

FLAME TEST LAB INSTRUCTIONS

Procedures

Follow the instructions below to complete your Flame Test Lab.

1. Place a few crystals of each metallic salt in a well of the spot plate. Record the positions of all the metallic salts.
2. Light the Bunsen burner. Adjust the burner to obtain a non-luminous two-part blue flame no more than 3 inches tall. Avoid a yellow flame.
3. Dip a cotton swab into the distilled water, then dab one of the metallic salts so that the crystals cling to the cotton swab.
4. Hold the cotton swab so the crystals are in the hottest part of the flame briefly then remove it several times. Observe with and without the cobalt glass and record your observations. Some of the flames may be similar in color, so try and use very descriptive words. The goal is to excite the electrons in the metallic salt. Avoid keeping the cotton swab in the flame and burning the cotton swab.
5. Place the used swab in its corresponding well. You may want to test it again.
6. Repeat with each of the remaining known metallic salts.
7. Obtain a sample of the unknown salt.
8. Perform a flame test with the unknown salt with and without the cobalt glass. Record your observations.
9. Dispose and/or clean materials as directed.

