

## THE HR DIAGRAM

### PLOTTING STARS

For the stars listed,

- ★ Assign a color to each LUMINOSITY CLASS (the Roman numeral ... include a key)
- ★ Plot them on the diagram with the color for its Luminosity Class (the Roman Numeral).<sup>30</sup>
- ★ After plotting all the stars, sketch in the lines of the 5 Luminosity Classes with their colors ... make smooth curves ... **NO DOT-TO-DOT!!** (you're too grown up for that!).<sup>5</sup>

	STAR	M <sub>V</sub>	Spec. Type
1	Betelgeuse (α Ori)	-5.0	M2 I
2	Rigel (β Ori)	-6.6	B8 I
3	Mintaka (δ Ori)	-5.4	O9.5 II
4	Miaplacidus (β Car)	-5.5	A1 III
5	Alnilam (ε Ori)	-6.6	B0 I
6	Sirius (α CMa)	1.5	A1 V
7	Procyon (α CMi)	2.8	F5 IV
8	Pollux (β Gem)	1.1	K0 III
9	Castor (η Cep)	2.7	K0 IV
10	Capella (α Aur)	-0.8	G6 III

	STAR	M <sub>V</sub>	Spec. Type
11	Aldebaran (α Tau)	-0.8	K5 III
12	Nunki (σ Sgr)	-2.4	B3 IV
13	Sargas (θ Sco)	-3.0	F1 II
14	σ Sco	-4.8	B1 III
15	ε Eri	6.2	K2 V
16	Alioth (ε UMa)	-0.2	A0 IV
17	(β Crv)	-0.5	G5 II
18	Alkaid (η UMa)	-1.8	B3 V
19	Polaris (α UMi)	-4.1	F5 I
20	Arcturus (α Boö)	-0.6	K1.5 III

	STAR	M <sub>V</sub>	Spec. Type
21	Vega (α Lyr)	0.6	A0 V
22	Deneb (α Cyg)	-7.5	A2 I
23	Albireo (β Cyg)	-1.5	K3 II
24	Sadr (γ Cyg)	-4.1	F8 I
25	Altair (α Aql)	2.1	A7 V
26	Antares (α Sco)	-5.8	M1.5 I
27	Muphrid (η Boö)	2.4	G0 IV
28	Proxima Centauri	15.5	M5.5 V
29	Barnard's Star	13.2	M4 V
30	Sol (α of α's)	4.82	G2 V

Temperature (K)

25,000      11,000      7,500      6,000      5,000      3,500

