



MYSTERY CUBES

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 while doing 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

- 2 Ice Cubes
- 2 Transparent Drinking Glasses
- Water
- Isopropyl Alcohol

INSTRUCTIONS

STEP 1: Fill one of the transparent drinking glasses half the way with water. Describe and classify the water by its observable properties.

STEP 2: Fill the other transparent drinking glasses half the way with isopropyl alcohol. Describe and classify the isopropyl alcohol by its observable properties.

STEP 3: Drop one ice cue into the glass of water and the other ice cube into the glass of isopropyl alcohol. What happens? Describe and classify the ice by its observable properties.

EXPLANATION

The ice floats in the water and sinks in the isopropyl alcohol. The reason, the ice is less dense than water and more dense than isopropyl alcohol.



SCIENCE

BACKGROUND

Matter is anything that has mass and takes up space. Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. Measurements of a variety of properties can be used to identify matter. Different properties are suited to different purposes. Density is used to describe how much space an object or substance takes up in relation to the amount of matter in that object or substance.

I CAN STATEMENTS

- ✓ I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter | Patterns