

Skill Builder 2: Solid, Liquid, Gas

Andy Says....

Food can be solid or liquid. Some foods such as milk can be converted into solid butter or ice cream. These treats are the result of changes in solids, liquids, and gases.



DISCOVER

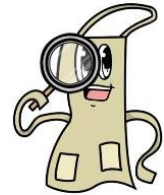


SKILLS CHECKLIST

- Identify the different phases of matter
- Explain why matter changes states
- Describe freezing and melting points

Important Words

Watch for these important words throughout this Skill Builder: **Solid, Liquid, Gas**
Freezing Point



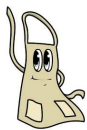
Dream it!

What items in this room are a solid, a liquid or a gas? Water can be all three. In this activity you will explore how this occurs.

The Amazing Water Experiment!

Ingredients

Zip lock bag
ice cubes
antacid tablets



Directions

1. Place a handful of ice cubes in the zip lock bag and seal it.
2. Using your hands or other methods melt the ice to a liquid state. How long did this take?
3. Add 2 antacid tablets to the bag and seal it. Observe what happens. What does the gas do?
4. Continue to add antacid tablets to the bag. See how many you can add until the bag explodes. What would happen if you used warm water instead of cold.

Do it!

Ice Cream in a Bag

Ingredients and Materials (Yields: 3-4 servings)

1/2 cup (125 mL) sugar
1 cup (250 mL) half and half cream
1 cup (250 mL) whole milk
1/2 tsp (2.5 mL) vanilla extract
1/2 cup (125 mL) coarse salt
Enough ice to fill large Zip lock bag half full
1 large Zip lock bag
1 medium Zip lock bag
mittens

Directions

1. Mix sugar, half and half cream, milk, and vanilla in medium Zip lock bag.
2. Tightly seal the bag and tape over the opening with duct tape.
3. Fill the large Zip lock bag half full with ice. Add salt.
4. Place the small bag in the ice mixture inside the large bag so that it is surrounded by ice. Tightly seal the large bag.
5. Wearing mittens, shake the bag vigorously for 5 minutes.
6. Remove the small bag and enjoy!

The cream freezes because
