Safety: Wear safety goggles, and be sure to follow all safety instructions given by your teacher. Wash your hands after completing the activity.

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

________________________________________________________________________

________________________________________________________________________


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

On the inside of the cookie, there are __________________________

________________________________________________________________________

________________________________________________________________________

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

________________________________________________________________________

________________________________________________________________________
**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 should pour all of the cold water into one of the baking powder cups and all of the hot water into the other baking powder cup.

4. You put baking powder in hot and in cold water.

   In hot water, the baking powder
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

   In cold water, the baking powder
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

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
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________