

Name _____ Hour _____ Date _____

Mass Conservation

Prediction: What will happen to the baking soda when you pour vinegar on it?

Data:

1. What is the Initial mass) of the bag and substances?
2. What is the Ending mass of the bag and substances?

Observation:

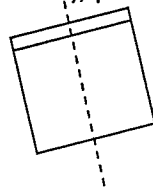
1. What do you think has happened to the mass?
2. Did it change during this reaction?
3. How did it change, heavier or lighter?
4. What would happen if we added more vinegar to the zip lock bag?
5. What would happen if we added more baking soda to the zip lock bag?
6. What if the zip lock bag was bigger?
7. What happened to the match in the empty bag?
8. What happened to the match that was placed in the bag where the reaction occurred?
Why?

Analysis:

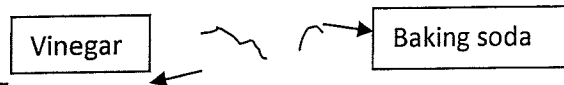
9. What two substances did we mix to create a reaction?
 1. _____
 2. _____
10. What type of reaction did we create?
Physical ☐ Chemical ☐ Reversible ☐ Not reversible ☐
11. What would happen to a container if you created this reaction in a container with a lid?
12. Explain why the bag weighed the same before and after the reaction.

Procedure:

1. At your table have someone hold open the zip lock bag and someone else pour the vinegar (black film canister) into one side of the bag and tie off with rubber band
2. Keeping the vinegar separate from the baking soda (white film canister), pour the baking soda into the other side of the bag and tie off with rubber band.



3. What is the Initial mass) of the bag and substances?



4. Remove all the air (as much as possible) and seal bag.
5. Un-tie the vinegar and untie the baking soda.
6. Shake the bag and watch the substances mix.
7. Weigh the bag once the reaction is complete **DO NOT OPEN THE BAG!**

8. What is the Ending mass of the bag and substances?

5g Baking Soda NaHCO_3 (sodium Bicarbonate)
5mL Vinegar CH_3COOH