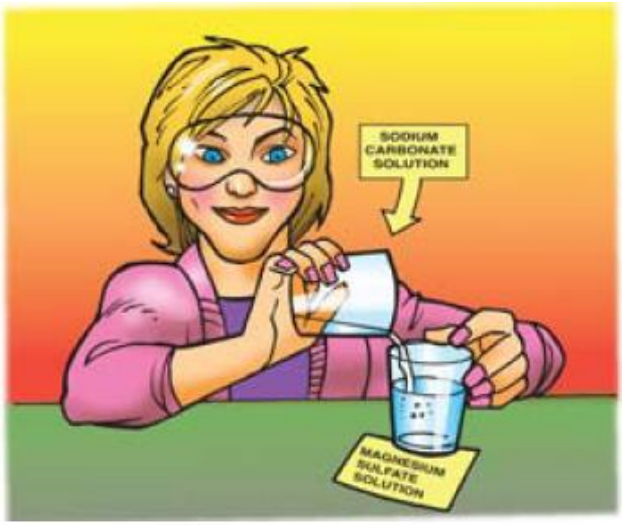
Name _____ Date _____ Period _____ Page _____

Forming A Precipitate - Activity Sheet

Objectives:

1. To be able to explain that for a chemical reaction to take place, the reactants interact, bonds between certain atoms in the reactants are broken, the atoms rearrange, and new bonds between the atoms are formed to make products.

2. To be able to explain that this definition also applies to the production of a solid called a _____.



DEMONSTRATION

1. Your teacher combined two clear colorless solutions. One was sodium carbonate solution and the other was a magnesium sulfate solution. Do you think a chemical reaction occurred when these two substances were combined?

Why or why not?

2. What is a precipitate?

ACTIVITY

Question to investigate

_____

_____

Procedure

1. Use masking tape and a pen to label 2 plastic cups ***Baking Soda Solution*** and ***Calcium Chloride Solution.***

2. Use a graduated cylinder to add 20 mL of water to each cup.

3. Add 2 g (about 1/2 teaspoon) of calcium chloride to the water in its labeled cup. Swirl until as much of the calcium dissolves as possible.

4. Add 2 g (about 1/2 teaspoon) of baking soda to the water in its labeled cup. Swirl until as much of the baking soda dissolves as possible. Some undissolved baking soda may remain in the bottom of the cup.

5. Carefully pour the baking soda solution into the calcium chloride solution. Try not to pour in any undissolved baking soda. Observe.

3. What do you observe when you combine the baking soda solution and calcium chloride solution?

4. How do you know that a chemical reaction occurs when you combine baking soda solution and calcium chloride solution?

ACTIVITY

Question to investigate
Can you separate the calcium carbonate from the rest of the products?

Materials for Each Student

- Coffee filter or paper towel
- Tall clear plastic cup

Procedure

1. Use a large enough coffee filter (or paper towel) so that you can push it about 1/3 of the way into the cup and still have enough left to hold it around the outside of the cup.

2. While holding the coffee filter in place, pour the products into the center of the coffee filter.

3. Allow the liquid to drip through the filter. This may take a while.

4. Set the precipitate aside and allow the water to evaporate.

6. Is filtering the calcium carbonate and allowing the water to evaporate a chemical change or a physical change?

Why?