Bohr Line Spectra Writing Assignment
SCH 3U – Senior Chemistry

Your assignment must be word processed and double spaced.

1. Write one paragraph that outlines the relationship between energy, frequency and wavelength. In addition, clearly explain why some light sources (or spectral lines) are brighter than others.

2. Write one paragraph that explains the process by-which an atom such as hydrogen can become excited and then give off light

3. Write one paragraph that explains why the only certain colours of light are observed in the line spectra.

4. Draw and label a good and complete diagram that shows the electromagnetic spectrum. Include the relationships between, wavelength, frequency, energy and type of light.

5. Draw a fully labeled diagram of the hydrogen atom as described by the Bohr model

6. Using the line spectra line on the webpage, determine:

a) the number of lines present in neon
b) clearly identify the brightest line present in neon, and how you know this to be true
c) answer why the brightest line is the brightest line