NAME:

- 1. Consider the following types of electromagnetic radiation: <u>visible red</u>, <u>x-rays</u>, <u>visible yellow</u>, <u>ultraviolet</u>, <u>visible green</u>, <u>infrared</u>, <u>visible blue</u>.
 - a. Put them in the order of increasing wavelength.

b. Photons of which type of the above have the greatest energy?

- 2. On a clear evening, take a look at the night sky around 7-8 pm. Look in the direction South (and up[©]). The most prominent constellation you see is Orion, The Hunter (slightly South-South-West). Its left shoulder is marked by a RED supergiant star called *Betelgeuse*. Its right foot is marked by a BLUE supergiant star called *Rigel*. Now look strictly North (and up[©]) and try to find *Polaris* The North Star, which is a very bright YELLOW supergiant. Can you tell which of these three stars is:
 - a. the HOTTEST?

b. the COLDEST?

