

JR-ENGINEERS

DIY MAGNIFIER

Can you make a magnifying glass out of plastic?

INSTRUCTIONS

STEP 1: Cut a lens shaped piece out of the neck of your 2 liter bottle.

STEP 2: Find some small print to read.

STEP 3: Add drops of water to the center of your plastic lens.

STEP 4: Now look at the small print through the water. Does it look any different?

SUPPLIES

2 Liter bottle

Scissors

Water

Dropper

Small print

THE SCIENCE

Light travels in a straight line to your eye, but can be altered when a transparent material, like glass or water, gets in the way. Did you notice how the small type became larger when you looked through a water drop? The plastic lens curves to make a dome, and this curvature bends light rays inward. This makes the object appear bigger than it is. Any clear liquid will work as a lens. Depending on what type of liquid you use, the magnification factor will vary.

