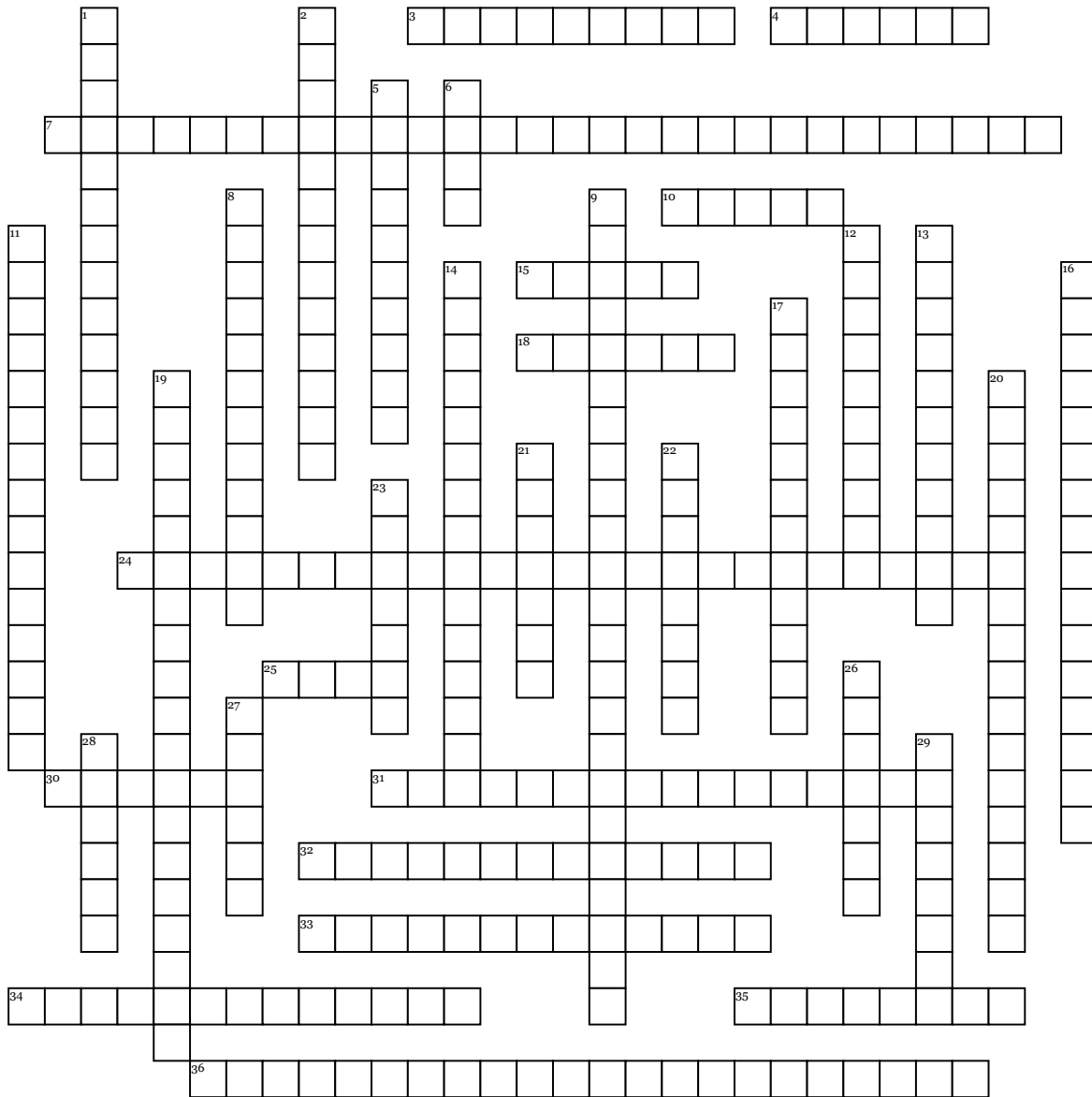


# Motion Crossword



**Across**

- 3. heat transfer through electromagnetic waves like light or x-rays
- 4. An object's change in position relative to a reference point.
- 7. Potential energy related to an objects height
- 10. the push or pull from one object to another
- 15. the distance an object travels per unit of time
- 18. measure of the force of gravity
- 24. the rule that energy cannot be created or destroyed
- 25. thermal energy that flows from an object with a higher temperature to an object with a lower temperature
- 30. the amount of space an object takes up
- 31. a materials inability to transfer heat
- 32. the unbalanced force on an object is = to mass x acceleration

- 33. for every action there is an equal and opposite reaction

- 34. The energy an object has due to its motion
- 35. The length of a path between two points
- 36. The potential energy of an object that is stretched or compressed

**Down**

- 1. the total kinetic energy of all the particles vibrating in a substance, measured using a Thermometer
- 2. an object at rest will stay at rest; an object in motion will stay in motion unless acted on by an unbalanced force
- 5. heat transfer through circulation of a gas or liquid
- 6. the amount of matter in an object
- 8. the change of velocity over time
- 9. energy that is stored in the chemical bonds of a substance
- 11. Energy that results from the position or shape of an object

- 12. heat transfer through direct contact
- 13. measure of the average kinetic energy of particles in an object
- 14. a force that acts on an object and changes the objects motion
- 16. the energy associated with both the motion and position of an object
- 17. a force that acts on an object without changing its motion
- 19. a materials ability to transfer heat
- 20. A change from one form of energy to another
- 21. a force of attraction between two objects
- 22. speed in a given direction
- 23. mass divided by volume
- 26. The unit of measurement for force
- 27. The ability to work or cause change
- 28. How energy is measured
- 29. a force that opposes motion