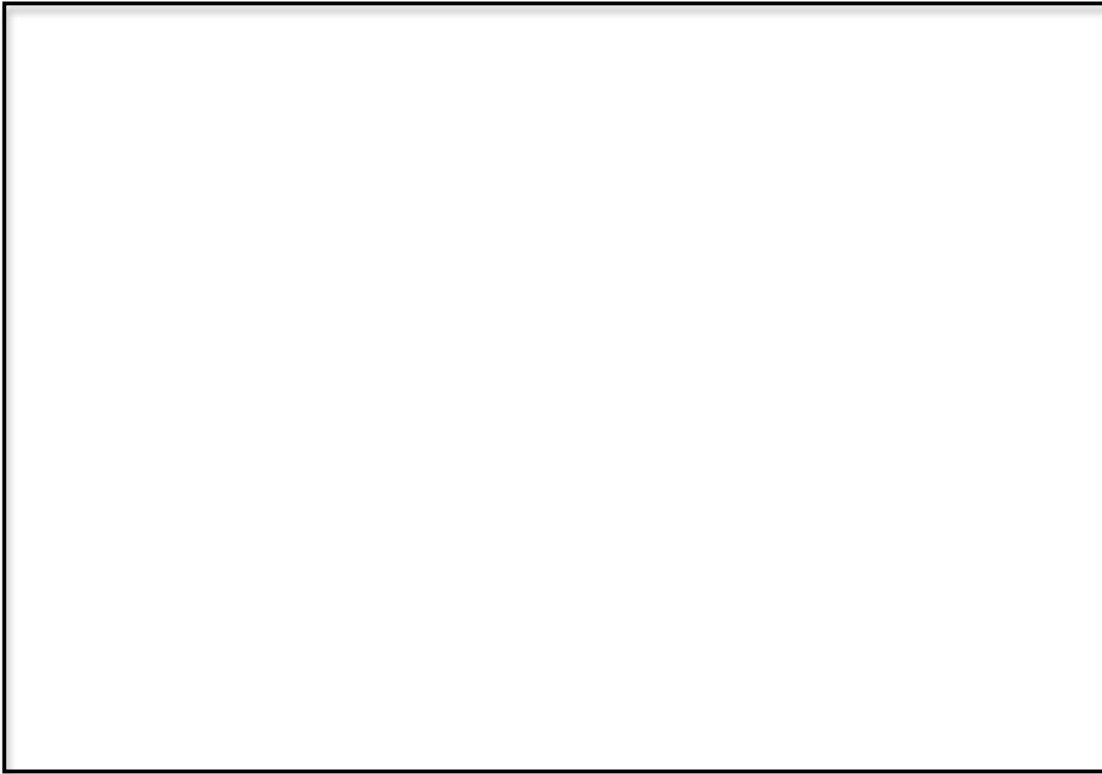


Astronomy & Astrophysics I Quiz Nov 18th 2011

1. Sketch the evolutionary track of a massive star on the HR diagram.
2. Label the MS, RGB, HB, AGB



3. What event leads to supernova explosion, and where on the diagram do you expect this to occur?
4. Calculate the rotation rate of the sun after it eventually contracts down to a white dwarf. $M_{\text{sun}}=1.99 \times 10^{30}$ kg, $R_{\text{sun}}=6.96 \times 10^5$ km, $P_{\text{sun}}=25$ days. Assume negligible mass loss during the red giant phase.