

Name \_\_\_\_\_ Date \_\_\_\_\_  
Teacher \_\_\_\_\_ Period \_\_\_\_\_

## Physics - Reflection Worksheet

1. How does regular reflection differ from diffuse reflection?
  
  
  
  
  
  
  
  
  
  
2. Does the law of reflection hold true for diffuse reflection? Explain.
  
  
  
  
  
  
  
  
  
  
3. What is meant by the phrase “normal to the surface”?
  
  
  
  
  
  
  
  
  
  
4. Which of the following are examples of regular reflection and which are examples of diffuse reflection?
  - a. reflection of light from the surface of a lake on a calm day
  - b. reflection of light from a plastic trash bag
  - c. reflection of light from the lens of an eyeglass
  - d. reflection of light from a carpet
  
  
  
  
  
  
  
  
  
  
5. Which of the following is true about a plane mirror?
  - a. It can be used to magnify.
  - b. It produces both virtual and real images
  - c. It always produces a virtual image
  - d. It form images by diffuse reflection
  
  
  
  
  
  
  
  
  
  
6. What is the magnification of a plane mirror?
  
  
  
  
  
  
  
  
  
  
7. A person stands 2.0 m away from a plane mirror. What is the apparent distance between the person and his or her image? List the image characteristics.

8. A small dog sits a distance of 1.5 m away from a plane mirror. Where is the dog's image located? If the dog jumps at the mirror with a speed of 0.5 m/s, how fast does the dog approach its image?
  
9. Suppose you want to get the attention of your friend sitting at a table across the room. To do this, you are going to reflect light off of your watch from a lamp directly above you into the eyes of your friend. You estimate that the angle created between the light, your watch, and your friend to be  $150^\circ$ . What should the angle of incidence be to achieve this?
  
10. If one wall in a room is covered with mirrors, how much larger will the room appear to be? Explain.