**Grade 9 Science: Activity 1-6 Identifying Physical and Chemical Changes**

If you were not here for the lab OR you did not complete the lab, please check out the following Youtube videos to help you!

**Experiment #A – Sugar and Iron Filings.**

Step 1: Write down your hypothesis. What do you think will happen?

Step 2: In your Observations chart, write down the physical properties of sugar and iron. (Google image these items if you need)

Step 3: Watch the video:

Step 4: Record your observations in the Observation chart.

Step 5: Is it a chemical or physical reaction?

**Experiment #B – Copper (II) Sulfate Solution and Steel Wool**.

Step 1: Write down your hypothesis. What do you think will happen?

Step 2: In your Observations chart, write down the physical properties of copper (II) sulfate and the steel wool. (Google image these or watch the start of the video and pause it).

Step 3: Watch the video: <http://www.youtube.com/watch?v=1_weAXeEL1>M

Step 4: Record your observations in the Observation chart.

Step 5: Is it a chemical or physical reaction?

**Experiment #C – Paper**

Step 1: Write down your hypothesis. What do you think will happen?

Step 2: In your Observations chart, write down the physical properties of paper.

Step 3: Cut paper into 8 pieces with scissors.

Step 4: Record your observations in the Observation chart.

Step 5: Is it a chemical or physical reaction?

**Experiment #D – Magnesium ribbon and Dilute hydrochloric acid**

Step 1: Write down your hypothesis. What do you think will happen?

Step 2: In your Observations chart, write down the physical properties of magnesium ribbon and dilute hydrochloric acid. (Start video if you need or google pictures of them).

Step 3: Watch the video: <http://www.youtube.com/watch?v=ghVpyQbzYpM>

Step 4: Record your observations in the Observation chart.

Step 5: Is it a chemical or physical reaction?

**Experiment #E – Sodium Chromate and Lead (II) Nitrate**

Step 1: Write down your hypothesis. What do you think will happen?

Step 2: In your Observations chart, write down the physical properties of sodium chromate and lead (II) nitrate (Start video if you need to or google pictures of them).

Step 3: Watch the video: http://www.youtube.com/watch?v=Jt0eGtHHV04

Step 4: Record your observations in the Observation chart.

Step 5: Is it a chemical or physical reaction?

**Experiment #F – Water and Ammonium chloride**

Step 1: Write down your hypothesis. What do you think will happen?

Step 2: In your Observations chart, write down the physical properties of water and ammonium chloride (Start video if you need to or Google pictures of them).

Step 3: Watch the video: http://www.youtube.com/watch?v=0GjJ3LiD-zU

Step 4: Record your observations in the Observation chart.

Step 5: Is it a chemical or physical reaction?

Complete the Questions, Conclusions and Application sections of the lab and hand in.