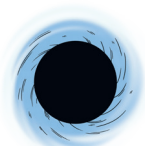
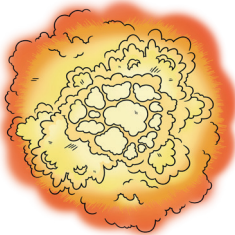
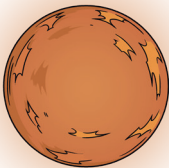
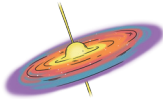
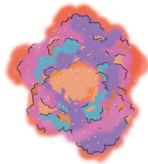




# Life Cycle of a Star More Massive than the Sun





## Life Cycle of a Star More Massive than the Sun

Cut out the labels. Then, stick them next to the right stage in the life cycle of a star more massive than the Sun diagram.

**black hole**

**red supergiant**

**main sequence  
star**

**neutron star**

**protostar**

**supernova**

**nebula**

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

Nuclear fusion starts.

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

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

Gravity pulls particles closer together.

Elements heavier than iron are produced.

The star begins to emit light.

Nuclei as large as iron can fuse here.

Gravitational forces are so strong that nothing can escape.

Fusion does not occur in this incredibly dense core.