



## DISAPPEARING GLASS

### SCIENCE SAFETY

PLEASE follow these safety precautions when doing any science experiment.

- **ALWAYS** have an adult present.
- **ALWAYS** wear the correct safety gear while doing any experiment.
- **NEVER** eat or drink anything when performing any experiment.
- **REMEMBER** experiments may require marbles, small balls, balloons, and other small parts. Those objects could become a **CHOKING HAZARD**. Adults are to perform those experiments using these objects. Any child can choke or suffocate on uninflated or broken balloons. Keep uninflated or broken balloons away from children.

### INGREDIENTS

- Vegetable Oil
- Large Pyrex Bowl
- Small Pyrex Bowl

### INSTRUCTIONS

**STEP 1:** Fill the large Pyrex bowl half of the way with vegetable oil.

**STEP 2:** Completely submerge the small Pyrex bowl into the vegetable oil and observe. What happens when light passes through the air, Pyrex bowl, and vegetable oil?

### EXPLANATION

The small Pyrex bowl disappears in the vegetable oil because Pyrex and vegetable oil have the same refractive index.



### SCIENCE BACKGROUND

Light is energy you can see, which travels in a straight line until it hits an object. Once light hits an object it can reflect, refract, or absorb. Reflect mean to bounce off, refract means to bend, and absorb means to take in. The refractive index of a material is a measure of the change in the speed of light as it passes through the air into a material.

Transparent materials allow most light to pass through. Translucent materials allow some light to pass through. Opaque materials block all light from passing through.

### I CAN STATEMENTS

- ✓ I can plan and conduct an investigation to determine the effects of placing objects made of different materials in the path of a beam of light.

### NEXT GENERATION SCIENCE STANDARDS CONNECTION

1 – Waves: Light and Sound

