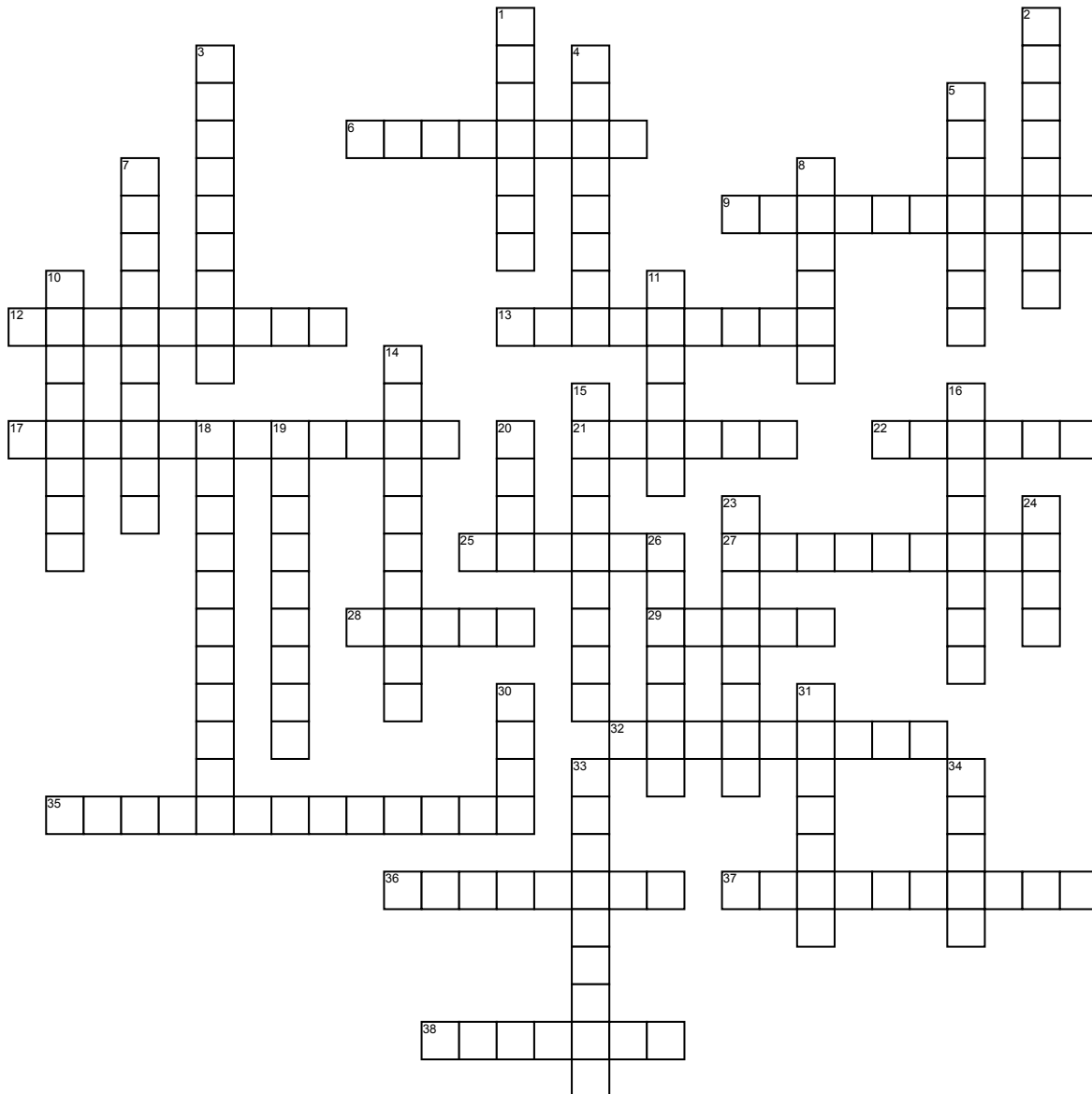


acoustics and resonance



Across

- 6.** Molecules to one another
9. Tube resonance represents _____ resonance
12. Bounce back
13. Graphic record of sound
17. Sound travels _____ waves
21. Anything a wave travels through
22. Lowest point
25. Time for one cycle to occur
27. Set into vibration by action of another
28. Highest point
29. Represents one compression and one rarefaction
32. Vibrations of a tuning fork
35. Stationary waves
36. Type of wave for time

- 37.** Property of object returning to original shape
38. Size, length and distance

Down

- 1.** Keeps molecules in motion
2. Oscillation
3. Measured in hertz
4. Dampen the sound wave
5. Relative pressure
7. Distance from crest to crest
8. Less dense
10. Series of frequencies systematically related
11. Packed molecules
14. Perpendicular waves
15. Loudness represents
16. Compression is measured this way
18. Sound passes through

- 19.** Sound changes direction due to an obstacle

- 20.** Musical instruments need this occasionally
23. Decrease of amplitude
24. Left alone to vibrate at own frequency
26. Uses logarithmic scale
30. Amount of matter in object
31. Sent into vibration and left alone
33. Frequencies not related
34. Measured in newtons