## **EVALUATING ENERGY OF A PHOTON**

- 1. What energy will a photon have if it is traveling at a frequency of  $1.2 \times 10^{17}$  Hz?
  - A. 7.9 X 10<sup>-17</sup>J
  - B. 8.2 X 10<sup>-17</sup> J
- 2. What energy will a photon have if it is traveling at a frequency of 6.3×10<sup>-19</sup> Hz?
  - A. 6.7 X 10<sup>-23</sup> J
  - B. 4.1 X 10<sup>-14</sup> J
- 3. What frequency will a photon have if has 2.19×10<sup>-15</sup>J of energy?
  - A. 9.4 X 10<sup>-15</sup> Hz
  - B. 3.3 X 10<sup>18</sup> Hz
- 4. If a photon has a wavelength of 0.04 cm, how much energy does it have?
- A. 4.9 X 10<sup>-22</sup> J
- B. 4.9 X 10<sup>-24</sup> J