

Curved

Introduction

Light has many interesting aspects. An example is **reflection**. Reflection occurs when light bounces off a surface. Think about what happens when you look in a mirror. Whether you realize it or not, you are reflecting light. This light travels to the mirror, then bounces back to your eyes. This is how you see your reflection.

In this lab you will compare curved and flat mirrors.

Materials

- A light of your choice (e.g. candle)
- 2 curved mirrors
- a flat mirror
- White paper (8.5X11")
- a Styrofoam cup

Procedure

1. Cut a slit in the Styrofoam cup. It should be large enough to hold a curved mirror.
2. Place one of the curved mirrors in the Styrofoam cup slit.

3. Make an image of the light (e.g. candle flame) with the mirror. Measure the distance from the mirror to the image.

4. Replace the first mirror with the second curved mirror and repeat the measurement.

5. Place a flat mirror in the cup and record your observation.

6. Draw a sketch of how a curved mirror forms an image.

Questions

1. Which mirror produced the larger image?
2. Where might a scientist want to use a curved mirror rather than a flat mirror?
3. Explain how "Fun House" mirrors work.

Conclusion

What can you say about curved mirrors versus flat mirrors? Use evidence from your lab to backup your statement.