



Name \_\_\_\_\_ Class: \_\_\_\_\_

Directions: Go to <http://sciencespot.net/>, click the link for the Kid Zone, and then click 2017 Solar Eclipse Links in the astronomy section.

**Site #1: Eclipse 101 (NASA)**

- 1) When was the last time most Americans experienced a total solar eclipse? \_\_\_\_\_
- 2) Go to the **Eclipse: Who? What? Where? When? How?** section to find these answers.
  - a) In what state will the "path of totality" begin in the United States? \_\_\_\_\_
  - b) In what state will the path end? \_\_\_\_\_
  - c) If you are in the path of totality, what will you see? \_\_\_\_\_
  - d) If you are not in the path of totality, what will you see? \_\_\_\_\_
  - e) For this eclipse, what is the longest period of totality? Where? \_\_\_\_\_
- 3) Go to the **Safety** section to complete these statements.
  - a) Looking directly at the sun is \_\_\_\_\_ except during the brief total phase of a solar eclipse ("\_\_\_\_\_"), when the moon entirely blocks the sun's bright face. This will only happen within the narrow \_\_\_\_\_ of totality.
  - b) Do not use solar filters if they are scratched or \_\_\_\_\_.
  - c) Do not look at the sun using an \_\_\_\_\_ camera, telescope, binoculars, or other optical device.
  - d) Outside the path of totality, you must \_\_\_\_\_ use a safe solar filter to view the sun directly.
  - e) If you normally wear eyeglasses, keep them on. Put your eclipse glasses on \_\_\_\_\_ them.

**Site #2: Time & Date Eclipses**

- 1) During which moon phase does a solar eclipse occur? \_\_\_\_\_
- 2) During which moon phase does a lunar eclipse occur? \_\_\_\_\_
- 3) Where does the Greek word "*ékleipsis*" mean? \_\_\_\_\_
- 4) How many solar eclipses happen each year? \_\_\_\_\_
- 5) What is the difference between a total and partial solar eclipse? \_\_\_\_\_  
\_\_\_\_\_
- 6) Click "Why are there 3 shadows?" link to describe the difference between umbras, penumbras, and antumbras.  
\_\_\_\_\_  
\_\_\_\_\_
- 7) How do the different shadows affect an eclipse? \_\_\_\_\_  
\_\_\_\_\_

What questions do you have about the solar eclipse? Write at least 3 questions in your notebook (on the page below this worksheet.) Challenge your classmates to find the answers!