

# Lab: Flame Tests

Name: \_\_\_\_\_

Block: \_\_\_\_\_

Date: \_\_\_\_\_

Procedure	Measurement
1. When certain compounds are heated in a flame, they emit a distinctive color. The color of the light can be used to identify the compound.	
2. Get a plastic well plate with the 6 samples. NOTE: Each of the samples is a “chloride” – the metal ion below plus the chloride ion. <ol style="list-style-type: none"> <li>a. barium</li> <li>b. strontium</li> <li>c. sodium</li> <li>d. potassium</li> <li>e. copper</li> <li>f. calcium</li> </ol>	
3. Set up a Bunsen burner flame. What is the hottest part of the flame?	
4. Using a wash bottle, squirt out a little bit of distilled water into an empty small beaker.	
5. Dip a cotton swab into distilled water. Dip the moistened swab into the first sample.	
6. Take the Q-tip with the crystal sample and put it into the hottest part of the flame.	
7. Record the color of the flame for each sample. Place the used Q-tips into the metal pan. After you have tested all the samples (including the unknown) and the Q-tips are completely cooled, empty out the metal pan into the trash. Return the empty pan to your lab bench.	
a. barium	
b. strontium	
c. sodium	
d. potassium	
e. copper	
f. calcium	
8. Get an UNKNOWN sample.  Write the letter of your unknown here: _____	
9. Test your unknown sample as above. What is the identity of your unknown? How do you know?	