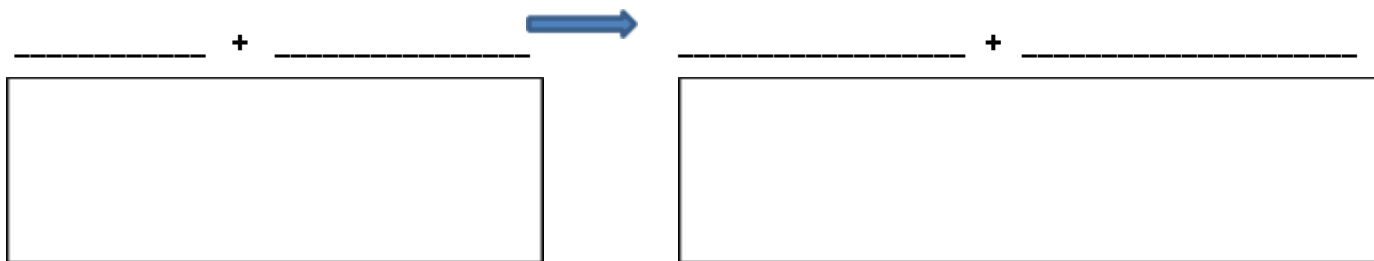


Single Replacement Inquiry Lab

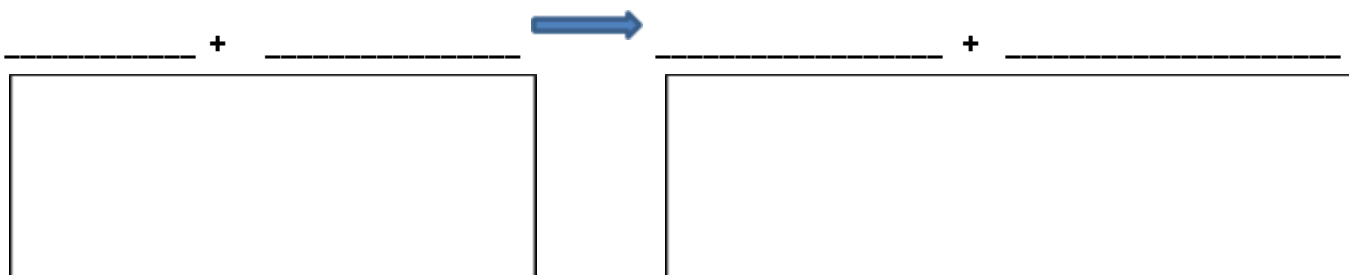
Name _____ Date _____ Period _____

Reaction Number | Write a balanced equation with physical state symbols and descriptions (color, state, descriptive word) beneath each substance.

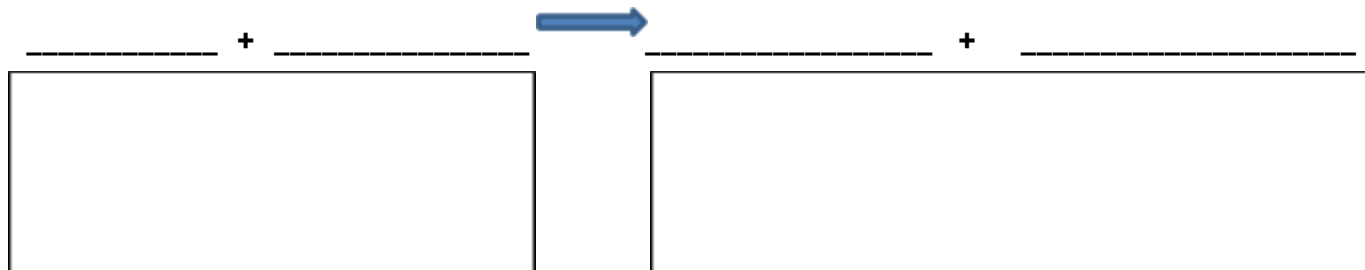
1



2



3



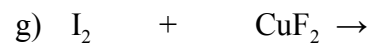
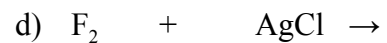
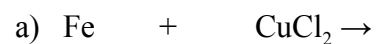
4



Post Lab Questions

1. Looking at the reactivity chart on page 7 of your reference table and your data, write a rule for determining whether or not single replacement reactions will occur.

2. For the following reactions: (1) identify the type (2) predict the products for reactions that will occur and write “no reaction” for those that will not occur and (3) balance reactions that did occur.



Directions for completion of the data and observations table.

1. Write formulas for reactants with state of matter
2. Describe each reactant
3. Perform reaction in the lab (directions of each reaction below)
4. Describe each product
5. Write formulas for products

<p><u>Reaction 1 – Copper (II) sulfate reacts with zinc</u> Procedure: Wear goggles at all times!</p> <ol style="list-style-type: none">1. Place a small piece of zinc in a clean well.2. Put 8-10 drops of copper (II) sulfate in a well.3. Set up other reactions then come back and observe.4. Observe.	<p><u>Reaction 3- sodium chloride reacts with tin (II)</u> Procedure: Wear goggles at all times!</p> <ol style="list-style-type: none">1. Place a small amount of tin metal into a clean well.2. Put 8-10 drops of NaCl onto the tin.3. Set up other reactions then come back and observe.4. Observe.
<p><u>Reaction 2- aluminum reacts with copper(II) chloride</u> Procedure: Wear goggles at all times!</p> <ol style="list-style-type: none">1. Place a small piece of aluminum metal into a clean well.2. Put 8-10 drops of CuCl₂ onto the aluminum.3. Wait and observe.	<p><u>Reaction 4- hydrochloric acid reacts with Zinc</u> Procedure: Wear goggles at all times!</p> <ol style="list-style-type: none">1. Fill a test tube about 1/3 full with 6.0M HCl2. Place a piece of Zinc metal in the test tube.3. Light a match and hold it over the mouth of the test tube.4. Observe.