

1. What is meant by the term quantum?
2. Describe the photoelectric effect.
3. Describe how light can be both a wave and a particle. Gives examples of both.
4. What is the relationship between a joule (J) and an electron volt (eV)?
5. According to the photon theory of light what does the frequency of light determine?
6. According to the photon theory of light what does the intensity of light effect?
7. Which has more energy, a photon of violet light or a photon of green light?
8. A photon has 3.62×10^{-19} J of energy. What is the frequency of this photon? What is the color of this photon?

9. A photon of blue light has a wavelength of 444 nm. Find:
- The frequency of this photon.
 - The energy of this photon.
10. Describe emission lines.
11. Describe absorption lines.
12. Describe a continuous spectrum.
13. What is a photon?
14. What is the energy of a light wave with a wavelength of 6.5×10^{-7} meters?