

Name _____

The Electromagnetic Spectrum: Unveiling the Colors of Light

Open-Ended Response Questions

1. Imagine you are a scientist studying the effects of ultraviolet (UV) waves on living organisms. Discuss the potential benefits and risks of UV exposure, and explain how you would conduct your research to ensure safety.
2. Reflect on the impact of the discovery of X-rays on the field of medicine. How have X-rays revolutionized medical diagnostics and treatments, and what are some ethical considerations related to their use?
3. Discuss the significance of visible light in human perception and art. How do artists use the properties of visible light to create stunning visual effects in their work, and why is color symbolism important in art and culture?
4. Consider the potential dangers of gamma rays due to their high energy. How can scientists and researchers harness the power of gamma rays for beneficial purposes, such as cancer treatment, while minimizing the risks to human health and safety?

