

Lab: Physical and Chemical Changes

In this lab you will visit 8 stations and follow the instructions at each station. Complete the questions on this worksheet and hand it in at the end of the lab.

The starting materials in a chemical reaction are called REACTANTS and the end materials are called PRODUCTS.

STATION #1 – Magnesium and Hydrochloric Acid

List 3 physical properties of the reactants, zinc and hydrochloric acid.

Magnesium

Hydrochloric acid

1.

1.

2.

2.

3.

3.

What did you observe when you added the hydrochloric acid to the magnesium?

Is this a physical or chemical change?

What is your evidence?

STATION #2 – Silver Nitrate and Copper

List 3 physical properties of the reactants, silver nitrate and copper.

Silver Nitrate

Copper

1.

1.

2.

2.

3.

3.

What did you observe when you added the copper to the silver nitrate?

Is this a physical or chemical change?

What is your evidence?

STATION #3 – Bimetallic Strips and heat

List 3 physical properties of the bimetallic strips.

- 1.
- 2.
- 3.

What did you observe when you heated the bimetallic strip in the Bunsen burner?

What did you observe when it cooled down?

Is this a physical or chemical change?

What is your evidence?

STATION #4 – Copper Sulfate and Iron (steel wool)

List 3 physical properties of the reactants, copper sulfate and iron (steel wool).

Copper Sulfate

Iron (steel wool)

- | | |
|----|----|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |

What did you observe when you added the iron to the copper sulfate?

Is this a physical or chemical change?

What is your evidence?

STATION #5 – Salt and Water

List 3 physical properties of the reactants, salt and water.

Salt

Water

1.

1.

2.

2.

3.

3.

What did you observe when you added the crystals to the water?

What did you observe when you heated the solution?

Is this a physical or chemical change?

What is your evidence?

STATION #6 – Magnesium and Air

List 3 physical properties of the reactants, magnesium and air.

Magnesium

Air

1.

1.

2.

2.

3.

3.

What did you observe when you placed the magnesium in the flame?

Is this a physical or chemical change?

What is your evidence?

STATION #7 – Silver Nitrate and Potassium Iodide

List 3 physical properties of the reactants, silver nitrate and copper.

Silver Nitrate

- 1.
- 2.
- 3.

Potassium Iodide

- 1.
- 2.
- 3.

What did you observe when you added the potassium iodide to the silver nitrate?

Is this a physical or chemical change?

What is your evidence?

STATION #8 – Milk and Vinegar

List 3 physical properties of the reactants, silver nitrate and copper.

Milk

- 1.
- 2.
- 3.

Vinegar

- 1.
- 2.
- 3.

What did you observe when you added vinegar to milk?

Is this a physical or chemical change?

What is your evidence?