

Test Review

H-R diagram/ Classification of Stars/ Galaxy Classification

- 1) Know the H-R diagram. You will be given a H-R diagram on the test. You should be able to chart the star on the H-R diagram and determine various characteristics of the star by its placement.
 - a. Know where Red giants, red supergiant, red dwarf, blue giant, middle main sequence, blue supergiant and white dwarf stars are located on the H-R diagram.
 - b. Be able to determine if the star is stable or not.
 - c. Know the approximate lifespan of the star if it is on the main sequence.
 - d. Be able to compare stars in terms of luminosity and temperature.
 - e. Be able to find stars that have similar characteristics.
 - f. Be able to locate which stars on the main sequence have the most mass. Longest lifespan.
- 2) The majority of stars in our universe are what type of stars? Why?
- 3) Which type of stars on the main sequence will go supernova when they die?
- 4) What is apparent brightness? Explain the scale used to measure a star's apparent brightness?
- 5) What is absolute brightness? How is it measured?
- 6) How is temperature related to the color a star appears? Which stars on the H-R diagram are the hottest? Coolest?
- 7) What two quantities are needed to place a star on the H-R diagram?
- 8) What is occurring in the core of a main sequence star?
- 9) What is happening to stars that are not on the main sequence?
- 10) When a star is forming what quantity determines where a star will end up on the main sequence?
- 11) What is a globular cluster? Open cluster?
- 12) If one star has a larger apparent magnitude than another star does it have a greater absolute luminosity? Explain.
- 13) If given two star clusters on H-R diagrams know which star cluster is older.
- 14) What are the four main types of galaxies?
 - a. Which type of galaxy is the Milky Way?
 - b. Which galaxy (ies) have young stars?
 - c. Which galaxy (ies) have only older stars?
 - d. Which galaxy (ies) show evidence of galaxy collisions?
- 15) Know the classifications of galaxies. If given a picture of a galaxy be able to classify it.
- 16) What is a variable star?