Solar Eclipses – Teacher Key

1. A citizen science project is a project where regular people collect data that scientists can use. For example, people can count how many birds they see in a particular area. This data can be used by scientists to monitor the health of bird populations.

2. Citizen science projects about solar eclipses are important because solar eclipse don't happen very often. When they do happen, they can only be seen from a few locations on Earth. Scientists can't always be in the right place at the right time to collect data. Citizen science projects allow regular people to input data from many different places at what ever time they can see the solar eclipse.

3. There is some light visible during a solar eclipse. For a partial solar eclipse, only part of the sunlight is blocked so it doesn't get super dark. For a total solar eclipse, even though pretty much the whole sun is block, light rays can bend around the moon and still make it to earth. It's similar to right after sunset when you can't see the sun in the sky; however, it is not totally dark yet.

4. During a total eclipse, the shadow of the moon completely blocks the light of the Sun. This is different from a partial eclipse, when the moon only partially blocks the light of the Sun.

5. True. The change in light fools some animals into thinking that the sun is setting, so they start acting the way they do at sunset. For example, crickets start chirping.

6. Answers will vary. Students should think of an analogy where something is partially blocked to explain a partial solar eclipse and fully blocked to explain a total solar eclipse.

