



# Life Cycle of a Star More Massive than the Sun

## Answers



nebula

Gravity pulls particles closer together.



protostar

The star begins to emit light.



main sequence star

Nuclear fusion starts.

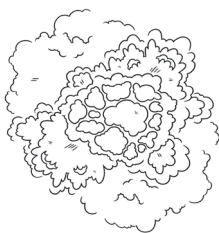
The expansion forces are equal to the gravitational forces, so the star is stable.



red supergiant

Expansion forces are larger than gravitational forces, so the star expands.

Nuclei as large as iron can fuse here.



supernova

Gravitational force causes the star to collapse and the shockwaves cause an explosion.

Elements heavier than iron are produced.



neutron star

Fusion does not occur in this incredibly dense core.



black hole

Gravitational forces are so strong that nothing can escape.