

## Find the Main Idea: Solar Eclipse



*The moon blocks the sun during a solar eclipse in August 2008*

**A** solar eclipse occurs when the moon comes between the Earth and the sun. During an eclipse, the moon blocks all or part of the sun.

A solar eclipse would happen every month if the orbits of the Earth and the moon were perfectly circular and the moon orbited on the same plane as the Earth's orbit around the sun. However, the Earth's orbit and the moon's orbit are not perfect circles. They are both oval shaped, or elliptical. In addition, the moon's orbit is not on the same plane as the Earth's, but is angled at about 5 degrees. These orbit characteristics provide fewer opportunities for the moon to be in the correct position to block the sun. Rather than happening every month, some type of solar eclipse happens only two to five times a year.

A total solar eclipse for any give location is even rarer. In a total eclipse, the moon completely blocks the sun, leaving only a rim of light called "the ring of fire." A total eclipse occurs somewhere on Earth about every 18 months. Any one location on Earth, however, will only be able to view a total eclipse about every 360 to 410 years.

### Find the Main Idea

Write the main idea of the passage in your own words.

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Write two supporting ideas for the main idea.

1. \_\_\_\_\_

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2. \_\_\_\_\_

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