

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Salt Flame Test

**Problem Statement:**

**Background Information:**

Element	Color before adding energy	Flame color
LiCl		
CuCl <sub>2</sub>		
CaCl <sub>2</sub>		
KCl		
CoCl <sub>2</sub>		
SrCl <sub>2</sub>		
Borax		
NaCl		
Unknown 1		
Unknown 2		
Unknown 3		

**Procedures:**

1. Obtain Sample (one at a time)
2. Dip wire into the solution
3. Place solution end of paper clip into the flame
4. Record the color and clean end of wire
5. Repeat steps 1-4 for the remaining samples

**Diagram:**

**Material List:**

1. Safety Goggles
2. Bunsen Burner
3. Wire with cork
4. Samples of elements

## Conclusion Questions:

1. What is one way to identify an unknown salt or powder?
2. What type of property causes a salt to burn a different color?
3. How could the color of salt burning relate to fireworks, pottery, and colored magazines?
4. What are the names of the 3 unknown substances?  
  
#1: \_\_\_\_\_  
  
#2: \_\_\_\_\_  
  
#3 \_\_\_\_\_
5. What do you think would happen if you had 2 different salts mixed together and you performed a flame test?