

# BRIGHT STARS AND THE STARS CLOSEST TO EARTH

**LUMINOSITY:** the total brightness of a star or [galaxy](#).

## ABSOLUTE AND APPARENT MAGNITUDE

Rank	Star	Absolute Magnitude	Apparent Magnitude	Distance from Earth (light-years)
.	<a href="#">The Sun</a>	+4.8	-26.72	.
1	<a href="#">Sirius</a> (in Canis Major)	+1.4	-1.46	8.6
4	<a href="#">Arcturus</a> (in Boötes)	+0.2	-0.04	34
5	Vega (in Lyra)	+0.6	0.03	25
6	<a href="#">Capella</a> (in Auriga)	+0.4	+0.08	41
7	<a href="#">Rigel</a> (in Orion)	-8.1	+0.12	900
8	Procyon (in Canis Minor)	2.8	+0.38	11
10	<a href="#">Betelgeuse</a> (in Orion)	-7.2	+0.50	1,500
12	Altair (in Aquila)	+2.3	+0.77	17
13	Aldebaran (in Taurus)	-0.2	+0.85	65
16	Spica (in Virgo)		0.98	220
17	Pollux (in Gemini)		1.14	40
19	<a href="#">Deneb</a> (in Cygnus)	-7.2	+1.25	1,500
21	Regulus (in Leo)		+1.35	69

**Apparent magnitude** is a measure of the brightness of a celestial object as seen from Earth. The lower the number, the brighter the object. Negative numbers indicate extreme brightness. The full [moon](#) has an apparent magnitude of -12.6; the sun's is -26.8. We can see objects up to 6th magnitude without a telescope. Apparent magnitude is abbreviated m. This system of rating the brightness of celestial objects was developed by the Greek astronomer Hipparchus in 120 B.C.

**Absolute magnitude** is a measure of the inherent brightness of a celestial object. This scale is defined as the [apparent magnitude](#) a star would have if it were seen from a distance of 32.6 [light-years](#) (10 [parsecs](#)). The lower the number, the brighter the object. Negative numbers indicate extreme brightness.