

### **Life Cycle of a Star Worksheet**

A nebula is made up of \_\_\_\_\_.

Stars live out the majority of their life in a phase termed as the \_\_\_\_\_.

The star's main goal in life is to achieve stability, or \_\_\_\_\_.

The star burns \_\_\_\_\_ to maintain stability.

Once the outer shell expands to help heat escape, the star is termed a \_\_\_\_\_, which is the first step in old age.

When the core collapses sending the shockwaves outwards, the resulting core is called a \_\_\_\_\_.

Stars are grouped into three categories. Name the masses of each:

Low-mass stars: \_\_\_\_\_ solar mass or less

Medium-mass stars: \_\_\_\_\_ solar mass to \_\_\_\_\_ solar mass

Massive stars: \_\_\_\_\_ solar mass or more

Low-mass stars become \_\_\_\_\_.

Medium-mass stars become \_\_\_\_\_.

A \_\_\_\_\_ star is made entirely out of neutrons.

\_\_\_\_\_ are the most massive and densest singular objects in the universe.

The position of the stars on an H-R diagram tells us two things about a star: its \_\_\_\_\_, or absolute magnitude, and its \_\_\_\_\_.