

Electromagnetic Waves 101 Video Notes

Learning Target: Analyze and interpret data to identify the relationships among wavelength, frequency, and energy in electromagnetic waves.

1. How do electromagnetic waves travel? _____

2. What happens when electromagnetic waves go through a medium? _____

3. What all waves does the electromagnetic spectrum include? _____

4. What is the relationship between wavelength, frequency, and energy? _____

5. Draw and label a picture of the electromagnetic spectrum below:

6. List the waves in the electromagnetic spectrum from longest wavelength, lowest frequency, and lowest energy to the highest. _____

7. What are ultraviolet waves used for? _____

8. How can ultraviolet waves be dangerous to us? _____

9. What are X-rays used for? _____

10. How can X-rays be dangerous to us? _____

11. Why are Gamma Rays so dangerous? _____

Check for Understanding:

1. What waves on the electromagnetic spectrum are not harmful to you? _____

2. What properties of these waves lets you know they are not harmful to you? _____

3. What waves on the electromagnetic spectrum are harmful to you? _____

4. What properties of these waves lets you know they are harmful to you? _____

5. What is the relationship between wavelength, frequency, and energy? _____

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