

Matter and Minerals
Fall 2005

Chemistry Lab
Week 10

We will meet in Lab II, 1234 on Thursday of Week 10, from 9 a.m. – 12 noon

“Flame Tests”

Prepared & Presented by
Dr. Dharshi Bopegedera

Flame Tests

Please do this lab in groups of 2. Your group is provided with a Bunsen burner and the following ionic compounds.

- Light the Bunsen burner, adjust the amount of air to get a blue flame and use it for all flame tests.
- Clean the nichrome wire by
 - Dip in conc. HCl
 - Burn in the blue flame
 - Dip in alcohol
 - Burn in the blue flame
- Take a small amount of the known ionic compound to the clean nichrome wire and hold it to the blue flame of the Bunsen burner. Record the color of the flame (naked eye observation) as descriptively as possible.
- Continue in this manner until you are done with all the known ionic compounds.
Clean the nichrome wire each time you start a new compound.

Tabulate your data as follows.

name	formula	cation	anion	color of flame	inference

- Based on your observations, what conclusions can you draw about the known ionic compounds.
- Now repeat the flame tests with unknown compounds. **Clean the nichrome wire each time you start a new compound.** Tabulate your data as follows.

label	color of flame	inference

- By comparing your observations of unknown compounds with those of known compounds, deduce the ion(s) present in the unknown compounds.