

NAME: \_\_\_\_\_

# Lab Report: Bending Light



CHIP KIDS

Complete the lab report as you conduct the experiment!

**PURPOSE:**

**HYPOTHESIS:**

**OBSERVATIONS AND RESULTS:**

**CONCLUSION:**

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NOTES:

VOCABULARY:

- Refraction: how light bends when it passes through multiple different mediums
- Photolithography: a process that uses light to etch patterns onto semiconductor wafers

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## MATERIALS:

- Paper plate
- Scissors
- Flashlight
- Magnifying glass (optional)

## PROCEDURE:

1. Draw a block letter "E" (about as long as your finger) in the middle of a paper plate and cut it out. (It's okay if you make a straight cut from the edge of the plate!)
2. Shine a flashlight through the paper plate onto the wall or floor and observe the resulting stencil. Is the "E" bigger or smaller than what you cut out of the plate? Can you change the size of the "E" by moving the flashlight?
3. (Optional) If you have a magnifying glass, place it in the pathway of the paper plate and flashlight. You will need an extra person to hold the magnifying glass for you. Now experiment with the position of the flashlight and the magnifying glass.
  - How big can you make the "E"?
  - How small can you make it?
  - Can you get the "E" to flip?