

Table A (Bright) and Table B (Nearby) Stars to plot on the blank H-R Diagram as an initial activity before plotting the variable stars listed in Table I on page 5 of the student variable star H-R diagram activity. Plot the bright stars as circles and the nearby stars as triangles, as in some cases a star is both bright and nearby and will basically be plotted in the same location.

Table A: Some of the Brightest Stars Visible from Earth

Star	Spectral Class	Absolute Magnitude
1. The Sun	G2	4.8
2. Sirius (α CMa A)	A0	1.8
3. Canopus (α Car)	A9	-5.5
4. Vega (α Lyr)	A0	0.6
5. Arcturus (α Boo)	K2	-0.1
6. α Cen A	G2	4.5
7. Rigel (β Ori)	B8	-6.7
8. Capella (α Aur A,B)	G6	-0.3
9. Achernar (α Eri)	B3	-2.8
10. Procyon (α CMi A)	F5	2.7
11. Agena (β Cen A,B)	B1	-5.5
12. Acrux (α Cru A)	B0	-3.3
13. Altair (α Aql)	A7	2.3
14. Spica (α Vir)	B1	-3.6
15. Aldebaran (α Tau A)	K5	-0.5
16. Becrux (β Cru)	B0	-4.0
17. Formalhaut (α Ps A)	A3	1.8
18. α Cen B	K1	5.6
19. Pollux (β Gem)	K0	1.2
20. Regulus (α Leo A)	B7	-0.6
21. Adhara (ϵ CMa A)	B2	-4.2
22. Shaula (λ Sco)	B1	-5.1
23. Bellatrix (γ Ori)	B2	-2.8
24. Castor (α Gem A,B)	A2	0.6
25. Alnath (β Tau)	B7	-1.4
26. Betelgeuse (α Ori)	M2	-7.1
27. Antares (α Sco)	M1	-5.2

* The absolute magnitudes of all stars except the Sun, Sirius (α CMa B), and Procyon (α CMi B) were calculated from parallax measurements and apparent magnitude (Hp) measurements taken from The European Space Agency, *et al.*, *The Hipparcos and Tycho Catalogues* (17 Vols.), Noordwijk, The Netherlands: ESA Publications Division, 1997. ISBN 92-9092-399-7 (Vols. 1-17).

Table B: Some of the Nearest Stars to Earth

Star	Spectral Class	Absolute Magnitude
1. The Sun	G2	4.8
2. α Cen C	M5	15.2
3. α Cen A	G2	4.5
4. α Cen B	K1	5.6
5. Barnard's star	M5	13.2
6. 70 Oph A	K0	5.6
7. Sirius A (α CMa A)	A0	1.8
8. V1216 Sgr	M4	13.0
9. ϵ Eri	K2	6.3
10. HIP 114046	M0	9.8
11. FI Vir	M4	13.4
12. V1803 Cyg	K5	7.7
13. Procyon (α CMi A)	F5	2.7
14. 61 Cyg B	K7	8.4
15. HIP 91772	M3	12.3
16. GX And	M1	10.4
17. HIP 91768	M3	11.2
18. ϵ Ind	K4	7.0
19. τ Cet	G8	5.8
20. YZ Cet	M4	14.1
21. Luyten's star	M3	11.9
22. Kapteyn's star	M1	11.0
23. AX Mic	K7	8.8
24. Kruger 60A	M3	11.6
25. V577 Mon	M4	12.9
26. Sirius (α CMa B)	A0	11.2
27. Procyon (α CMi B)	F0	13.0

* The absolute magnitudes of all stars except the Sun, Sirius (α CMa B), and Procyon (α CMi B) were calculated from parallax measurements and apparent magnitude (H_p) measurements taken from The European Space Agency, *et al.*, *The Hipparcos and Tycho Catalogues* (17 Vols.), Noordwijk, The Netherlands: ESA Publications Division, 1997. ISBN 92-9092-399-7 (Vols. 1-17).