

Visible Light Quiz PDF

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What is the range of wavelengths for visible light?

- 10 nm to 100 nm
- 380 nm to 750 nm
- 1000 nm to 1500 nm
- 2000 nm to 3000 nm

How does the wavelength of light affect the color we perceive?

What is the speed of light in a vacuum?

- 150,000 km/s
- 200,000 km/s
- 299,792 km/s
- 500,000 km/s

Describe how a rainbow is formed in the atmosphere.

Which color of visible light has the longest wavelength?

- Red
- Green
- Blue
- Violet

Which part of the eye is primarily responsible for detecting light?

- Cornea
- Lens
- Retina
- Iris

Discuss how refraction is utilized in corrective lenses for vision.

Explain the process by which the human eye converts light into electrical signals.

Which of the following devices use lenses to manipulate light? (Select all that apply)

- Microscope
- Telescopes
- Camera
- Speaker

What natural phenomenon is caused by the refraction and dispersion of light in water droplets?

- Mirage
- Rainbow
- Aurora
- Eclipse

What happens to light when it passes through a prism?

- It is absorbed
- It is reflected
- It is refracted
- It is scattered

Which type of light bulb is known for its energy efficiency and long lifespan?

- Incandescent
- Halogen
- Fluorescent
- LED

Which of the following are true about visible light? (Select all that apply)

- It is a type of electromagnetic radiation.
- It can be seen by the human eye.
- It has a wavelength longer than infrared light.
- It travels slower than sound.

Which cells in the human eye are responsible for color vision?

- Rods
- Cones
- Retinal ganglion cells

- Phot receptors

Explain why visible light is essential for human vision.

Describe how the wave-particle duality of light is demonstrated in everyday phenomena.

Which natural phenomena are caused by the interaction of light with the atmosphere? (Select all that apply)

- Rainbows
 Thunder
 Mirages
 Blue sky

Which properties are exhibited by visible light? (Select all that apply)

- Reflection
 Refraction
 Absorption
 Nuclear decay

When light interacts with a surface, which of the following can occur? (Select all that apply)

- Reflection
 Refraction

- Absorption
- Emission

Which colors are part of the visible spectrum? (Select all that apply)

- Red
- Cyan
- Green
- Indigo