

O B A F G K M



Hotter, Bluer

Cooler, Redder

O, B: Very hot, blue stars

A, F: "White" stars (Vega)

G: Sun-like "Yellow" Stars (Sun = G2)

K: Orange stars

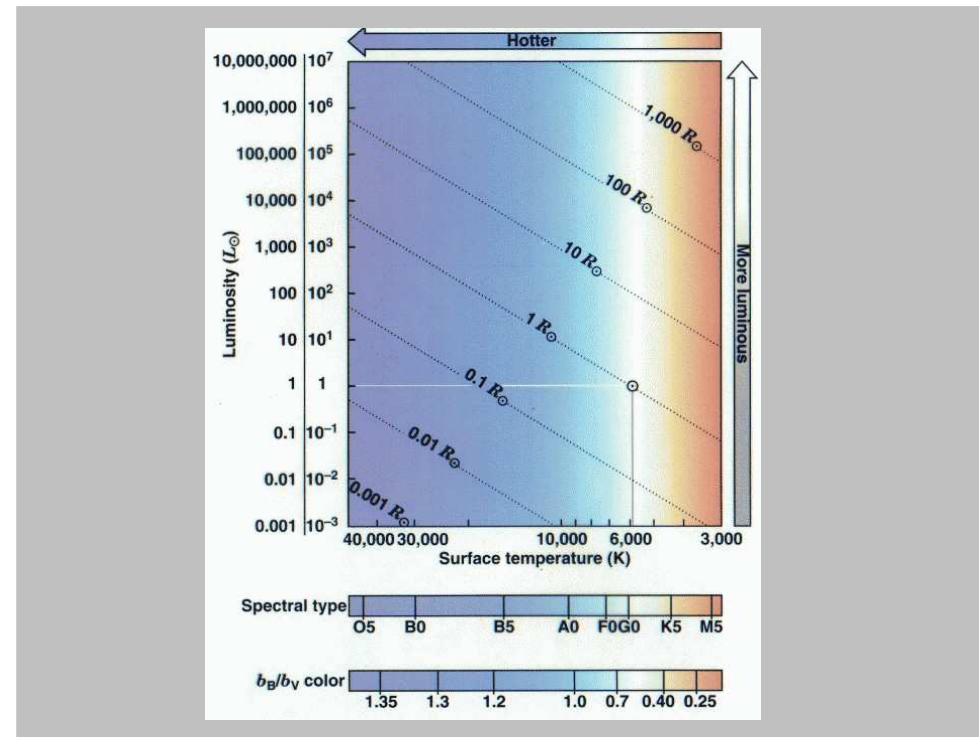
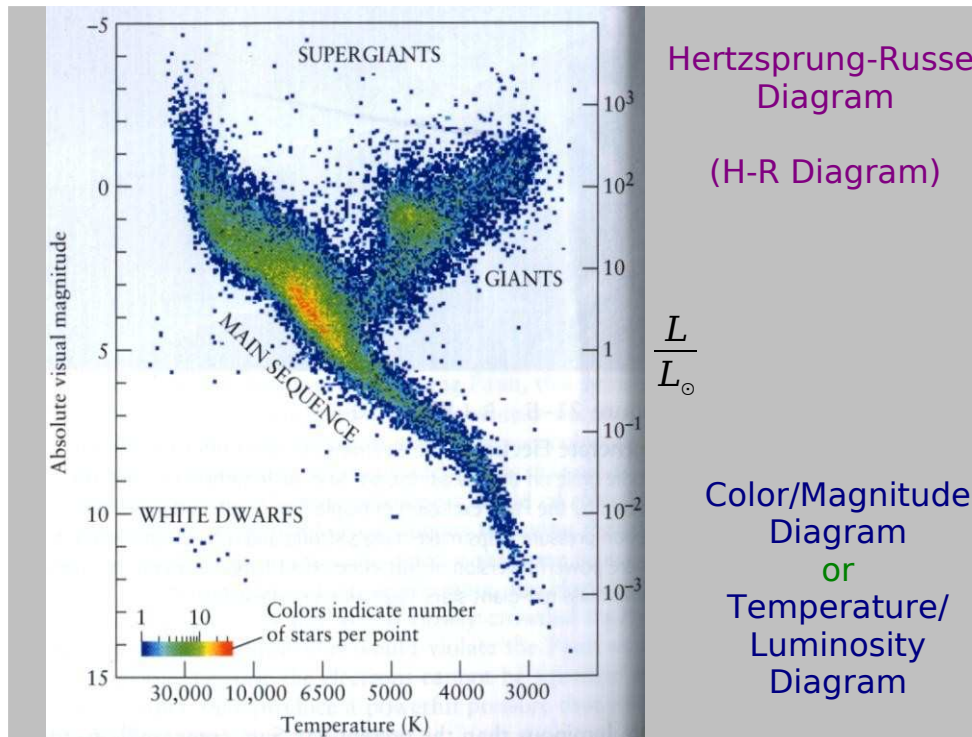
M: Cool red stars

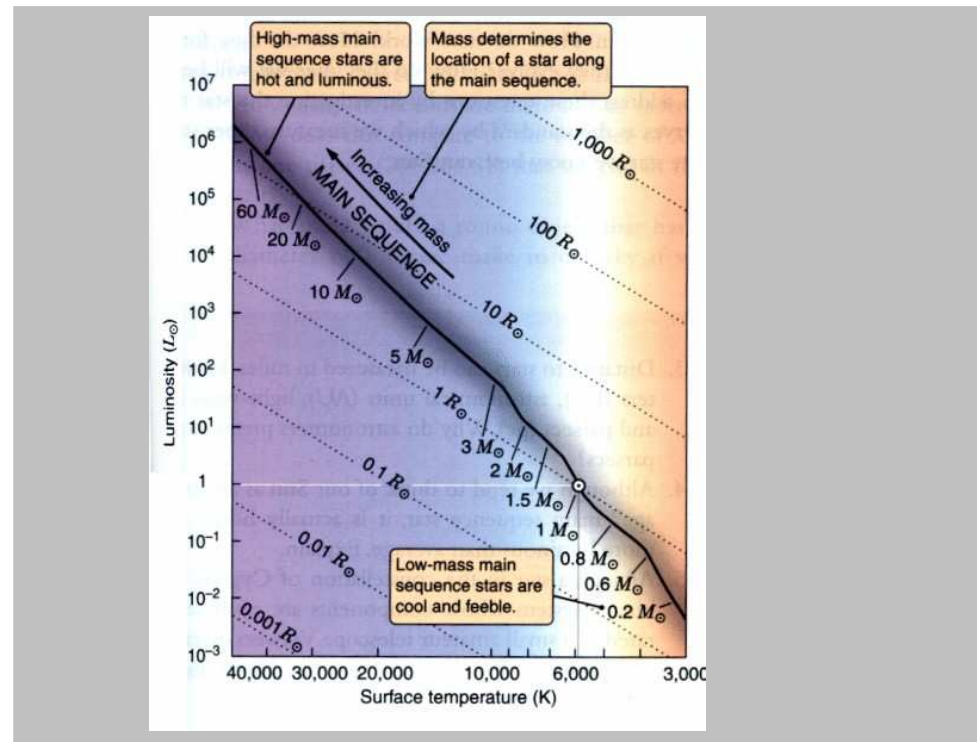
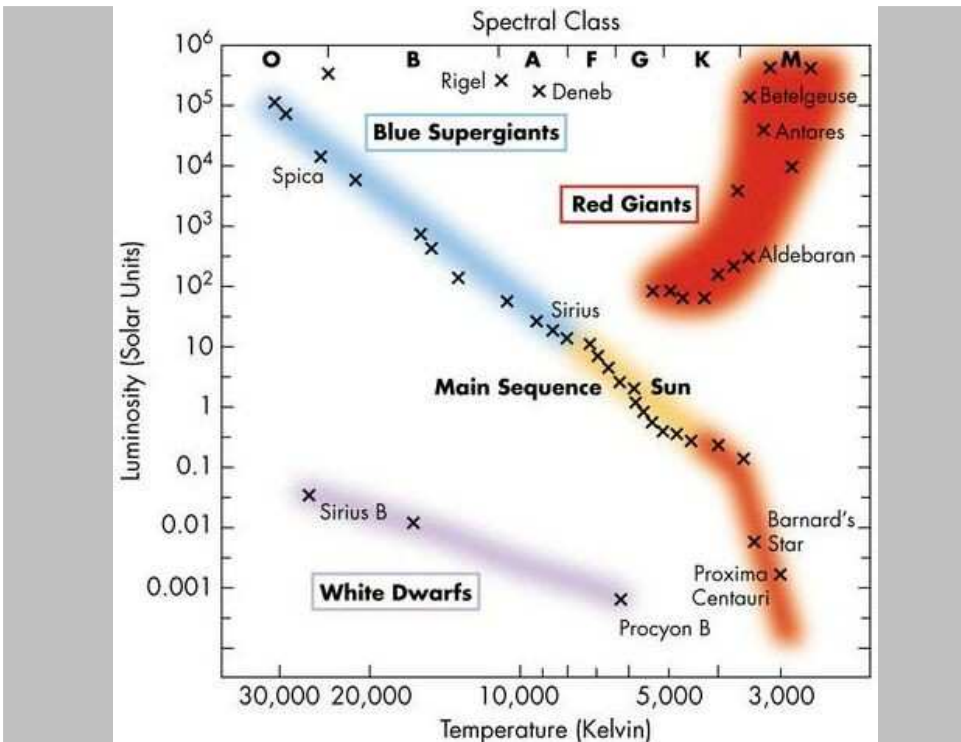
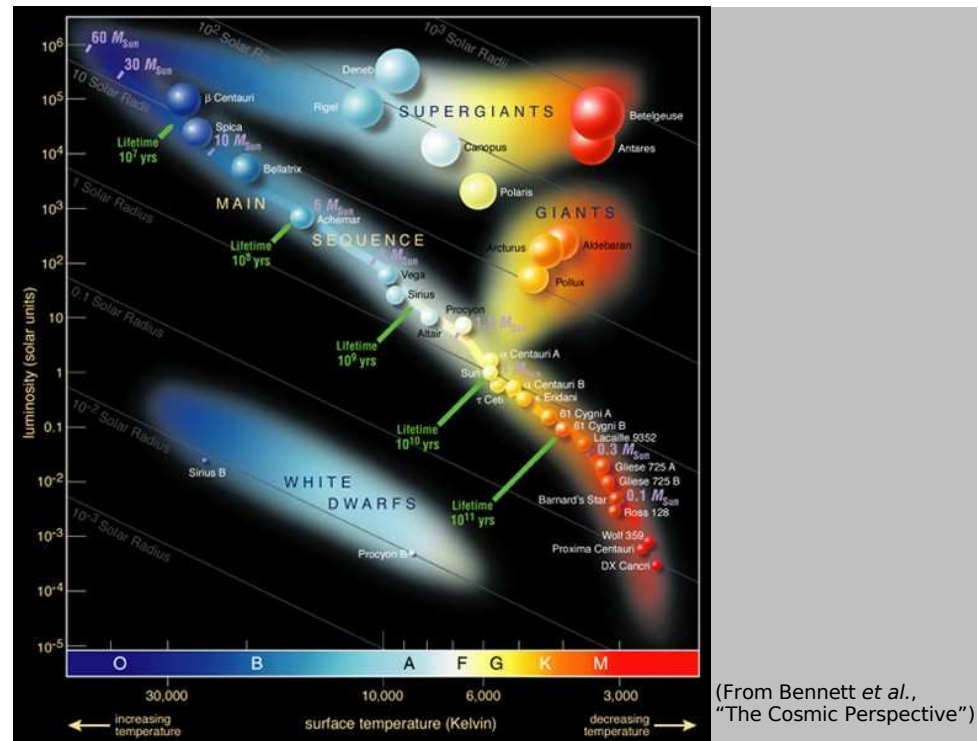
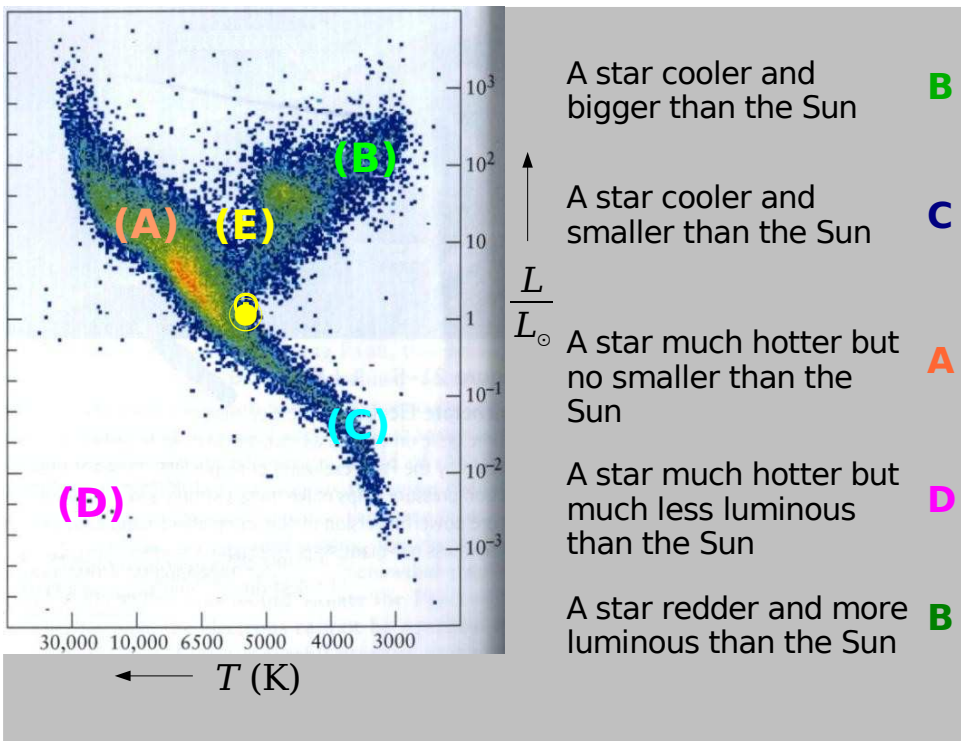
The spectral type of a star (O, B, A, F, G, K, or M) tells you which of the following?

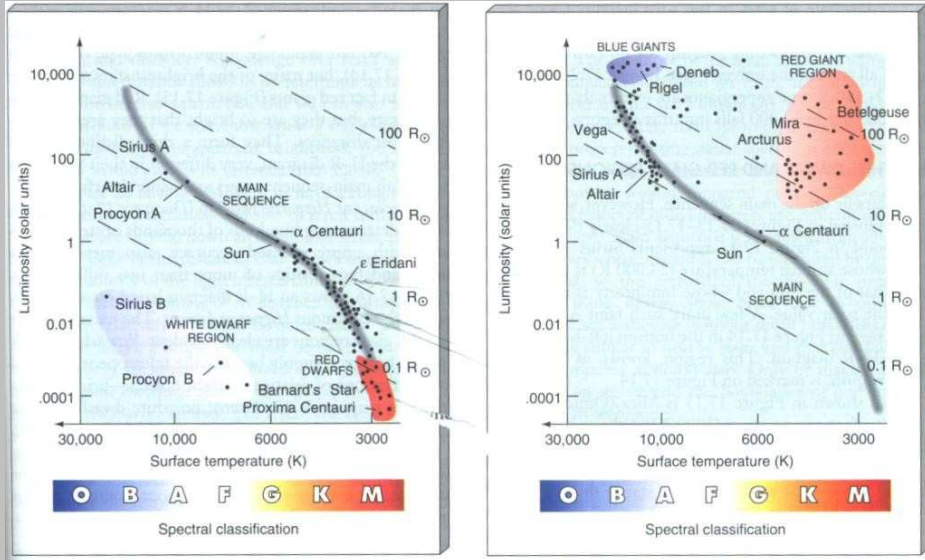
(Multiple answers may be right!)

- A The star's size.
- B** The star's temperature.
- C The star's luminosity.
- D** Which absorption lines appear.
- E** How strong the absorption lines are.

BED — nap time!

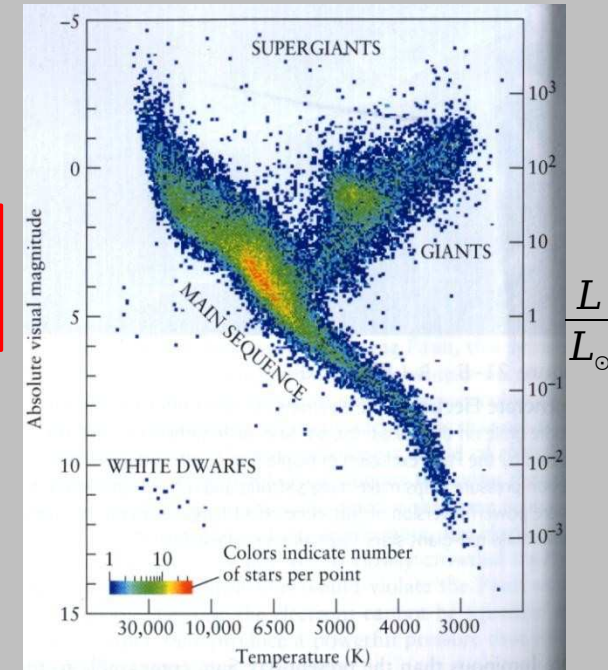






This is an H-R Diagram of:

- A All stars within a certain distance
- B All stars that are at least a certain observed brightness**
- C All stars in the Milky Way
- D All stars observed only from the Northern Hemisphere
- E None of the Above



The Sun has been shining for about 5 billion years, and will continue to shine at approximately the same rate for the next 4 or 5 billion years.

The small core of the Sun (where energy is produced via fusion) has a temperature of 15,000,000 K, in comparison to the surface's 5,800 K.

The rate of energy output (luminosity) of the core of the Sun compares how to the luminosity we observe from the surface of the Sun?

- A The core has a higher luminosity than the surface.
- B The core has a lower luminosity than the surface.
- C The core and the surface have the same luminosity.**
- D Not enough information.