Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per# \_\_\_\_

**The Universe: “Life and Death of a Star” video questions**

1. There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stars in our galaxy.

2. What are the pillars of creation?

3. Each contraction cloud can produce a few dozen to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of stars. A star like our sun requires a gas cloud \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ times the size of our Solar System. The temperature in the middle of a dust disc is initially \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. After 10 million years, a protostar’s core begins to sustain\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. A star’s biggest opponent is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which want to crush the star. What holds up the star from gravity, keeping the star in equilibrium?

6. How hot a star is relates to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it emits. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stars are hotter and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stars are cooler.

7. What are red dwarfs? Why are they not seen in the night sky?

8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the fundamental think that drives the life history of stars.

9. Why do more massive stars live shorter lives than less massive stars?

10. What will gravity do to the sun when fusion is over?

11. What is a white dwarf?

12. Our sun will eventually turn into a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

13. How can a white dwarf have its “last hoorah”? (Be sure to use the term supernova).

14. What are type II supernovas?

15. What connects supernovas with all elements, and even life on Earth?

16. What is a neutron star?

17. One teaspoon of neutron star is the mass of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ tons. Some neutron stars spin rapidly, and light emitted from the magnetic field can appear to blink off and on, called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

18. A black hole represents the death of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ star.

19. Why are black holes called “black holes”?

20. What happens when neutron stars collide?

21. What is a globular cluster?

22. What are blue stragglers?

23. What is a brown dwarf?