

FLAME TEST LAB SHEET

Draw your well plate in the box below and label where you placed each metallic salt. Record your observations from the flame test in the table.



Metallic Salt	Observations	Observations with Cobalt Glass

Post-Lab Questions

1. Which substances were more difficult to distinguish from one another? Explain why.
2. Identify two things that groups may have done incorrectly that would have caused them to get different results from the rest of the class. Be specific about what might have been done and the effect it would have on the results.
3. How could you tell the following three white artificial sweetener powders apart using flame tests? You have: Equal[®] ($C_{14}H_{18}N_2O_5$, a non-ionic compound that doesn't produce a metal ion), Ace-K ($KC_3H_4NO_4S$), and Sweet 'N Low ($Ca(C_7H_4NO_3S)_2$).
4. What do you think the unknown salt is? State your reasoning.