

A Bowl of Bubbles



10 minutes

What You Will Do

Illustrate sublimation.

Get it Together

- ◆ Chunk of dry ice
- ◆ Clear bowl or large glass
- ◆ Soap and bubble wand

Procedure

1. Place the dry ice in the bowl and allow it to completely evaporate.
2. Blow a few soap bubbles and allow them to settle in the bottom of the bowl.



A Closer Look

The bubbles seem to float in the bowl. Dry ice is frozen carbon dioxide. Instead of melting to a liquid, it changes directly from a solid to a gas. This is called sublimation. The dry ice sublimed in the bowl and formed a denser layer of carbon dioxide gas at the bottom of the bowl. When the soap bubbles landed on the layer of carbon dioxide gas, it seemed to form an invisible cushion. The carbon dioxide gas sits in the bottom of the bowl because it is more dense than the air around it.

Attention!

Do not touch the dry ice with your hand—it will cause severe burns. Do this activity only under adult supervision.

Clean Up

Flush the dry ice down the drain with water.