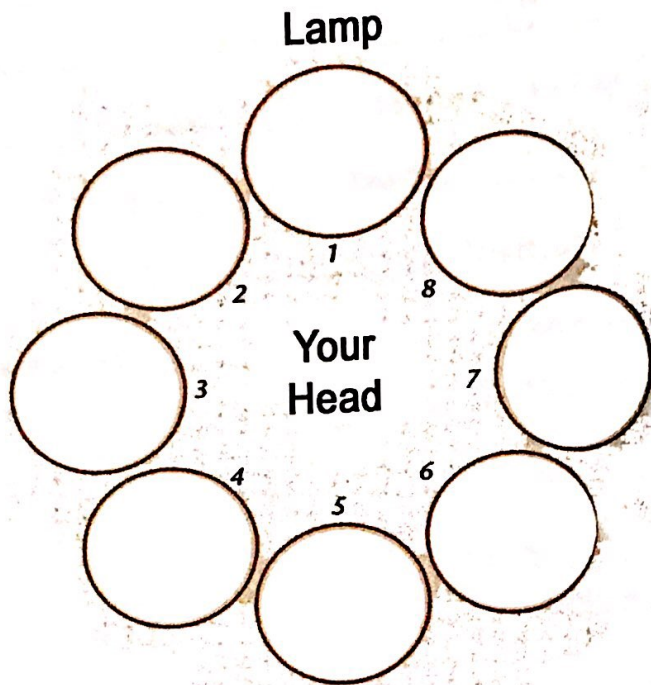


## Data:

Your partner should observe and draw what part of the ball facing you is lit by the lamp. If light is visible on the ball, draw the shape on the lighted part of the ball in each circle. Start with number 1 and turn  $45^\circ$  to the left (counter-clockwise) for each subsequent phase.



## Analyze and Conclude:

1. In your model, what represents Earth? The sun? The moon?

Earth \_\_\_\_\_

Sun \_\_\_\_\_

Moon \_\_\_\_\_

2. Refer back to your 8 circles. How much of the lighted part of the ball did you see when facing the lamp?

3. Go back to your drawing and label the names of the phases of the moon. Which drawing represents a full moon? A new moon? Which represents a waxing crescent? A waning crescent?

Full Moon - \_\_\_\_\_

New Moon - \_\_\_\_\_

Waxing Crescent - \_\_\_\_\_

Waning Crescent - \_\_\_\_\_

4. Whether you could see it or not, how much of the ball's surface was always lit by the lamp? Was the darkness of the new moon caused by an eclipse? Explain your answer.

\_\_\_\_\_

\_\_\_\_\_

5. How did making a model help you understand the phases of the moon? What are some disadvantages of using models?