

Practice Quiz: Medium Star Life Cycles + Earth Formation

1. What process gives stars their energy?
2. What is a star's main fuel?
3. What new substance is produced inside a star when that fuel is used up?
4. Put these star life stages in order, from earliest to latest:
Main Sequence Star, Protostar, Nebula, Red Giant, White Dwarf, Black Dwarf
5. Describe the source of energy for each of these stages in a star's life:
 - a. Red giant
 - b. White dwarf
 - c. Main sequence star
6.
 - a. How is a star's temperature related to its mass?
 - b. Explain why a star's temperature is related to its mass in this way.
7. Where does the helium in a medium star end up, and why does it go there?
8. When our Sun becomes a red giant why will it turn red?

9. When our Sun becomes a red giant why will it get bigger?

10. When our Sun becomes a white dwarf why will it turn white?

11. Approximately how many years does the Sun have before it turns into a red giant?

12. When the Earth was first forming, it wasn't massive enough for gravity to cause its pieces to attract one another. According to the video we watched, what force caused the tiny bits of dust to clump together?

13. The early Earth was molten and did not have layers.
 - a. What does *molten* mean?

 - b. How did Earth's layers (core, mantle, crust, etc.) form?

14. What caused the Earth's surface to cool and harden?

15. What type of rock samples did scientist use to find the age of the Earth?

16. Where do scientists think the Earth's water came from?

17. Where do scientists think the Earth's first oxygen came from?

18. Where did all of our coal, oil, and natural gas deposits come from?