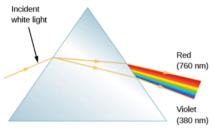
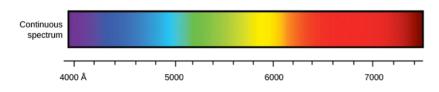
Spectroscopy

A prism disperses light (sends different wavelengths in different directions)

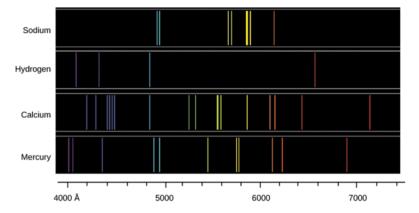


This allows us to measure how much light there is at each wavelength (spectroscopy)

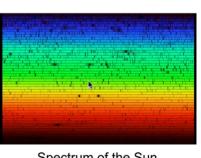
Hot solids and dense gases emit a continuous spectrum (bright at every wavelength)



Hot thin gases emit an emission spectrum — bright "lines" only at specific wavelengths, that depend on the element(s) comprising the gas



A cool gas sitting in front of a hot source exhibits an absorption spectrum — like a continuous spectrum, but with dark "lines" at specific wavelengths, that depend on the element(s) comprising the source



Spectrum of the Sun