

The HR Diagram Glossary

term	definition
brown dwarf	A star-like object that is not massive enough to sustain hydrogen fusion in its core.
apparent brightness	The flux of a star's light arriving at the Earth.
evolutionary track	The path on an H-R diagram followed by an object as it changes characteristics while developing into a star.
giant	A large, cool star of high luminosity that sit above and to the right of the middle of the main sequence.
absolute magnitude	The apparent magnitude that a star would have if it were at a distance of 10 parsecs.
distance modulus	The difference between the apparent and absolute magnitudes of an object.
Hertzsprung-Russell diagram	A plot of the absolute magnitude of stars against their surface spectral type. Now also a plot of luminosity as a function of temperature.
supergiant	A very large, extremely luminous star of luminosity class I.
apparent magnitude	A measure of the brightness of a star as measured from Earth.
white dwarf	A low-mass star that has exhausted all its thermonuclear fuel and contracted to a size roughly equal to the size of the Earth.
luminosity	The rate at which electromagnetic radiation is emitted from a star or other object.
parsec	A unit of distance such that 1 AU subtends an angle of 1 second of arc; 3.26 light-
stellar parallax	The apparent displacement of a star due to the Earth's motion around the Sun.
main-sequence star	A star that derives its energy from core hydrogen fusion.
ZAMS	A star that has just become a member of the main sequence.
spectral class	A classification of stars according to the appearance of their spectra.
luminosity class	A classification of a star of a given spectral type according to its luminosity.