

Identify the Spectrum Activity

Before beginning this activity read the information located at:

Wikipedia Absorption Spectrum, http://en.wikipedia.org/wiki/Absorption_spectrum

Wikipedia Emission Spectrum, http://en.wikipedia.org/wiki/Emission_spectrum

In this activity you will compare as many of the spectrum tube spectra as possible with those in *The Elements Spectra* software on the computer in our classroom.

Questions

1. Are you observing emission or absorption spectra? How do you know?
2. Which spectrum is not available in *The Elements Spectra* software? Why not?
3. What unit does the software use for wavelength? Convert this unit to meters and show your work.
4. Why do both the spectroscopes and *The Elements Spectra* software only include wavelengths between $4,000 \text{ \AA}$ and $7,000 \text{ \AA}$?