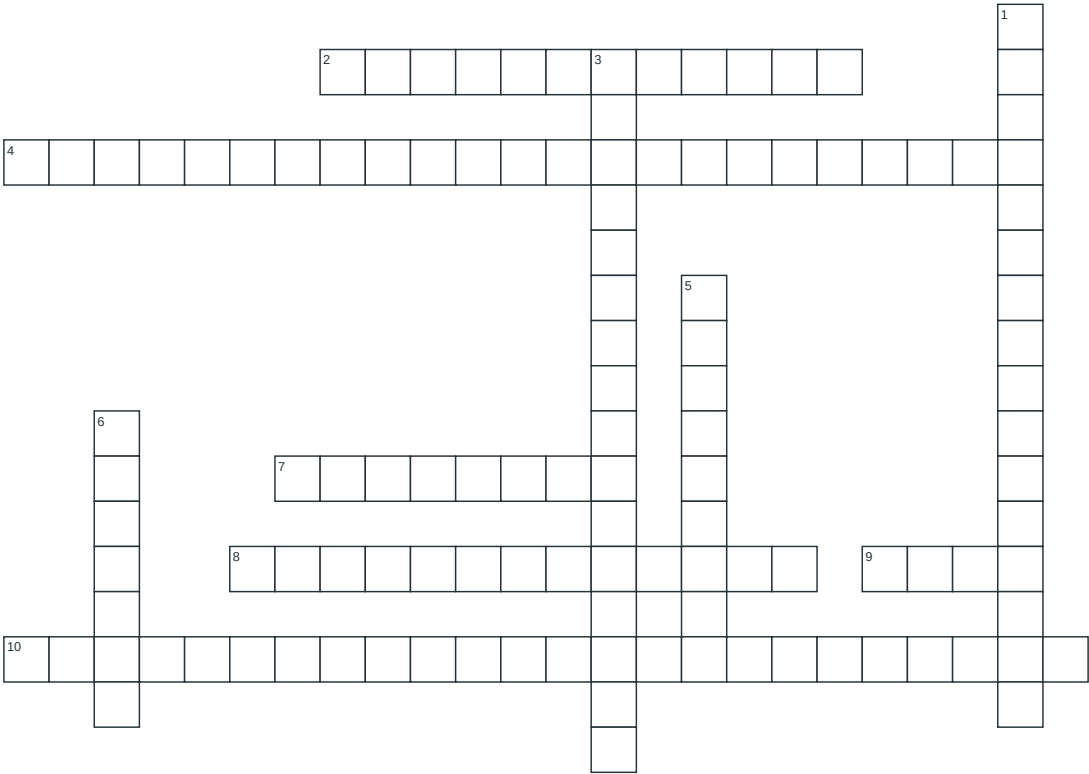


Wave Interference and Resonance Crossword

Easy | 10 clues | Student Worksheet

Name: _____ Date: _____

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



ACROSS

- 2. Pattern formed by overlapping waves traveling in opposite directions.
- 4. Opposite displacements partly or completely cancel at overlap
- 7. Point of maximum displacement in a standing wave.
- 8. Rate of loudness variation produced by two nearby sound frequencies.
- 9. A point with zero displacement amplitude

ACROSS (continued)

- 10. Overlapping displacements reinforce each other
- DOWN

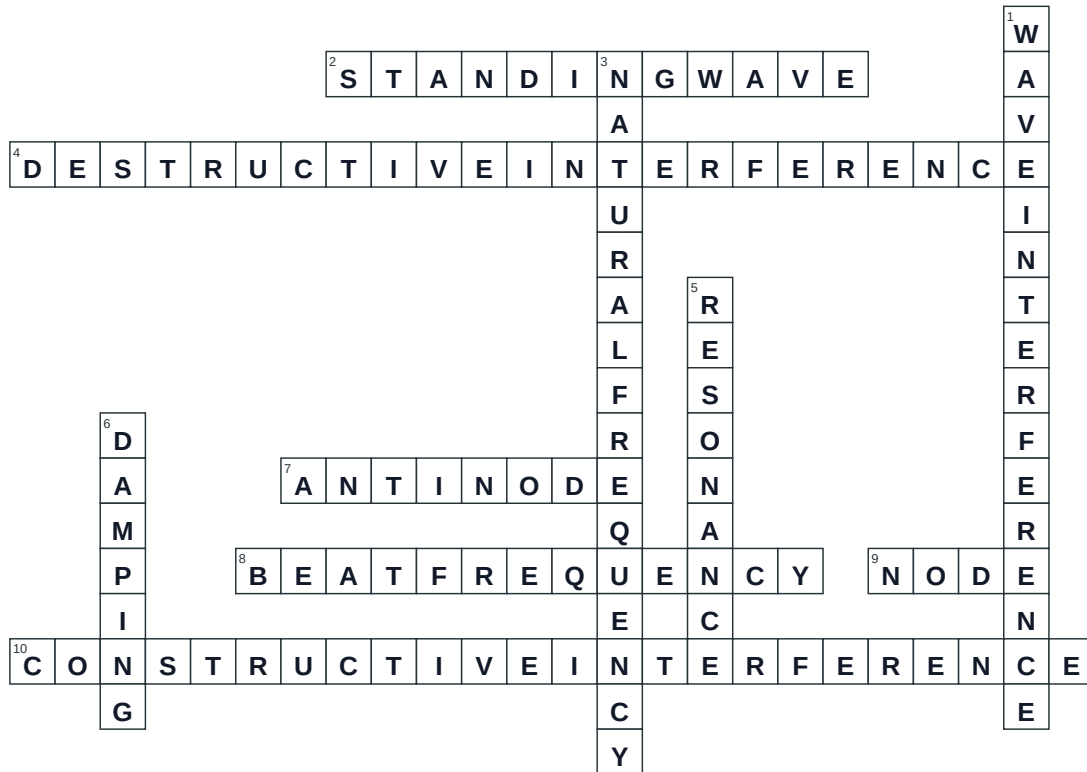
- 1. The combination of overlapping wave displacements
- 3. Frequency at which a system tends to oscillate when disturbed.
- 5. A strong response when driving frequency is near a system's natural frequency
- 6. Reduces oscillation amplitude over time

Wave Interference and Resonance Crossword

Easy | 10 clues | Teacher Answer Key

TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



ACROSS

2. Standing wave
4. Destructive Interference
7. Antinode
8. Beat frequency
9. Node
10. Constructive Interference

DOWN

1. Wave Interference
3. Natural frequency
5. Resonance
6. Damping

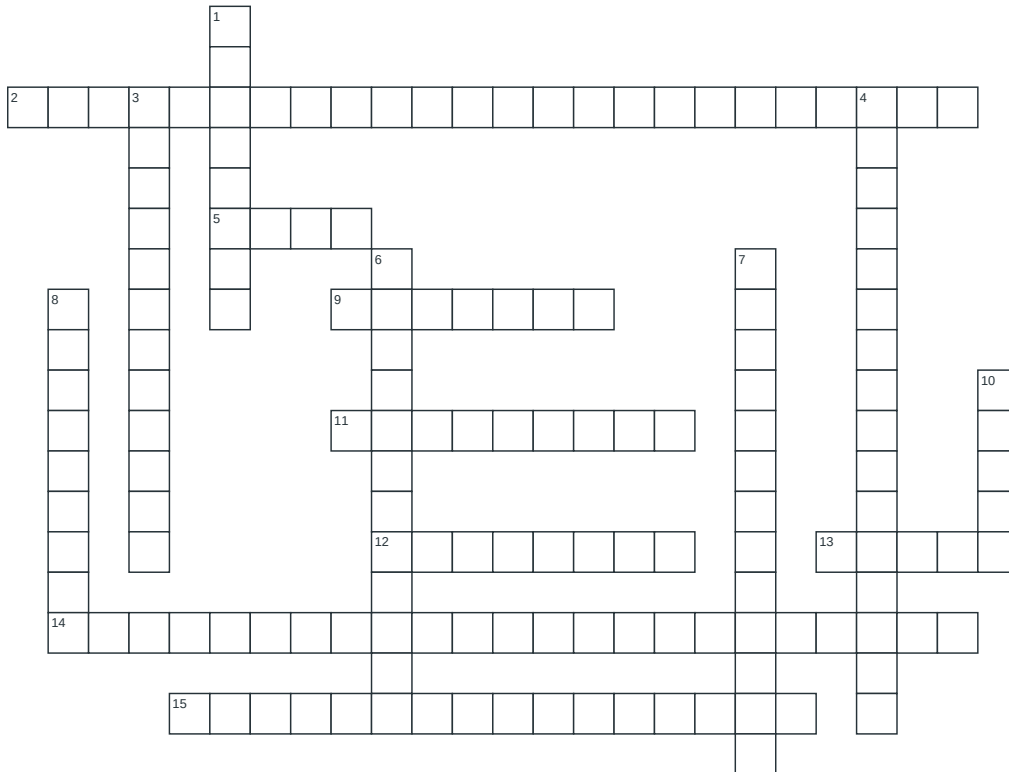
Wave Interference and Resonance Crossword

Medium | 15 clues | Student Worksheet

Name: _____

Date: _____

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.

**ACROSS**

2. Overlapping displacements reinforce each other
5. A point with zero displacement amplitude
9. Reduces oscillation amplitude over time
11. A strong response when driving frequency is near a system's natural frequency
12. Point of maximum displacement in a standing wave.
13. Single, localized disturbance that travels through a medium.
14. Opposite displacements partly or completely cancel at overlap
15. The combination of overlapping wave displacements

DOWN

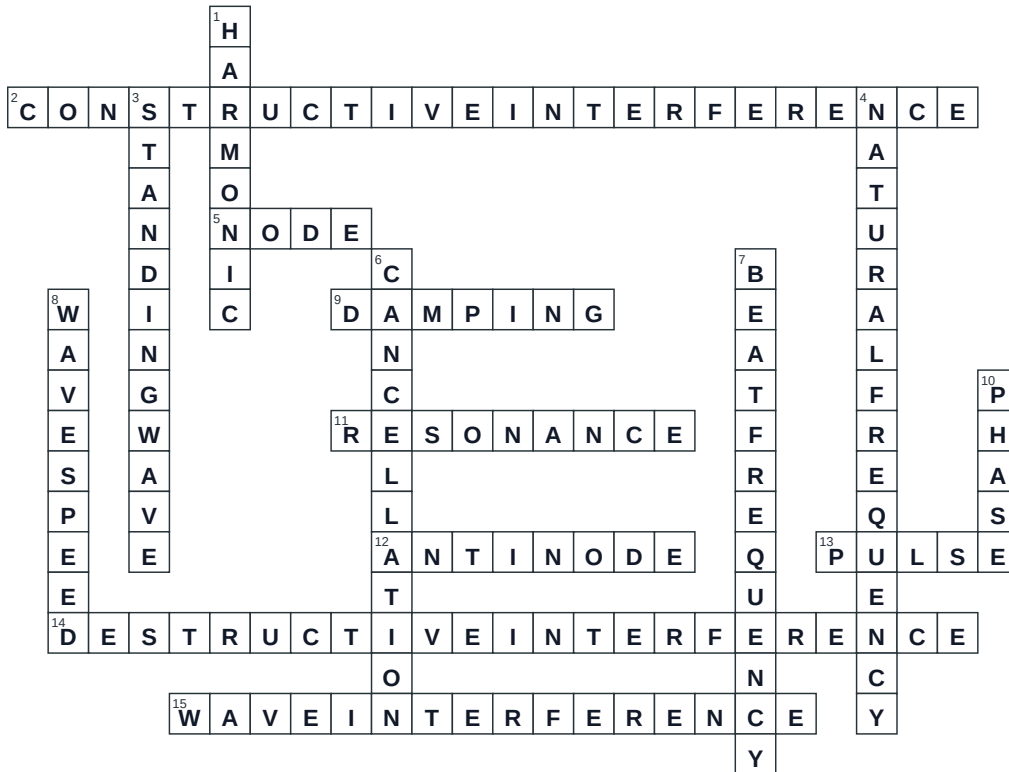
1. Frequency that is an integer multiple of a system's fundamental frequency.
3. Pattern formed by overlapping waves traveling in opposite directions.
4. Frequency at which a system tends to oscillate when disturbed.
6. Reduction in displacement when waves overlap with opposite phases.
7. Rate of loudness variation produced by two nearby sound frequencies.
8. Distance traveled by a wave per unit time.
10. Position within a repeating wave cycle.

Wave Interference and Resonance Crossword

Medium | 15 clues | Teacher Answer Key

TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



ACROSS

2. Constructive Interference
5. Node
9. Damping
11. Resonance
12. Antinode
13. Pulse
14. Destructive Interference
15. Wave Interference

DOWN

1. Harmonic
3. Standing wave
4. Natural frequency
6. Cancellation
7. Beat frequency
8. Wave speed
10. Phase

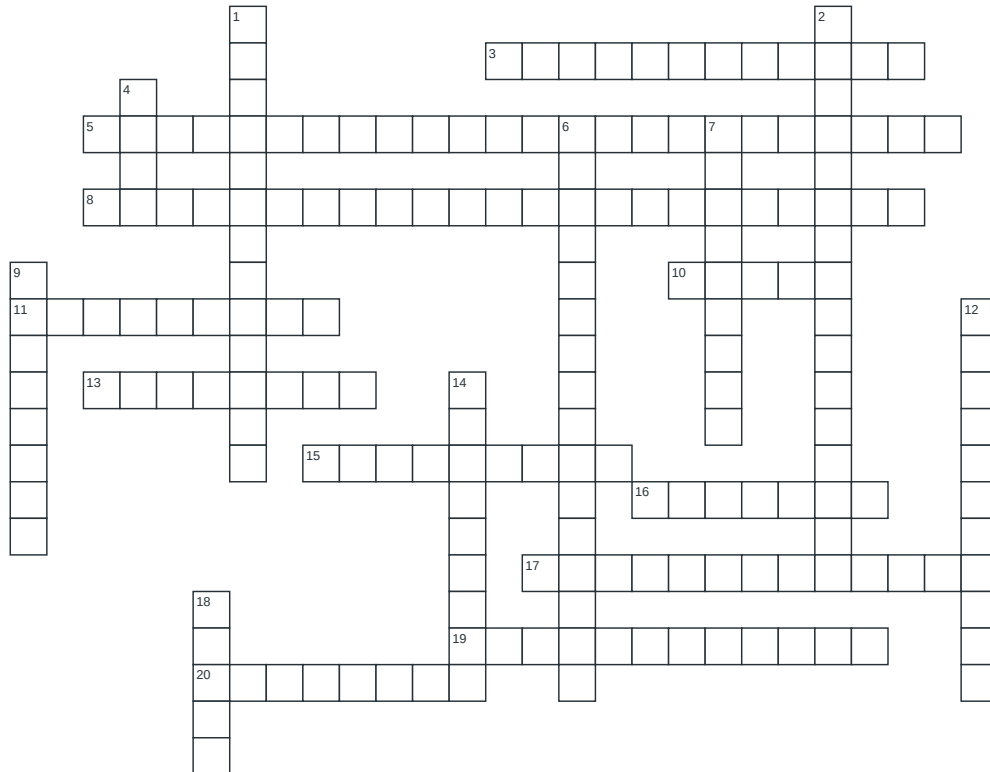
Wave Interference and Resonance Crossword

Hard | 20 clues | Student Worksheet

Name: _____

Date: _____

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



ACROSS

3. Pattern formed by overlapping waves traveling in opposite directions.
5. Overlapping displacements reinforce each other
8. Opposite displacements partly or completely cancel at overlap
10. Single, localized disturbance that travels through a medium.
11. The maximum displacement from equilibrium
13. Perception associated with sound intensity and hearing conditions.
15. Distance traveled by a wave per unit time.
16. Reduces oscillation amplitude over time
17. Increase in displacement when overlapping waves have the same phase.
19. Reduction in displacement when waves overlap with opposite phases.

ACROSS (continued)

20. Point of maximum displacement in a standing wave.

DOWN

1. Rate of loudness variation produced by two nearby sound frequencies.
2. The combination of overlapping wave displacements
4. A point with zero displacement amplitude
6. Frequency at which a system tends to oscillate when disturbed.
7. The number of cycles per unit time
9. Frequency that is an integer multiple of a system's fundamental frequency.
12. Repeated motion or change around an equilibrium state.
14. A strong response when driving frequency is near a system's natural frequency
18. Position within a repeating wave cycle.

Wave Interference and Resonance Crossword

Hard | 20 clues | Teacher Answer Key

TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



ACROSS

3. Standing wave
5. Constructive Interference
8. Destructive Interference
10. Pulse
11. Amplitude
13. Loudness
15. Wave speed
16. Damping
17. Reinforcement
19. Cancellation
20. Antinode

DOWN

1. Beat frequency
2. Wave Interference
4. Node
6. Natural frequency
7. Frequency
9. Harmonic
12. Oscillation
14. Resonance
18. Phase