**ASSIGNMENT IN EARTH SCIENCE (NATSCI-1)**

**Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Answer the following questions about the Sun and the Main Sequence Stars.**

1. What causes sunspots?
2. What is the difference between a sunspot and an active region?
3. Draw the structure of the sun. Make sure to include the following: solar flare, convective zone, radiative zone, photosphere, chromospheres, corona and core.
4. The table below gives data for the 15 nearest stars. Study the table and answer the following questions:

(a) Which star (after the Sun) is brightest?

(b) Which star is faintest?

(c) Which star has the highest luminosity?

(d) Which star has the lowest luminosity?

(e) Which star is most like the Sun?

(f) Why does Sirius B not have a spectral class listed?

(g) How many stars are M type?

(h) How many stars are G type?

(i) How many stars are another type?

(j) Using just the information in this table, would you say the Sun is a ‘‘typical’’ star?