

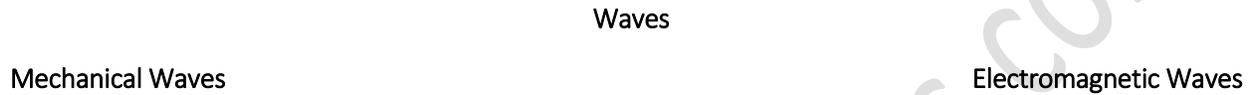
Electromagnetic vs. Mechanical Waves Video Review 101

Learning Target: I will be able to ask questions to compare and contrast the characteristics of electromagnetic and mechanical waves.

1. What do all waves have in common? _____

2. What is the biggest difference between mechanical and electromagnetic waves? _____

3. Draw the graphic organizer for waves below:



4. What are the two main types of mechanical waves? _____
5. What is a longitudinal wave? Give an example. _____

6. Draw and label an example of a longitudinal wave below:
7. Explain the difference between a compression and rarefaction in a mechanical longitudinal wave. _____

8. How do sound travel in a mechanical longitudinal wave? _____

9. What is a transverse wave? Give an example. _____

10. Draw and label an example of a transverse wave below:

11. How do you count the number of waves in a transverse wave? _____

12. What is the difference in how longitudinal and mechanical waves travel? _____

13. What does a higher amplitude of a wave tell you? _____

14. What happens to mechanical wave speed as they travel through different medium? _____

15. Why does this occur? _____

16. How do electromagnetic waves travel? _____

17. ALL electromagnetic waves are _____

18. How fast do electromagnetic waves travel? _____

19. What happens to electromagnetic wave speed as they travel through different medium? _____

20. How is this different from the way mechanical waves travel in a medium? _____

Check for Understanding:

1. Can be transverse or longitudinal waves _____

2. Require a medium (solid, liquid, gas) to travel through _____

3. Do not require a medium (solid, liquid, gas) to travel _____

4. Travel fastest in solids and slowest in gases _____

5. Can travel through the vacuum of space _____

6. Travel by alternating electric and magnetic fields _____

7. Travel Perpendicular or at right angles to medium _____

8. Travel fastest in gases and slowest in solids _____

9. Do not require a medium in order to travel _____

10. Includes ocean and sound waves _____

11. Travel at 300,000 km/s = "speed of light" _____

12. ALL waves are transverse waves _____

13. Travel Parallel to medium _____

14. Carry energy _____

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