

Vocabulary



absolute magnitude the actual brightness of a star

A very bright star that is far from Earth may appear dimmer than a less bright star that is closer to Earth. Absolute magnitude describes how bright a star would be if all stars were the same distance from Earth.

apparent magnitude the brightness of a star as viewed from Earth

Apparent magnitude describes how bright a star is in Earth's night sky. The brightest stars have the lowest numbers, including negative numbers. A star with an apparent magnitude of 2 appears dimmer than a star with an apparent magnitude of 1. A star with an apparent magnitude of -0.8 is brighter than one with an apparent magnitude of 0. The Sun's apparent magnitude is -26.5 .

Kelvin a temperature scale that begins at the coldest possible temperature, which is absolute zero, or 0 K

Scientists use the Kelvin scale for describing extreme temperatures, such as the temperatures of stars. On the Kelvin scale, 0 K equals -273°C . The degree symbol is not used with the Kelvin scale.

light-year the distance light travels in one year, or 9.5 trillion km (5.9 trillion miles)

Light travels at a speed of 300,000 km/s (186,000 mi/s). The distance to the next closest star, Centauri Proxima, is 4.2 light-years. That means it takes 4.2 years for light from that star to reach Earth. For comparison, it takes 8.5 minutes for light from the Sun to reach Earth. One light-year is equal to about 9.5 trillion km, or 63,000 AU.