

Name \_\_\_\_\_

## *EGG-SPLOSION*

**Materials:** Egg shell      mossy zinc      Acid      reaction bottle  
Tape      2 L pop top      safety shield      goggles      matches

**Safety:** Care should be taken when working with HCl. Goggles must be worn at all times. Wash hands with soap and water thoroughly after you have cleaned your lab station.

**Disposal:** Return the reaction bottle to the teacher when finished. **WASH HANDS**

**Procedure:**

1. One person obtains a bottle of acid and matches.
2. Another person gets a piece of tape, pop top, and zinc.
3. Adjust your egg so it rests on top of the reaction bottle.
4. Place a small piece of tape over the top hole of your egg.
5. Drop the zinc in the reaction bottle and place the top back on.
6. Allow the reaction to occur for about 10 seconds then place your egg on top of the bottle.
7. Let the egg stay on the bottle for about 2 minutes.
8. Place the egg on the pop-top.
9. Light a match, remove the tape and hold the match briefly over the hole.
10. Clean up all pieces and place in the garbage. Return the reaction bottle to the teacher
11. Complete the Observations and Conclusions below and turn in your own sheet.

**Observations & Conclusions:**

1. Did a reaction take place in the bottle? How do you know?
2. What are the two reactants in bottle? \_\_\_\_\_ & \_\_\_\_\_
3. What type of reaction did you create in the bottle? \_\_\_\_\_
4. Write a complete balance chemical equation, with states of matter symbolized, for the reaction in the bottle.
5. What is the gas produced from the reaction above? \_\_\_\_\_
6. Suppose you placed a piece of zinc in water. Write the reactant side of the equation for this reaction.
7. Predict what the products will be. If no reaction would occur write N.R. and explain why no reaction would occur.
8. Write a general rule about the reactivity of zinc with an acid and with water>
9. Write a complete balanced chemical equation for the reaction that occurred inside the egg. Remember you had to light a match for the reaction to take place.
10. Did you have fun today? Why or Why Not?