UNIT 6 PRACTICE TEST

1. Draw a picture of the HR DIAGRAM and label the location of the following:
   1. Blue Giants
   2. Red Dwarfs
   3. Red Giant
   4. White Dwarf
   5. Main Sequence of Stars
   6. Location of our SUN
   7. The location of 90% of the star
   8. The final location of where our star will eventually die
   9. Where will a Blue Giant eventually end up?
2. How does the life of a Blue Giant compare to that of a red dwarf?
3. Will our Sun go supernova? Why or why not?
4. In a main sequence star, if the mass increases what happens to the luminosity?
5. How does a Red Giant form?
6. Describe how a white dwarf compares to our sun.
7. Stars that produce a white dwarf leave a shell of gas behind called a \_\_\_\_\_\_?
8. Which type of star could become a black hole?
9. How many solar masses will a star need to be to produce a black hole?
10. What determines the size of a black hole?
11. What does a black hole do to space?
12. What happens to the light from a star that is within the event horizon?
13. What are black holes?
14. What evidence supports the existence of a black hole? List 3
15. List in order the correct life sequence of a supermassive blue giant.
16. What does a pulsar emit according to the lighthouse model?
17. How often does a typical pulsar rotate?
18. What type of object can rotate a thousand times a second without being torn apart?
19. Our sun will end its life as a \_\_\_\_\_\_ star?
20. What chemical element will be the final one produced before a star goes supernova?
21. Elements from the periodic table that are heavier than iron are produced as a result of\_\_?
22. After a star, like our sun, becomes a white dwarf, describe how its temperature and brightness have changed.
23. A Cepheid variable star is one that varies in its apparent brightness. in comparing brightness of 2 variable stars Star A has a period of 6 days and Star B has a period of 3 days, which is more luminous?
24. Why are Cepheid variable stars important to astronomers?
25. What is the first phase of a star’s life cycle is what?
26. What is the most important factor that affects a star’s lifetime on the main sequence?
27. What group of stars are converting hydrogen into helium?
28. After a star has consumed its hydrogen which direction n the HR Diagram does it shift?
29. What are the oldest stars in the galaxy?
30. How does the lifetime of an O star and an M star compare?

Study your diagram and parts of a black hole.

Study your diagram and parts of a pulsar.

UNIT 6 PRACTICE TEST

1. Draw a picture of the HR DIAGRAM and label the location of the following:
   1. Blue Giants
   2. Red Dwarfs
   3. Red Giant
   4. White Dwarf
   5. Main Sequence of Stars
   6. Location of our SUN
   7. The location of 90% of the star
   8. The final location of where our star will eventually die
   9. Where will a Blue Giant eventually end up?
2. How does the life of a Blue Giant compare to that of a red dwarf?
3. Will our Sun go supernova? Why or why not?
4. In a main sequence star, if the mass increases what happens to the luminosity?
5. How does a Red Giant form?
6. Describe how a white dwarf compares to our sun.
7. Stars that produce a white dwarf leave a shell of gas behind called a \_\_\_\_\_\_?
8. Which type of star could become a black hole?
9. How many solar masses will a star need to be to produce a black hole?
10. What determines the size of a black hole?
11. What does a black hole do to space?
12. What happens to the light from a star that is within the event horizon?
13. What are black holes?
14. What evidence supports the existence of a black hole? List 3
15. List in order the correct life sequence of a supermassive blue giant.
16. What does a pulsar emit according to the lighthouse model?
17. How often does a typical pulsar rotate?
18. What type of object can rotate a thousand times a second without being torn apart?
19. Our sun will end its life as a \_\_\_\_\_\_ star?
20. What chemical element will be the final one produced before a star goes supernova?
21. Elements from the periodic table that are heavier than iron are produced as a result of\_\_?
22. After a star, like our sun, becomes a white dwarf, describe how its temperature and brightness have changed.
23. A Cepheid variable star is one that varies in its apparent brightness. in comparing brightness of 2 variable stars Star A has a period of 6 days and Star B has a period of 3 days, which is more luminous?
24. Why are Cepheid variable stars important to astronomers?
25. What is the first phase of a star’s life cycle is what?
26. What is the most important factor that affects a star’s lifetime on the main sequence?
27. What group of stars are converting hydrogen into helium?
28. After a star has consumed its hydrogen which direction n the HR Diagram does it shift?
29. What are the oldest stars in the galaxy?
30. How does the lifetime of an O star and an M star compare?

Study your diagram and parts of a black hole.

Study your diagram and parts of a pulsar.