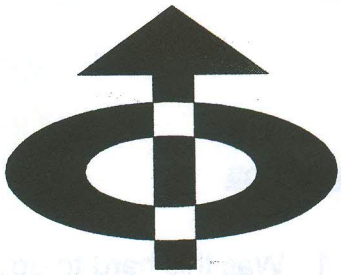
Name _____ Box # _____

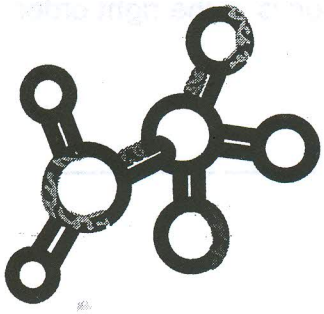
Mirror/Reflection Lab

Part I: Place the mirror above the picture, and try to draw an exact copy of the picture directly below the original. Do not look at the picture directly, only the mirror!

Place mirror here:



Place mirror here:



Part II: Stand the mirror so that it is perpendicular to the surface of the table. Use the mirror to write your name on the paper so that it appears right-side-up in the mirror.

Printed First & Last Name

Cursive First & Last Name

Questions

1. Was this hard to do? Explain.

2. Which letter(s) seemed harder than others?

3. What does a mirror do to images that it reflects?

Part III: In the space below, write the alphabet so that their reflection is in the right order and properly written.

Questions

1. Which, if any letters look the same forward AND backward?

Post Lab Questions:

1. Explain why it was not as easy to copy diagrams using a mirror as opposed to without.

2. Which property of light accounts for this happening? _____

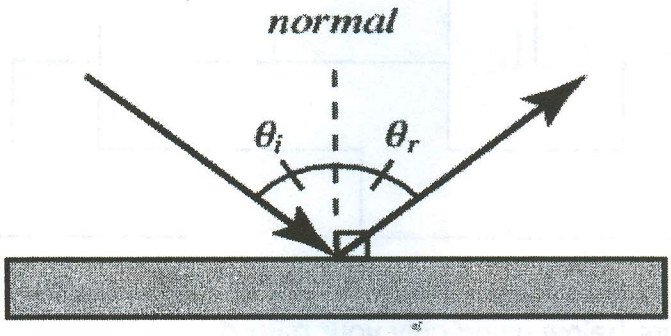
3. If the angle between the incident ray and the reflected ray is 40°, what is the angle of reflection? _____

4. If the angle of incidence is 35°, what is the angle of reflection? _____

5. The _____ is always perpendicular to a surface.

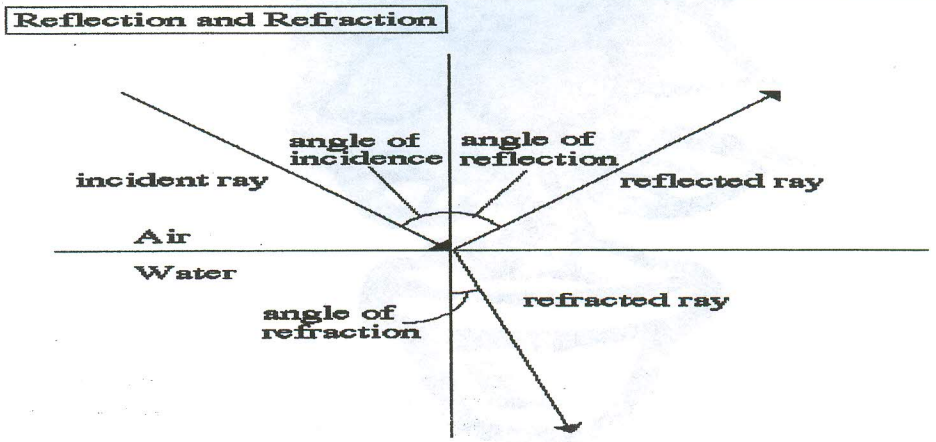
6. Using the diagram below, label the incident ray, reflected ray, angle of incidence, angle of reflection, and the mirror.

7. If the angle of reflection is 50°, what is the angle of incidence? _____

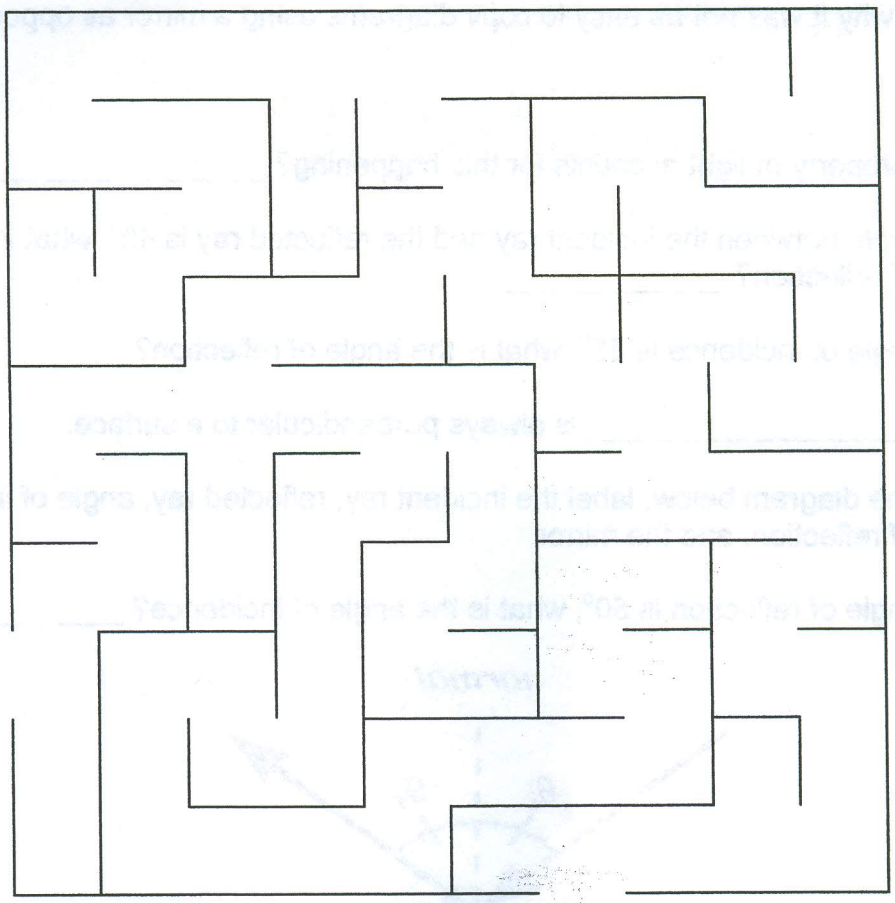


8. Using the diagram below, answer the following questions.
   a. Light refracts when passing between _____ substances at an angle.
   b. Which substances did this light ray pass through? _____ & _____
   c. If the light did not hit at an angle, what would happen?

_____



Part IV: Look only into the mirror to solve this maze!



Part V: Color the picture below using only your mirror!