

### Eclipses WebQuest Worksheet

An eclipse happens when one object gets in between you and another object and blocks your view. We experience two kinds of eclipses from Earth: an eclipse of the Sun and an eclipse of the Moon.

This WebQuest will help you understand why eclipses occur. You will need to read the information available on the webpages you visit. *All answers can be found using one or more of the websites. Your task is to read and find the information.* Good luck!

#### TASK ONE

**There are two types of eclipses. Define each term:**

solar eclipse - \_\_\_\_\_

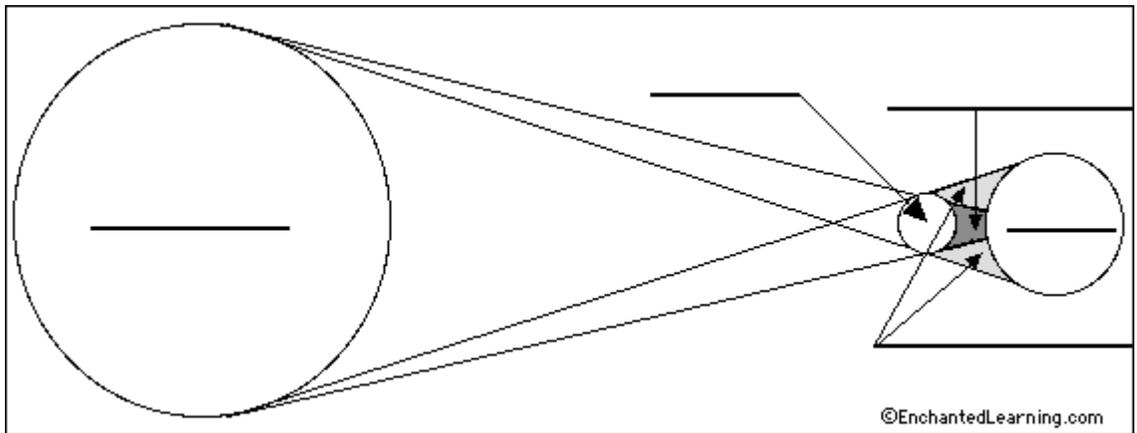
\_\_\_\_\_

lunar eclipse - \_\_\_\_\_

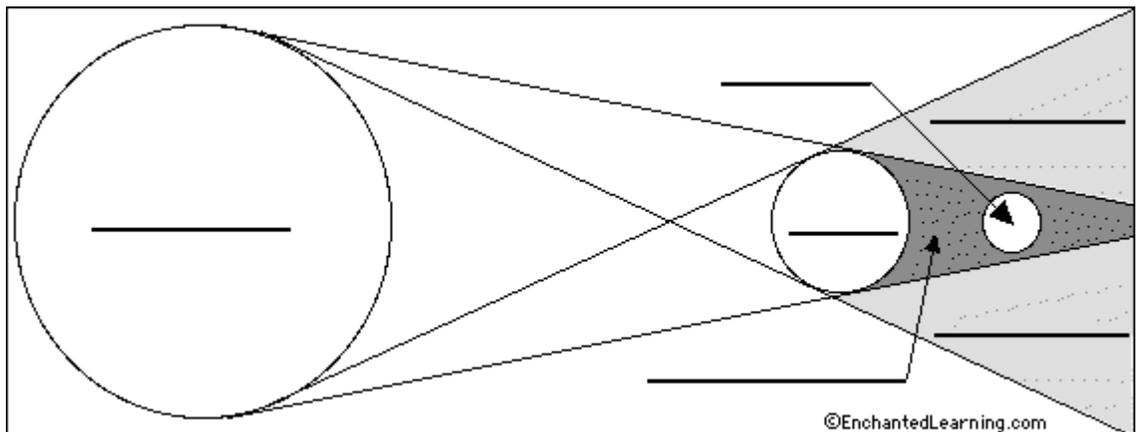
\_\_\_\_\_

**Use the terms in the box to label the diagram of a solar eclipse.**

**Solar Eclipse Terms**  
Earth Sun Moon  
Umbra Penumbra



**Lunar Eclipse Terms**  
Earth Sun Moon  
Umbra Penumbra



**TASK TWO**

*List the four types of solar eclipses and describe each.*

Type of Solar Eclipse	Description of Each Type of Solar Eclipse

*List the three types of lunar eclipse and describe each.*

Type of Lunar Eclipse	Description of Each Type of Lunar Eclipse

**TASK THREE**

*Answer each question.*

In which phase of the moon does a solar eclipse occur? \_\_\_\_\_

What can happen if you look at the sun during a solar eclipse? \_\_\_\_\_

In which phase of the moon does a lunar eclipse occur? \_\_\_\_\_

Which can be seen by more people, solar eclipse or lunar eclipse? Why? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How long does a lunar eclipse usually last? \_\_\_\_\_

How long does a solar eclipse usually last? \_\_\_\_\_

Why don't solar eclipses occur every month? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Why don't lunar eclipses occur every month? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### **TASK FOUR**

*Use the interactive. Write (T) if the statement is true. Write (F) if the statement is false.*

1. \_\_\_\_\_ If the size of the Moon is 100% and its orbit is tilted at zero degrees, a total eclipse would occur at every new moon phase and every full moon phase.
2. \_\_\_\_\_ Solar eclipses happen more often than lunar eclipses.
3. \_\_\_\_\_ A partial lunar eclipse occurs when only part of the Moon passes through Earth's umbra.
4. \_\_\_\_\_ The Moon appears black in a total lunar eclipse.
5. \_\_\_\_\_ A solar eclipse occurs only during a new moon phase, while a lunar eclipse occurs only during a full moon phase.
6. \_\_\_\_\_ You can see a total solar eclipse from within the Moon's umbra and penumbra.

#### **TASK FIVE**

*Complete the chart for eclipses that will occur for the rest of this year (2015).*

<b>Date (month/day/year)</b>	<b>Solar or Lunar</b>	<b>Type of Eclipse</b>	<b>Locations On Earth Where Eclipse Can Be Seen</b>	<b>Check Eclipses You Will Be Able to See</b>

