

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