

Chapter 27

Use with Section 3

ENRICHMENT

● Evolution of Stars

Classifying Stars

Use the H-R diagram in your textbook to classify each of the stars listed in the table as white dwarf, main sequence, giant, or supergiant stars. Also identify the color of the star based on its spectral class.

Spectral classifications	
Class	Color
O	blue
B	bluish-white
A	white
F	yellowish-white
G	yellow
K	orange
M	red

Star	Surface temperature, K	Absolute magnitude	Type of star	Spectral color
Hadar	21 000	-5		
Sirius A	10 400	+1.4		
Sirius B	10 700	+11.6		
Arcturus	4500	-0.3		
Antares	2900	-4.5		
Altair	8000	+2.2		
Ross	2800	+13.3		
Beta Pegasi	2000	-1.4		
Capella	5900	-0.7		
Bernard's	2600	+13.2		
Betelgeuse	2700	-5.6		
Mintaka	21 000	-5.1		