



BOUNCING BOO BUBBLES

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

- [Rubbermaid MixerMate Clear 2qt Bottle w/ Chili Red Lid](#)
- [1/2" Vinyl Tube](#)
- Dishwashing Liquid
- Warm Water
- Dry Ice
- Thermal Gloves
- [Fuzzy Glove](#)
- Ruler

INSTRUCTIONS

STEP 1: Attach the one-half inch vinyl tube to the Rubbermaid MixerMate clear 2qt bottle chili red lid.

STEP 2: Pour warm water into the Rubbermaid MixerMate clear 2qt bottle, add a few pieces of dry ice, and then secure the chili red lid onto the Rubbermaid MixerMate clear 2qt bottle. Describe and classify the dry ice by using its observable properties.

STEP 3: Place the fuzzy glove on your hand, put the end of the one-half inch vinyl tube into the dishwashing liquid, and hold the one-half inch vinyl tube over your hand, allowing the bubbles to fall on the fuzzy glove. Pop the bubbles and observe. Describe and classify the dishwashing liquid by using its observable properties.

STEP 4: Using the ruler, make observations and measurements of the bubbles, to identify the materials, which make up the bubbles, based on their properties.

EXPLANATION

When dry ice is placed into the warm water a ghost or a cloud forms. Dry ice is frozen carbon dioxide gas and is -109.3°F . As dry ice breaks down it turns directly into carbon dioxide gas. This process is called sublimation. The bubbles are filled with a ghost or a cloud, which is created by the dry ice sublimating. When you "pop" the bubble, the cloud rushes out, which looks like a ghost.



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.

I CAN STATEMENTS

- ✓ I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- ✓ I can make observations and measurements to identify materials based on their properties.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter

5 – Structure and Properties of Matter

