclipsed.

Phases of a Total Solar Eclipse



August 21, 2017— Great American Eclipse

- First total solar eclipse visible from mainland United States since 1979.
- Totality will last for 2 minutes and 40 seconds.
- Western Europe and northern parts of South America will see a partial solar eclipse.



timeanddate.com/eclipse/

Awesome Totality



WARNING: Never look directly at the Sun!

Protect your eyes by using eclipse glasses or by making a pinhole projector.



Did you know?

375 Years

On average, it takes about 375 years from one total solar eclipse to the next, at a specific location.

Longest Totality

The total phase of a solar eclipse can last up to 7 minutes and 30 seconds.

Come in Pairs

A solar eclipse always happens 2 weeks before or after a lunar eclipse.



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