



### HR Diagram Quiz

- 1) On a Hertzsprung–Russell diagram, where would you find stars that are cool and dim?  
A) upper right      B) lower right  
C) upper left      D) lower left
- 2) On a Hertzsprung–Russell diagram, where would you find stars that are cool and luminous?  
A) upper right      B) lower right  
C) upper left      D) lower left
- 3) On a Hertzsprung–Russell diagram, where would you find stars that have the largest radii?  
A) upper right      B) lower right  
C) upper left      D) lower left
- 4) On a Hertzsprung–Russell diagram, where on the main sequence would you find stars that have the greatest mass?  
A) upper right      B) lower right  
C) upper left      D) lower left
- 5) On a Hertzsprung–Russell diagram, where would you find red giant stars?  
A) upper right      B) lower right  
C) upper left      D) lower left
- 6) On a Hertzsprung–Russell diagram, where would you find white dwarfs?  
A) upper right      B) lower right  
C) upper left      D) lower left
- 7) The approximate main–sequence lifetime of a star of spectral type O is \_\_\_\_\_.  
A) 300 million years  
B) 3 million years  
C) 10,000 years  
D) 10 billion years
- 8) How is the lifetime of a star related to its mass?  
A) More massive stars live slightly shorter lives than less massive stars.  
B) More massive stars live slightly longer lives than less massive stars.  
C) More massive stars live much longer lives than less massive stars.  
D) More massive stars live much shorter lives than less massive stars.
- 9) From hottest to coolest, list the order of the spectral types of stars
- 10) Which of the following is the most numerous type of main–sequence star?  
A) a G star  
B) an O star  
C) an F star  
D) an A star  
E) an M star
- 11) Which star is the hottest star?  
A) M  
B) A  
C) G  
D) O  
E) Can't tell from information provided.
- 12) Which of the following luminosity classes refers to stars on the main sequence?  
A) I  
B) II  
C) III  
D) IV  
E) V
- 13) The youngest star cluster is the one where the brightest main–sequence stars are  
A) G stars.  
B) M stars.  
C) O stars.  
D) B stars.  
E) A stars.
- 14) From the following, which main–sequence star will have the shortest lifetime?  
A) M  
B) B  
C) G  
D) A  
E) Can't tell from information provided.
- 15) From the following, which main–sequence star has the lowest mass?  
A) O  
B) G  
C) A  
D) K  
E) Can't tell from information provided.

Name \_\_\_\_\_