

9/11/2009

Home assignment:

Chapter 7. – Read the whole Ch.7 (pp.264-288)

Recommended problems (to be completed by Sept 23, Wed) : on pp. 288-293: 7.XX, where XX is:

19, 23, 25, 31, 35
39, 41, 43, 47, 51
56 (similar to 55!), 57, 63, 69
75, 79, 87

(Remember, the blue ones have solutions in the end of the book – work out your own solution first, THEN check the book solution. Be sure you understand it.)

Some of the important terms (define/explain in writing):

Wave: length and frequency, electromagnetic spectrum, photons, continuous and line spectra, energy levels, deBroigle equation, quantum mechanics, uncertainty principle, atomic orbitals, quantum numbers: n , l , m_l , m_s

developing skills:

1. inter-conversions “wave length/frequency/speed of light”
2. energy calculation for a photon of given wavelength or frequency
3. calculation from deBroigle equation (mass/speed/wavelength)
4. using quantum numbers : allowed/not allowed