Experiment 6: Atomic Fingerprints

Procedure A: Continuous Spectrum: White Light

1. The hand spectroscope has an end that you look into, with your eye...

...and an end that points toward a light source.

The light sources available for continuous spectrum, white light, are:

- Overhead Projector
- Incandescent Light Bulb
- Sunlight
Procedure B-C: Line Spectrum – Hydrogen, Helium, Neon, Argon, Krypton, Mercury

*The Gas Discharge Tube is shown along with a set of Gas Spectral Tubes.*
Procedure D: Identifying Unknown Elements in a Fluorescent Light

You’ll use the Fluorescent Lights right above your head... or, the instructor may set up a specific lamp to observe.

For coloring spectral lines that you see when looking into the spectrosopes, you may use a set of colored pencils, or markers like these: