1. You saw some cookie dough and a cookie. What is one main difference between them?

The cookie dough is a lot softer.

2. If you look very closely at the inside of a cookie, what do you notice?

On the inside of the cookie, there are a lot of tiny holes.

3. Your teacher added room-temperature water to baking powder. What did you observe when the water mixed with the baking powder?

There was bubbling.



ACTIVITY

Question to investigate:

Does baking powder make more bubbles when the water is hot or when it is cold?

Materials

- 2 cups with ½ teaspoon baking powder
- Cup with 1 Tablespoon hot water (plus 1 drop detergent solution)
- Cup with 1 Tablespoon ice water (plus 1 drop detergent solution)

Procedure

- 1. At the same time, you and your partner pour all of the cold water into one of the baking powder cups and all of the hot water into the other baking powder.
- Total Water Baking Powder
- 4. You put baking powder in hot and in cold water.

In hot water, the baking powder makes bubbles quickly.

In cold water, the baking powder makes bubbles much more slowly than in hot water.

5. There are little holes and spaces on the inside of the cookie. When the cookie is baking, what causes these little holes?

The little holes in the cookie are caused by the reaction in the cookie from the baking powder and liquids that makes bubbles of gas.