

History Channel's *Universe Series: Life and Death of a Star*

Name: _____ Period: _____ Date: _____

1. What is another word for the pillars of creation?
2. How are stars like the sun born?
3. What is a protostar?
4. What are the two forces that keep the size of a star in balance? Diagram them using a free body diagram.
5. What is the main sequence?
6. How does the temperature of a star influence its color?
7. How does the mass of a star affect the life span of a star?
8. What kind of death will stars >10 times the mass of our sun go through?
9. What kind of death will stars the size of our sun and smaller encounter?
10. Why does a star run out of helium faster than it does when it burns hydrogen?
11. What is a planetary nebula?

History Channel's *Universe Series: Life and Death of a Star*

Name: _____ Period: _____ Date: _____

1. What is another word for the pillars of creation?
2. How are stars like the sun born?
3. What is a protostar?
4. What are the two forces that keep the size of a star in balance? Diagram them using a free body diagram.
5. What is the main sequence?
6. How does the temperature of a star influence its color?
7. How does the mass of a star affect the life span of a star?
8. What kind of death will stars >10 times the mass of our sun go through?
9. What kind of death will stars the size of our sun and smaller encounter?
10. Why does a star run out of helium faster than it does when it burns hydrogen?
11. What is a planetary nebula?

12. What can electrons do for a star on the verge of death from gravitational collapse?
13. More than half of the stars in our galaxy are part of _____ systems.
14. What is a type 1a supernova?
15. What types of stars do type 2 supernovae come from?
16. Why is it not possible for a star to fuse iron? What happens the moment a star starts to fuse iron?
17. Where did all of the chemical elements on the periodic table come from?
18. What is a neutron star? How much does one teaspoonful of neutron star material weigh?
19. What is a pulsar?
20. What is a black hole?
21. Why are black holes black?
22. What is a globular cluster? Why are collisions between stars so much more likely in clusters?
23. What are brown dwarf stars? How are they similar to large planets like Jupiter?

12. What can electrons do for a star on the verge of death from gravitational collapse?
13. More than half of the stars in our galaxy are part of _____ systems.
14. What is a type 1a supernova?
15. What types of stars do type 2 supernovae come from?
16. Why is it not possible for a star to fuse iron? What happens the moment a star starts to fuse iron?
17. Where did all of the chemical elements on the periodic table come from?
18. What is a neutron star? How much does one teaspoonful of neutron star material weigh?
19. What is a pulsar?
20. What is a black hole?
21. Why are black holes black?
22. What is a globular cluster? Why are collisions between stars so much more likely in clusters?
23. What are brown dwarf stars? How are they similar to large planets like Jupiter?