



Name _____

Date _____

#32 - Neutron Stars

1. A supernova, from an 8-20 solar mass star, has center composed almost entirely of _____
2. In lower mass stars, while fusing silicon into iron, the core supports itself via _____
3. Which subatomic particles blast out along with the shock wave of a supernova? _____
4. A neutron star, about 20 km across, would have a mass _____
5. The highly dense matter in a neutron star is usually called _____
6. A single cubic centimeter of a neutron star has a mass equivalent to _____
7. Compared to Earth's surface gravity, how much stronger is that of a typical neutron star?
8. A freshly minted neutron star might spin several times per _____
9. Which astrophysicist, while still a graduate student in 1967, discovered the first pulsar?
10. Pulsars launch twin beams of magnetic energy away from the star like the beams from _____
11. The "blip" of a pulsar can be detected in _____
12. The first pulsar, which pulsed like a cosmic clock, was originally referred to as _____
13. A few pulsars, in binary systems, increase their mass and spin to become _____
14. Neutron stars with extremely strong magnetic fields are known as _____
15. In what year was Earth blasted with x-rays from a magnetar halfway across the galaxy? _____
16. The two main types of objects created by supernovae are _____