Name	Period
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Chemistry Review Questions on Light

 $C = 3.00 \text{ x} 10^8 \text{ m/s}$ $h = 6.626 \text{ x} 10^{-34} \text{ Js}$

1) What is the frequency of some visible light whose wavelength is $6.00 \times 10^{-7} \text{m}$?

2) What is the energy of a photon of the light in question number 1?

3) What is the wavelength of some visible light whose frequency is $4.0 \times 10^{14} \, \text{Hz}$?

4) What is the frequency and energy of a radio wave whose wavelength is 3.17 m?

5) What is the wavelength and frequency of a wave whose energy is $3.25 \times 10^{-19} \text{J}$?

Electron Orbital Diagrams

1) Write the electron orbital diagram (with arrows) for the following elements:
a) Na
b) F
c) O
d) Ne
e) V
2) Write the electron orbital diagram (with arrows) for the following ions: a) Na ⁺
b) O^{2-}
c) Mg ²⁺
d) Al ³⁺