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1. The general properties of a star are; brightness, temperature, and mass.
2. The Herzsprung-Russel diagram (H-R diagram) plots the luminosity (brightness) and temperature of stars. Most stars fall under the H-R diagram spectrum.
3. The atomic number refers to the number of protons. The atomic mass number refers to the number of protons plus the number of neutrons. Isotopes have the same number of protons, but different numbers of neutrons.
4. Wavelengths at which an atom emits and absorbs radiation form unique spectral fingerprints for each atom. The spectral lines that were shown in the lecture can help determine a star's temperature, composition, density, pressure, and much more information.
5. Molecules have other additional energy levels, since they can both rotate and vibrate. Due to the large numbers of vibrational and rotational energy levels, it can make the spectra of molecules very complicated.