WS 4.6 Reflection & Position

Name _____

Hour

st YOU WILL NEED A PROTRACTOR TO MEASURE ANGLES st $^{ m Date}$ —

1. Measure and draw the reflected light ray and draw an eye where an observer can see the reflected ray.



2. If the laser pointer were aimed at a piece of paper, it would not reflect the light in the same way that the mirror does. Explain in a sentence or two. (You may draw on the diagram below to support your argument.



3. A light bulb is place in front of a plane mirror. Draw 3 incident light rays from the light bulb to the mirror. Measure and draw the reflected rays for each incident ray. Then draw eyes wherever observers would have to be in order to see those light rays.

plane mirror

4. Suppose that a mirror and three lettered cards are set up as in the figure. Given the location of the person's eye, which of the lettered cards would she be able to see in the mirror? Explain in the space to the right and draw on the diagram to support your argument.



mirror

5. A top view of a mirror and bulb is shown below. This time, an <u>opaque</u> screen is placed between the bulb and the mirror. Does an image still form? If yes, show the location of an observer that would be able to see the image by drawing an eye in that position. If no, explain why not. In either case, use a ray diagram to support your argument.



6. Each diagram shows how the light from the light source reflects off the mirror and into the eye of observer 1. Does observer 2 see the light source in the mirror as well. Answer "yes" or "no" and draw on the diagram to show why or why not.

