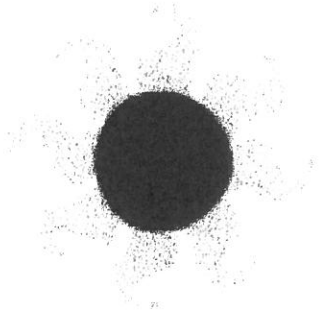


Name _____ Date _____ HR _____

ECLIPSES



PART 1: PREDICTION-REACTION GUIDE

Directions: Look at each statement. **Circle** True or False based on what you know about each statement. We will look at the same statements again after the activity.

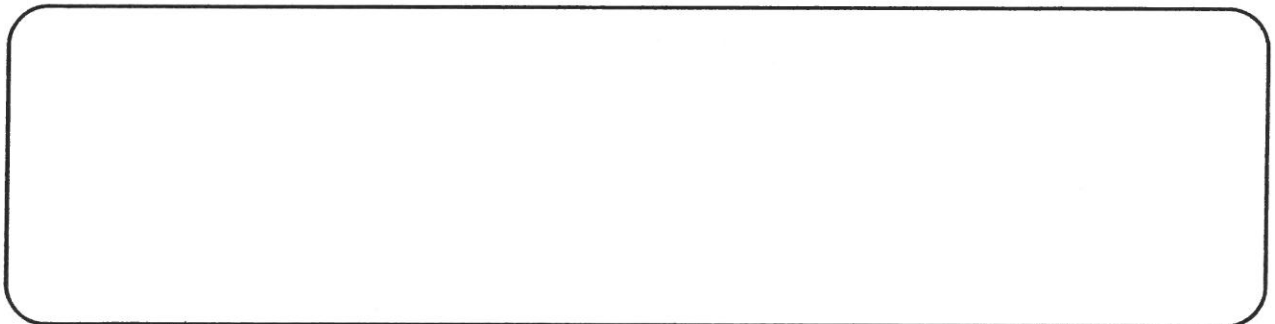
1. An eclipse occurs when one body in space blocks light reaching another body in space. True False
2. A solar eclipse is when the sun casts a shadow on the Earth. True False
3. Solar eclipses can only occur during a First Quarter moon. True False
4. During a solar eclipse, only the outer atmosphere of the sun (the corona) is visible. True False
5. A lunar eclipse occurs when the full moon passes through Earth's shadow. True False
6. During a lunar eclipse, the sun looks red due to refracted light from the Earth's atmosphere. True False

PART 2: SOLAR ECLIPSE

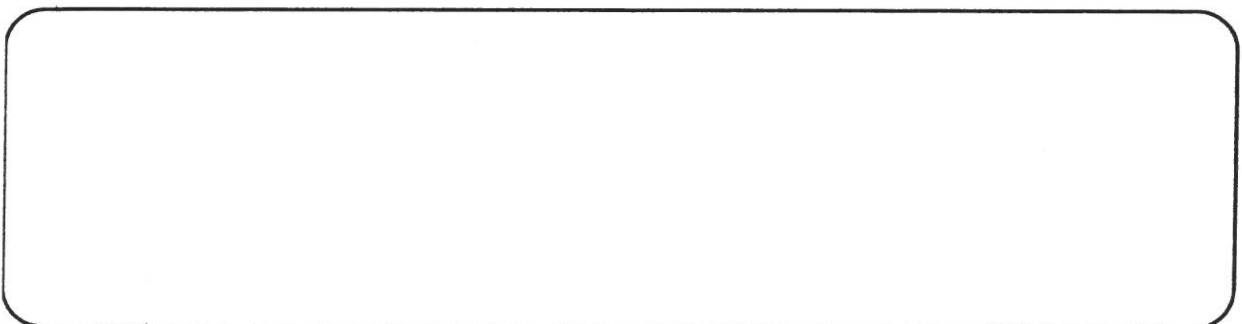
Directions: In your group of 3, choose who will be the sun, the moon, and the Earth. The Earth person will be the reader for this portion. Earth reads the text and all group members follow the directions given to create a solar eclipse model in the classroom. If needed, you may switch roles so everyone has a chance to see the solar eclipse.

The word eclipse means when one body in space blocks the light from reaching another body in space. There are two kinds of eclipses that we can see from Earth; a lunar eclipse and a solar eclipse. Both types of eclipses happen when the sun, moon, and Earth line up.

In a solar eclipse, the moon blocks the light of the sun from reaching Earth. Here is another way to think of it: the moon casts a shadow on a small portion of the Earth. Using the “moonsicle,” a flashlight, and your head, see if you can line things up to create a solar eclipse. In the box below, draw and label the line up for a solar eclipse.



Look up the alignment for a solar eclipse in real life on page 28 in your text. Draw and label it in the box below.



Read page 28 to help answer the following questions.

1. What phase does the moon have to be in for a solar eclipse?

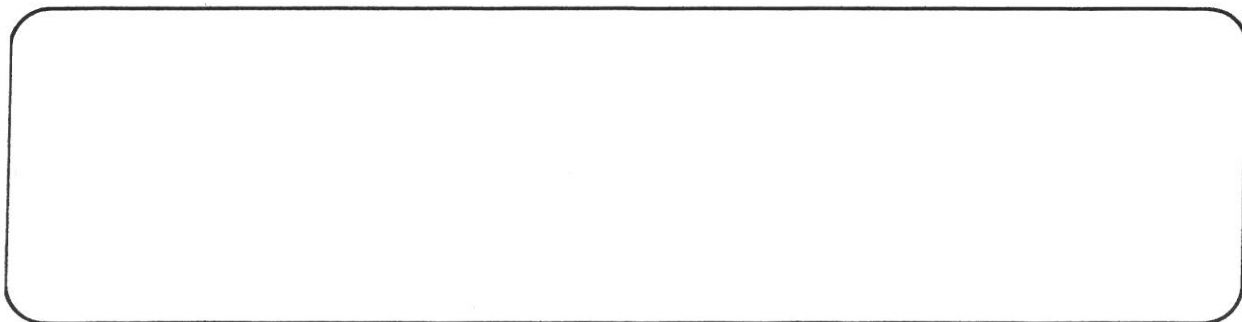
2. What part of the sun is still visible during a solar eclipse?

3. Why is a solar eclipse only visible to a small number of people on Earth? _____

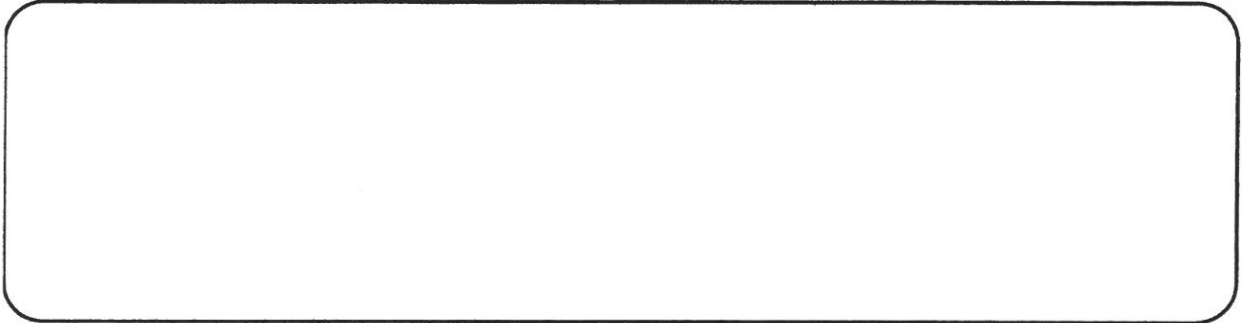
PART 3: LUNAR ECLIPSE

Directions: The sun person will be the reader for this portion. Sun reads the text and all group members follow the directions given to create a lunar eclipse model in the classroom. If needed, you may switch roles so everyone has a chance to see the lunar eclipse.

In a lunar eclipse, the Earth's shadow blocks the light that hits the moon. Here is another way to think of it: the moon passes into the shadow of the Earth. Using the "moonsicle," a flashlight, and your head, see if you can line things up to create a lunar eclipse. In the box below, draw and label the line up for the lunar eclipse in the classroom.



Look up the alignment for a lunar eclipse on page 29 in your text. Draw and label it in the box below.



Read page 29 to help you answer the following questions.

1. What phase does the moon have to be in for a lunar eclipse?

2. What are the two parts of the Earth's shadow?

_____ & _____

3. Why does the moon look reddish during a lunar eclipse?

PART 4: PREDICTION-REACTION GUIDE

Go through the true/false questions again. What did you learn?

1. An eclipse occurs when one body in space blocks light reaching another body in space. True False

2. A solar eclipse is when the sun casts a shadow on the Earth. True False

3. Solar eclipses can only occur during a First Quarter moon. True False

4. During a solar eclipse, only the outer atmosphere of the sun (the corona) is visible. True False

5. A lunar eclipse occurs when the full moon passes through Earth's shadow. True False

6. During a lunar eclipse, the sun looks red due to refracted light from the Earth's atmosphere. True False