

Electromagnetic and Visible Light Spectrum

Activity 1: Electromagnetic Spectrum

Question Group 1

Question 1

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of wavelength.

Radio, X-ray, Ultraviolet

Question 2

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of wavelength.

Gamma ray, Microwave, Infrared

Question 3

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of wavelength.

Visible light, Infrared, X-ray

Question Group 2

Question 4

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of frequency.

Radio, X-ray, Ultraviolet

Question 5

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of frequency.

Gamma ray, Microwave, Infrared

Question 6

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of frequency.

Visible light, Infrared, X-ray

Question Group 3

Question 7

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of energy.

Radio, X-ray, Ultraviolet

Question 8

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of energy.

Gamma ray, Microwave, Infrared

Question 9

Consider the three regions of the electromagnetic spectrum that are listed below. Rank these three regions in order of energy.

Visible light, Infrared, X-ray

Question Group 4

Question 10

Which one of the listed regions of the electromagnetic spectrum consist of waves having a wavelength greater than the wavelength of a visible light wave? Select all that apply.

- a. Ultraviolet Waves
- b. Microwaves
- c. X-Rays
- d. Infrared Waves
- e. Gamma Rays
- f. Radio Waves

Question 11

Which one of the listed regions of the electromagnetic spectrum consist of waves having a wavelength greater than the wavelength of an infrared wave? Select all that apply.

- a. Ultraviolet Waves
- b. Microwaves
- c. X-Rays
- d. Visible Light Waves
- e. Gamma Rays
- f. Radio Waves

Question 12

Which one of the listed regions of the electromagnetic spectrum consist of waves having a wavelength greater than the wavelength of an X-ray? Select all that apply.

- a. Infrared Waves
- b. Microwaves
- c. Gamma Rays
- d. Visible Light Waves
- e. Ultraviolet Waves
- f. Radio Waves

Question Group 5

Question 13

Which one of the listed regions of the electromagnetic spectrum consist of waves vibrating/ with a frequency greater than the frequency of a visible light wave? Select all that apply.

- a. Ultraviolet Waves
- b. Microwaves
- c. X-Rays
- d. Infrared Waves
- e. Gamma Rays
- f. Radio Waves

Question 14

Which one of the listed regions of the electromagnetic spectrum consist of waves vibrating with a frequency greater than the frequency of a microwave? Select all that apply.

- a. Infrared Waves
- b. X-Rays
- c. Gamma Rays
- d. Visible Light Waves
- e. Ultraviolet Waves
- f. Radio Waves

Question 15

Which one of the listed regions of the electromagnetic spectrum consist of waves vibrating with a frequency greater than the frequency of an ultraviolet wave? Select all that apply.

- a. Infrared Waves
- b. Microwaves
- c. Gamma Rays
- d. Visible Light Waves
- e. X-Rays
- f. Radio Waves

Question Group 6

Question 16

Which one of the listed regions of the electromagnetic spectrum consist of waves having an energy that is greater than the energy of a visible light wave? Select all that apply.

- a. Ultraviolet Waves
- b. Microwaves
- c. X-Rays
- d. Infrared Waves
- e. Gamma Rays
- f. Radio Waves

Question 17

Which one of the listed regions of the electromagnetic spectrum consist of waves having an energy that is greater than the energy of an infrared wave? Select all that apply.

- a. Ultraviolet Waves
- b. Microwaves
- c. X-Rays
- d. Visible Light Waves
- e. Gamma Rays
- f. Radio Waves

Question 18

Which one of the listed regions of the electromagnetic spectrum consist of waves having an energy that is greater than the energy of an ultraviolet wave? Select all that apply.

- a. Infrared Waves
- b. Microwaves
- c. Gamma Rays
- d. Visible Light Waves
- e. X-Rays
- f. Radio Waves

Activity 2: Visible Light Spectrum

Question Group 7

Question 19

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of wavelength.

blue, yellow, red

Question 20

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of wavelength.

violet, green, orange

Question 21

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of wavelength.

blue, green, orange

Question Group 8

Question 22

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of frequency.

red, yellow, blue

Question 23

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of frequency.

orange, green, violet

Question 24

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of frequency.

orange, green, blue

Question Group 9**Question 25**

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of energy.

red, yellow, blue

Question 26

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of energy.

orange, green, violet

Question 27

Consider the three colors of the visible light spectrum that are listed below. Rank these three colors in order of energy.

orange, green, blue

Question Group 10**Question 28**

Which one of the listed colors of the visible light spectrum consist of waves with a wavelength greater than the wavelength of a green light wave? Select all that apply.

- a. Orange light
- b. Blue light
- c. Red light
- d. Yellow light
- e. Violet light

Question 29

Which one of the listed colors of the visible light spectrum consist of waves with a wavelength greater than the wavelength of an orange light wave? Select all that apply.

- a. Yellow light
- b. Blue light
- c. Red light
- d. Green light

e. Violet light

Question 30

Which one of the listed colors of the visible light spectrum consist of waves with a wavelength greater than the wavelength of a blue light wave? Select all that apply.

- a. Yellow light
- b. Orange light
- c. Red light
- d. Green light
- e. Violet light

Question Group 11

Question 31

Which one of the listed colors of the visible light spectrum consist of waves vibrating with a frequency greater than the frequency of a green light wave? Select all that apply.

- a. Orange light
- b. Blue light
- c. Red light
- d. Yellow light
- e. Violet light

Question 2

Which one of the listed colors of the visible light spectrum consist of waves vibrating with a frequency greater than the frequency of a yellow light wave? Select all that apply.

- a. Orange light
- b. Blue light
- c. Red light
- d. Green light
- e. Violet light

Question 33

Which one of the listed colors of the visible light spectrum consist of waves vibrating with a frequency greater than the frequency of a blue light wave? Select all that apply.

- a. Yellow light
- b. Orange light
- c. Red light
- d. Green light
- e. Violet light

Question Group 12

Question 34

Which one of the listed colors of the visible light spectrum consist of waves having an energy that is greater than the energy of a green light wave? Select all that apply.

- a. Orange light
- b. Blue light
- c. Red light
- d. Yellow light
- e. Violet light

Question 35

Which one of the listed colors of the visible light spectrum consist of waves having an energy that is greater than the energy of a yellow light wave? Select all that apply.

- a. Orange light
- b. Blue light
- c. Red light
- d. Green light
- e. Violet light

Question 36

Which one of the listed colors of the visible light spectrum consist of waves having an energy that is greater than the energy of a orange light wave? Select all that apply.

- a. Yellow light
- b. Blue light
- c. Red light
- d. Green light
- e. Violet light

