ANSWER KEY

Characteristics Used to Classify Stars

\*Star: **A huge sphere of hot glowing gas. They are made mostly of hydrogen. The heat (energy) is produced through the process of nuclear fusion.**

\*Color: **A stars color depends on their temperature. In order from hottest to coolest: Blue, white, yellow, orange, red**

\*Temperature: **The hotter stars are brighter**

\*Size: **Our Sun is a medium size star. Most stars are smaller than the Sun**

Chemical Composition: **73% hydrogen and 23% helium**

\*Brightness: **The amount of light given off. It depends on the size, temperature and distance of the star.**

 Apparent Brightness: **A stars brightness as we see it from Earth**.

 Absolute Brightness: **The brightness a star would have if they were all at the same**

 **Distance from Earth.**

\*Light Year: **A measure of distance. It is the distance light travels in one year.**

\*Hertzsprung-Russel (HR) Diagram: **It shows that as main sequence stars increase in temperature they increase in absolute brightness.**