

# [Astronomy online – ch. 11 essay](https://assignbuster.com/astronomy-online-ch-11-essay/)

White dwarfs are so called becausethey are both very hot and very small. A teaspoonful of white dwarf material on Earth would weigha few tonsWhich of the following is closest in size (radius) to a white dwarf? the earthAfter a massive-star supernova, what is left behind? either a neutron star or a black holeA teaspoonful of neutron star material on Earth would weighmore than Mt. Everest. Which of the following is closest in size (radius) to a neutron star? a cityFrom a theoretical standpoint, what is a pulsar? a rapidly rotating neutron starHow does a black hole form from a massive star? During a supernova, if a star is massive enough for its gravity to overcome neutron degeneracy of the core, the core will be compressed until it becomes a black hole. How do we know what happens at the event horizon of a black hole? We don’t know for sure: we only know what to expect based on the predictions of general relativity. If you were to come back to our Solar System in 6 billion years, what might you expect to find? a white dwarf