

## Solar Eclipse Worksheet

The answers to the following questions can all be found by visiting:

<http://www.activewild.com/what-is-a-solar-eclipse/>

(Mark the correct answers with a tick.)

1. What is a solar eclipse?
  - A. A natural phenomenon that occurs when the moon comes between the sun and the Earth, preventing sunlight from reaching Earth. \_\_\_
  - B. A natural phenomenon that occurs when the Earth comes between the sun and the moon, preventing sunlight from reaching the moon. \_\_\_
2. A partial solar eclipse occurs ...
  - A. ... when the moon partially covers the sun, making the sun resemble a crescent. \_\_\_
  - B. ... when the moon is partially hidden by Earth, causing a shadow on the moon. \_\_\_
3. A total solar eclipse occurs ...
  - A. ... when the Earth's shadow can be seen on the moon. \_\_\_
  - B. ... when the sun is completely covered by the moon, causing darkness on Earth. \_\_\_
4. The brief period of darkness experienced during a total solar eclipse is known as what?
  - A. Totality \_\_\_
  - B. Solar darkness \_\_\_
  - C. Negativity \_\_\_
5. What is the maximum possible time of totality?
  - A. Around 60 seconds \_\_\_
  - B. Around 7.5 minutes \_\_\_
  - C. Around 12 hours \_\_\_
6. Does a total eclipse occur instantly, or is there a period of partial eclipse before and after?
  - A. A total eclipse occurs instantly \_\_\_
  - B. There is a period of partial eclipse before and after the total solar eclipse. \_\_\_
7. Which 2 of the following phenomena may be seen during a solar eclipse?
  - A. Baily's beads \_\_\_
  - B. The sun's corona \_\_\_
  - C. Sunspots \_\_\_
8. What is the moon's umbra?
  - A. The shadow cast by the moon on Earth. \_\_\_
  - B. The dark side of the moon. \_\_\_
9. If you're inside the moon's umbra, what type of eclipse will you be able to see?
  - A. Partial solar eclipse \_\_\_
  - B. Total solar eclipse \_\_\_

10. If you're inside the moon's penumbra, what type of eclipse will you be able to see?
- A. Partial solar eclipse \_\_\_
  - B. Partial lunar eclipse \_\_\_
11. The moon is far smaller than the sun. How does it manage to cover the entire sun during a solar eclipse?
- A. The moon is far closer to Earth than the sun. \_\_\_
  - B. The moon expands in the heat given off by the sun \_\_\_
12. What is the path of totality?
- A. The path taken by the Earth as it orbits the sun. \_\_\_
  - B. The path taken by the moon's shadow as it moves over the Earth \_\_\_
13. What are two factors that determine the duration of a total solar eclipse?
- A. The size of the moon's shadow \_\_\_
  - B. The speed at which the moon's shadow is moving across the surface of the Earth. \_\_\_
  - C. The ground temperature within the path of totality \_\_\_
14. What phenomenon will those near to, but not inside, the path of totality witness?
- A. A lunar eclipse \_\_\_
  - B. No eclipse \_\_\_
  - C. A partial eclipse \_\_\_
15. Why can't the same solar eclipse be seen by everyone on Earth?
- A. The moon is only large enough to cast a relatively small shadow on Earth. \_\_\_
  - B. Everyone on Earth can see the same solar eclipse. \_\_\_
16. What is an annular eclipse?
- A. An eclipse that occurs once a year. \_\_\_
  - B. An eclipse during which the sun can still be seen around the moon, making a ring shape. \_\_\_
17. What is syzygy?
- A. When three celestial bodies are aligned \_\_\_
  - B. When two celestial bodies are aligned \_\_\_
  - C. Hungarian for sausages \_\_\_
18. How often do solar eclipses occur?
- A. Once every year \_\_\_
  - B. Two to five times a year \_\_\_
  - C. Every two to five years \_\_\_
19. Why don't solar eclipses occur every month?
- A. It takes the moon two months to orbit the Earth \_\_\_
  - B. The moon orbits Earth at a slight angle, and its shadow usually misses Earth \_\_\_
20. What is a lunar eclipse?
- A. In a lunar eclipse, the sun comes between Earth and the moon. \_\_\_
  - B. In a lunar eclipse, the Earth prevents sunlight from reaching the moon. \_\_\_