



Eclipse Across America

Effects of a Solar Eclipse on Our Solar-Powered Planet



Name: _____

Date: _____

1. Circle words from the reading that stood out to you the most. Choose one and write it below.

2. Make an acrostic poem with the word ECLIPSE and underline any words you used from the reading.

E

C

L

I

P

S

E

Did you know that nearly everything on Earth—you, your computer, all the plants and animals, even the weather—gets its energy from the Sun? The Earth is a solar-powered planet. So, what would happen if you could dim or block out the Sun like you can with a desk lamp? Everyone in North America will get a chance to see this happen on August 21, 2017 during a solar eclipse.

A solar eclipse happens when the Moon passes between the Earth and the Sun, blocking some or all of the Sun’s light from reaching parts of the Earth. The sudden blocking of the Sun’s light makes the day appear to be night, affecting plants and animals. Birds fly to their nest for sleep in the middle of the day; cicadas reduce their calls; cows return to their barns; squirrels and bees become restless; and flowers begin closing up.

Many scientists will be making observations during this unique event. NASA researchers will use the solar eclipse to improve our understanding of Earth’s atmosphere. During the eclipse, NASA will collect data from the ground and from a spacecraft orbiting the Earth to study the effect on cloud cover. What observations do you want to make during the eclipse - clouds, temperature, pet reactions, street lights turning on and off, or other changes?

Adapted from <https://www.globe.gov/web/eclipse> and <https://eclipse2017.nasa.gov/>

3. If you were going to write a newspaper article about your experience during the solar eclipse, what would the headline read and why?

Safety: The only safe way to look at the sun is through special-purpose solar filters such as “eclipse glasses” or hand-held solar viewers. <https://eclipse2017.nasa.gov/safety>

Eclipse Reading Activity, NASA Langley

Here is an example of an acrostic poem using the word SOLAR.

Sun
Orbiting
Light
Animals
Restless

BONUS: Find the words used for the example in the reading. Draw a rectangle around them.