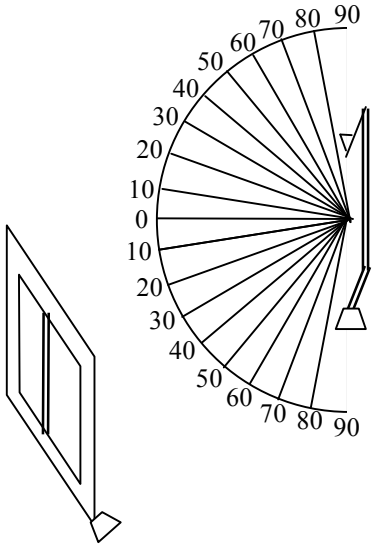
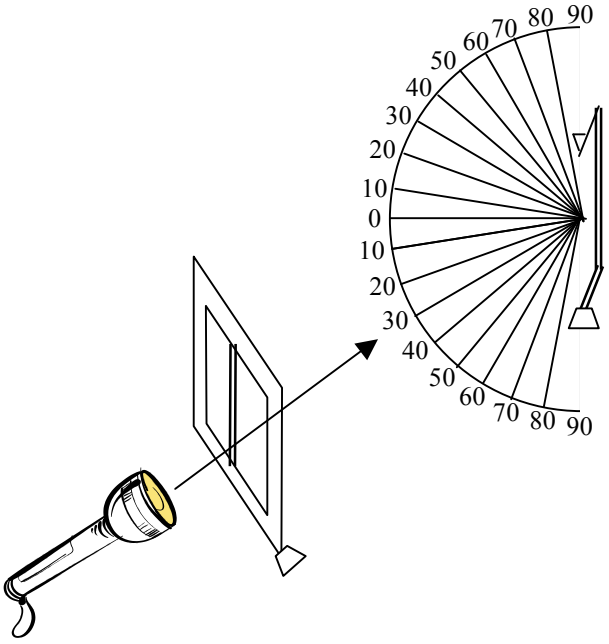
Name:_____

Mirrors and Reflection

1. Set up your experiment as shown in the diagram. Use the plastic holders to hold the mirror and slit card.



2. Predict the path of light if you shine the flashlight through the slit of the card and along the 30° line. Draw your prediction on the diagram below.



3. Shine your flashlight through the slit card along the 30 line. What is the angle of the reflected light? _____

4. Does this answer match your prediction in Question 2? _____

5. Use your flashlight to test 6 angles. Three have been selected for you. You may choose the other three. Before you test each angle, make a prediction about the angle of reflected light.

Angle of Light Rays for Flashlight (in degrees)	**Prediction Angle of Reflected Light Rays (in degrees)**	**Actual Angle of Reflected Light Rays (in degrees)**
10		
40		
60		

6. Compare your predictions to your results.

_____

_____

_____

7. Describe the path of light starting from the moment it leaves the flashlight.

_____

_____

_____

8. What is the relationship between the angle at which light hits the mirror and the angle at which it is reflected by the mirror?

_____

_____

_____