

Spectral Classification Glossary

absorption line spectrum	A spectrum with dark lines superimposed on a continuous spectrum.
Balmer line	An emission or absorption line in the spectrum of hydrogen caused by an electron transition between the second and higher energy levels.
calcium K line	One of the two absorption lines of singly ionized calcium found in the spectra of many stars.
continuous spectrum	A spectrum of light over a range of wavelengths without any spectral lines and produced by a hot solid or a hot gas under pressure.
emission spectrum	A spectrum that contains bright lines against a darker background and produced by electron transitions from higher energy levels down to lower ones.
energy level	In an atom, a location or orbital above the ground state in which an electron is found when it gains a specific amount of energy.
excited state	A state of an atom, ion, or molecule with a higher energy than the ground state.
ionization	The process by which a neutral atom becomes an electrically charged ion through the loss or gain of electrons.
luminosity class	A classification broadly indicating whether a star is a main sequence star, a giant, or a supergiant, and indicated by a Roman Numeral added after the spectral class. A range of wavelengths in the spectrum of a star that are absorbed indicating the presence of a molecular species of some kind.
molecular bands	
spectral class	A designation assigned to a star based on characteristics determined by its temperature.
spectral line	In a spectrum, an absorption or emission feature that is at a particular wavelength.
spectral type	A term used interchangeably with the term spectral class.
spectroscope	An instrument for studying the components of an object's spectrum.
spectrum	The result of dispersing a beam of electromagnetic radiation so that components with different wavelengths are separated for viewing and measurement.
wavelength	The distance between two successive wave crests of any periodic wave.