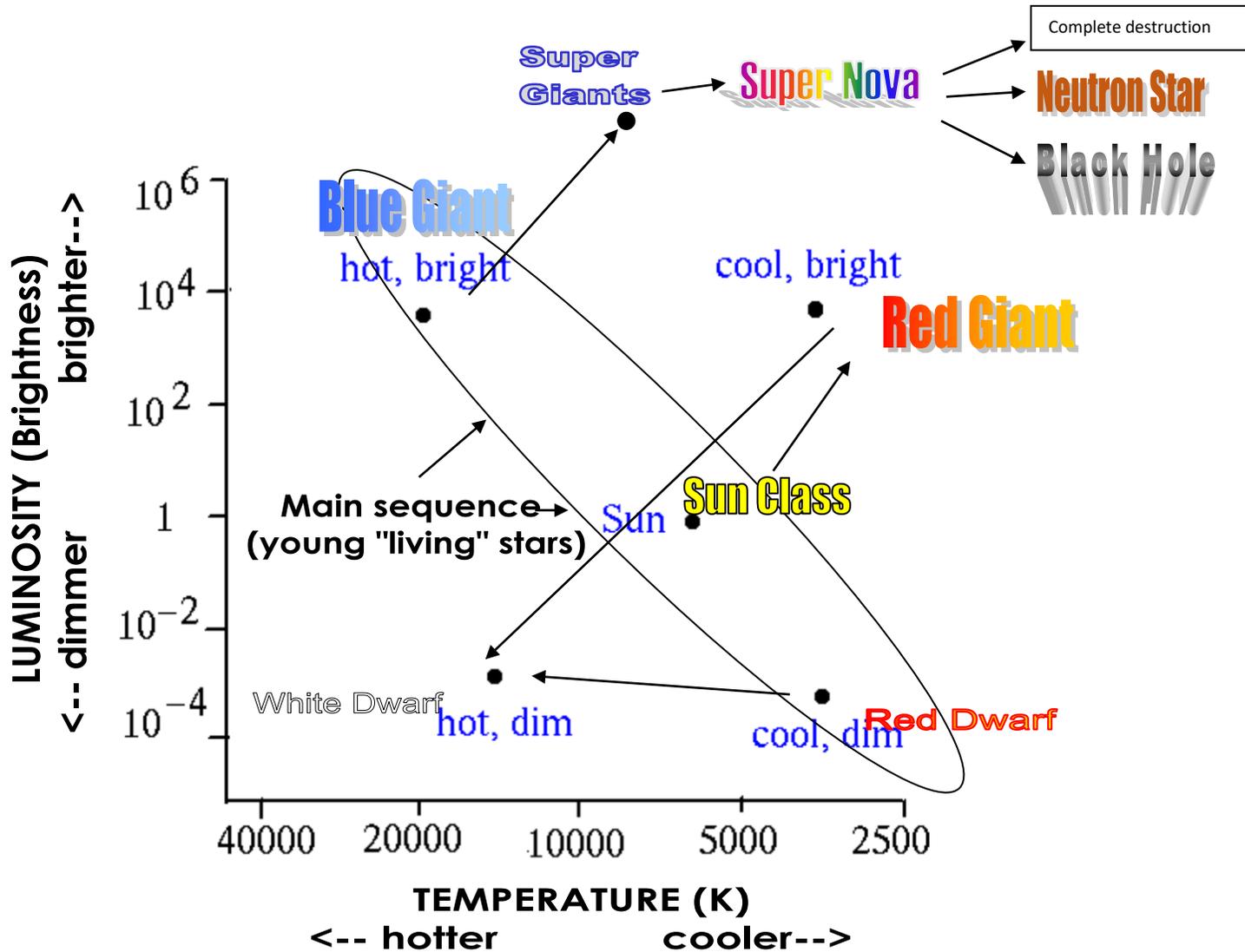


HERTZSPRUNG-RUSSELL DIAGRAM

HR diagram notes page

In a Hertzsprung-Russell diagram, each star type is represented by a dot. One uses data from lots of stars, so there are lots of dots. The position of each dot on the diagram corresponds to the star's luminosity and its temperature. The dot locations have nothing to do with a star's location in the galaxy. The vertical position represents the star's luminosity, and the horizontal position represents its temperature.



Finish the notes section on the backside →

- Stars spend most of their lives in the _____ .
(what section of the HR diagram?)
- During its lifetime, the star's _____ stays pretty much constant. This is because the outward force of fusion and the inward force of gravity are perfectly balanced. A star is called " _____ " during this time period. Of course, stars are never alive because they aren't made of _____ .
- The star's mass determines what the temperature and luminosity is during the star's main sequence lifetime.
 - More mass → _____ . (hotter or cooler?)
 - More mass → _____ . (more or less luminous?)
 - More mass → _____ color (more blue or more red?)
 - Also, more mass → _____ . (what size?)

Dying stars follow three different sequences:

