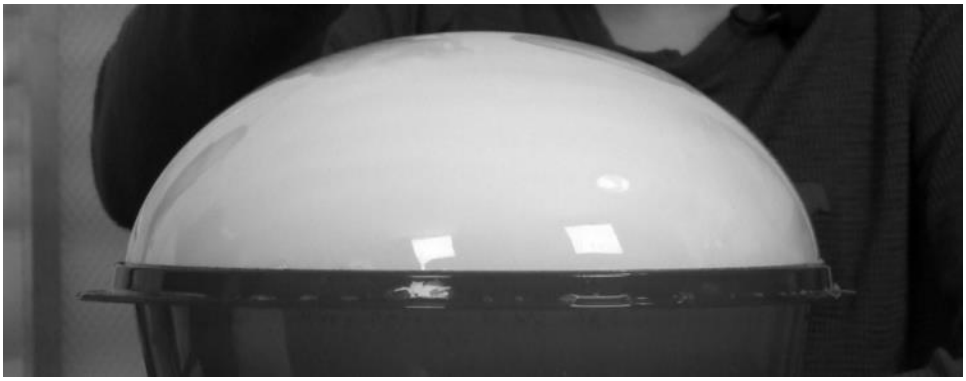

DRY ICE CRYSTAL BALL BUBBLE

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

- Dishwashing Liquid
- Warm Water
- Dry Ice
- Thermal Gloves
- Large Bowl
- Tick Shoelace
- Ruler

INSTRUCTIONS

STEP 1: Soak the thick shoelace in dishwashing liquid. Describe and classify the dishwashing liquid by its observable properties.
STEP 2: Fill the large bowl half of the way with warm water. Describe and classify the water by its observable properties.
STEP 3: Using the thermal gloves, place a few pieces of dry ice into the warm water. Describe and classify the dry ice by its observable properties.
STEP 4: Remove the thick shoelace from the dishwashing liquid and pull it across the top of the large bowl, so a bubble forms on top of the large bowl. Allow the bubble to expand. Describe and classify the bubble by its observable properties.
STEP 5: Using the ruler, make observations and measurements of the bubble, to identify the materials, which make up the bubble, based on their properties.

EXPLANATION

When the dry ice is placed into the warm water 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. When matter goes from a solid to a gas, it's called sublimation. The bubble is filled with the cloud, which is created by the dry ice sublimating. When the bubble pops, the cloud escapes.

Hooked on Science
WWW.HOOKEDONSCIENCE.ORG

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