LAB – Part One Name _____

Element's Colorful Clues Flame Test

Compound	Flame Color
Sodium Chloride (NaCl)	
Potassium Chloride (KCl)	
Strontium Chloride (SrCl2)	
Calcium Chloride (CaCl2)	
Copper Chloride (CuCl2)	
Copper Sulfate (CuSO4)	

Questions

#1 – Is the element Chlorine (Cl) responsible for the color produced in each of the flames? Why or why not?

#2 – Why is it necessary to make sure you clean off your nichrome wire loop after each sample?

#3 – Was the color that the flame produced similar to the color of the sample before you put it in the flame?

#4 – Using the periodic table, is there a pattern between the location of the elements and their color? If so, how?

LAB - Part II

ELEMENTS MINI LAB

Purpose: to identify the elements in a chemical reaction and to explain what happens during a reaction in terms of elements.

Materials: balance, graduated cylinder, flask, aluminum pans, candle, match, strike plate, baking soda, vinegar

Procedure:

1. Pour 20 ml of vinegar into a graduated cylinder. Pour this into a flask.
2. Mass about 3 grams of baking soda in an aluminum pan.
3. Light the candle.
4. Pour the baking soda into the flask. Wait a few moments. A gas will form in the flask.
5. Try putting out the candle flame with the gas contained in the flask.
6. Clean the lab station. Return equipment to the cart.
7. Begin the lab report.

Questions:

1. After you mixed the two ingredients, did a gas form in the flask? How do you know?
2. Was the gas heavier than air? How do you know?
3. Was the gas flammable? How do you know?
4. Did a chemical change take place? How do you know?
5. Make a list of all the elements involved in this reaction.

Lab Report: Include; names, hour, title, purpose, answers to questions.