Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per# \_\_\_\_\_

Life and Death of Stars – Episode 10 The Universe Season 1

1. The “pillars of creation” are also known as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, where stars are born.
2. What are the key components of a nebula? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The formation of a star starts with the creation of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Gravity wants to crush a star, what creates the pressure to fight against gravity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What colors are the hottest stars? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What colors are the coolest stars? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What type of stars has the shortest life span? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. What determines how a star dies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Once our sun fuses all its hydrogen into helium, what element will form next? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. What provides the “ledge” that keeps our sun from collapsing all the way? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What type of “star” will our sun form once nuclear fusion stops? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. If a white dwarf is part of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, it can steal hydrogen gas from its neighbor, producing a type 1 A supernova.
13. When massive stars die and collapse, the gases spring back outward in a huge explosion called a \_\_\_\_\_\_\_\_\_\_\_\_\_
14. Where do scientists think all the elements in our bodies come from? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. How small can neutron stars be? \_\_\_\_\_\_\_\_\_\_\_\_\_\_How much would a teaspoon of one weigh? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. A massive star that collapses to form a neutron star can spin rapidly, producing a high magnetic field and light. These stars are known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
17. Extremely massive stars collapse completely, forming an extremely dense mass known as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
18. How much larger than out sun do scientists think the star that caused supernova 2006 GY was? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
19. What do we call crowded dense regions of stars where there are higher incidences of stellar collisions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
20. What do scientists call brown dwarfs? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place to take notes: