

## HW 1.5

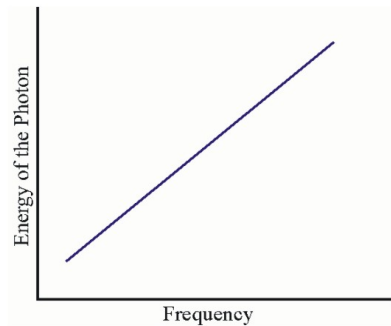
Started: Aug 27 at 6:29am

### Quiz Instructions

[← Return to "To Do List"](#)

#### Question 1

1 pts



The graph has a [ Select ] slope. This means that energy of the photon has [ Select ] relationship with frequency. The relationship is: as the energy of the photon increases the frequency [ Select ] .

#### Question 2

1 pts

Which of the following has the parts of the electromagnetic spectrum listed in order of increasing energy?

- ☐ visible, microwave, x-ray
- ☐ infrared, visible, ultraviolet
- ☐ x-ray, gamma, ultraviolet
- ☐ gamma, visible, radio

#### Question 3

1 pts

What is the velocity in m/s of all forms of electromagnetic radiation traveling in a vacuum?

#### Question 4

2 pts

If the velocity of a water wave is 9.4 m/s and the wave has a wavelength of 4.4 m, what is the frequency of the wave?

### Question 5

2 pts

Type what you would put into your calculator in order to calculate the energy, in joules, of a light wave whose frequency is  $5.66 \times 10^8 \text{ Hz}$  ?




### Question 6

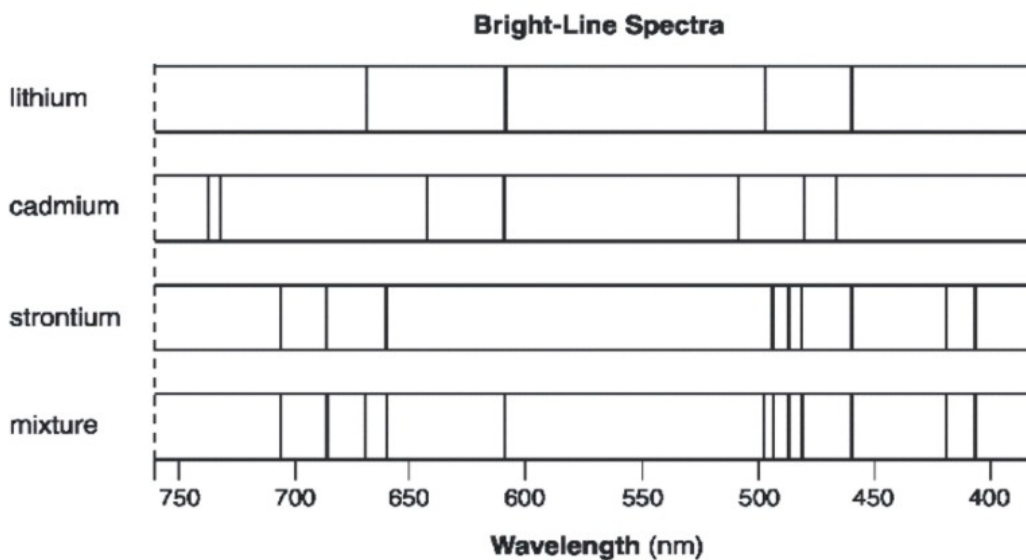
3 pts



The top spectrum is an [ Select ] spectrum and the bottom spectrum is an [ Select ] spectrum. The spectrum is for [ Select ] element(s).

### Question 7

2 pts



According to the data above, what are the likely components of the mixture?

- ☐ strontium
- ☐ cadmium
- ☐ lithium

**Question 8**

1 pts

Which of the following are true concerning the Bohr model?

- ☐ The electron energy levels can be calculated for all atoms.
- ☐ Electrons absorb energy to "jump" to a higher energy level and release energy to "jump" to a lower energy level.
- ☐ Each atom has a specific set of allowed electron energy levels.
- ☐ Atomic spectra is explained by the Bohr model

**Question 9**

1 pts

As the distance of the electron from the nucleus increases the energy of the electron

- ☐ remains the same.
- ☐ varies up and down.
- ☐ decreases.
- ☐ increases.

**Question 10**

1 pts

Match the model of the atom with the scientist responsible.

billiard ball

[ Choose ] ▼

plum pudding

[ Choose ] ▼

nuclear

[ Choose ] ▼

electron energy levels

[ Choose ] ▼

Not saved

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