



Name _____

Date _____

#31 - High Mass Stars

1. What are the two opposing forces that keep stars between collapsing and inflating?
2. Hydrogen fusion makes helium. "Triple-alpha" helium fusion makes _____
3. Carbon will fuse in the core of a star that has more relative mass than _____
4. If a star has more than about eight times the Sun's mass, it can fuse carbon into _____
5. A star becomes a ticking time-bomb once silicon starts fusing into _____
6. When helium fusion begins, a massive, blue, main sequence star will become _____
7. Which bright star, in the constellation Orion, is a red super giant? _____
8. VY Canis Majoris, the largest known star, is two billion km across and is classified as _____
9. The core of a supergiant star looks like an onion because it has _____
10. In massive stars, the fusion of which element occurs at a "ridiculously high rate"? _____
11. Which element, in its creation, removes energy from a star's core? _____
12. As the core collapses, if a star has less than twenty times the Sun's mass, it becomes _____
13. As the core collapses, if a star has more than 20 times the Sun's mass, it becomes _____
14. The collapse of a star's core generates vast numbers of subatomic particles called _____
15. During a supernova, the expanding gas blasts outward at _____
16. The creation of heavy elements during a supernova explosion is called _____