

Name \_\_\_\_\_  
Teacher \_\_\_\_\_  
Class \_\_\_\_\_ Block \_\_\_\_\_  
Date \_\_\_\_\_

Life of Stars (15 Minutes)

1. What is the nursery of a star? Nebula
2. What is the fuel of a star? Hydrogen
3. What is the ash of a star? Helium
4. What happens at 27 million degrees F?  
Star ignition
5. What happens to a star when heat expansion is greater than gravity?  
explosion or gets larger
6. What happens to a star when heat expansion and gravity are the same force?  
no change
7. What happens to a star when gravity is greater than heat expansion?  
collapse
8. Large stars burn (slower/faster) than small stars.
9. Describe fission.  
an atom splits  
and gives off energy
10. When fusion happens, 4 atoms of hydrogen gas react to make 1 helium atom, and they release a lot of energy.
11. The hottest color of a star is white.
12. The coolest color of a star is red.
13. The sun (will/will not) become a supernova.
14. The sun's size is recognized as (small/medium/large).

15. The sun will have a lifespan of 7 billion years.

16. It is currently 4 billion years old.

17. Give the stages of a star as it goes through its life and ends up as a black dwarf.

- a. Nebula
- b. Mid-sized star
- c. Red Giant
- d. Planetary Nebula
- e. white dwarf
- f. black dwarf

18. Give the stages of a star as it goes through its life and ends up as a neutron star.

- a. Nebula
- b. Massive Star
- c. Red Supergiant
- d. Supernova
- e. neutron star

19. All black holes must be Massive stars at the beginning of their lives.

20. One sugar cube of neutron star material weighs the same as humanity.

21. If a black hole with the mass of the sun was put in the same place as where the sun is, Earth

(would/would not) be sucked into the black hole.