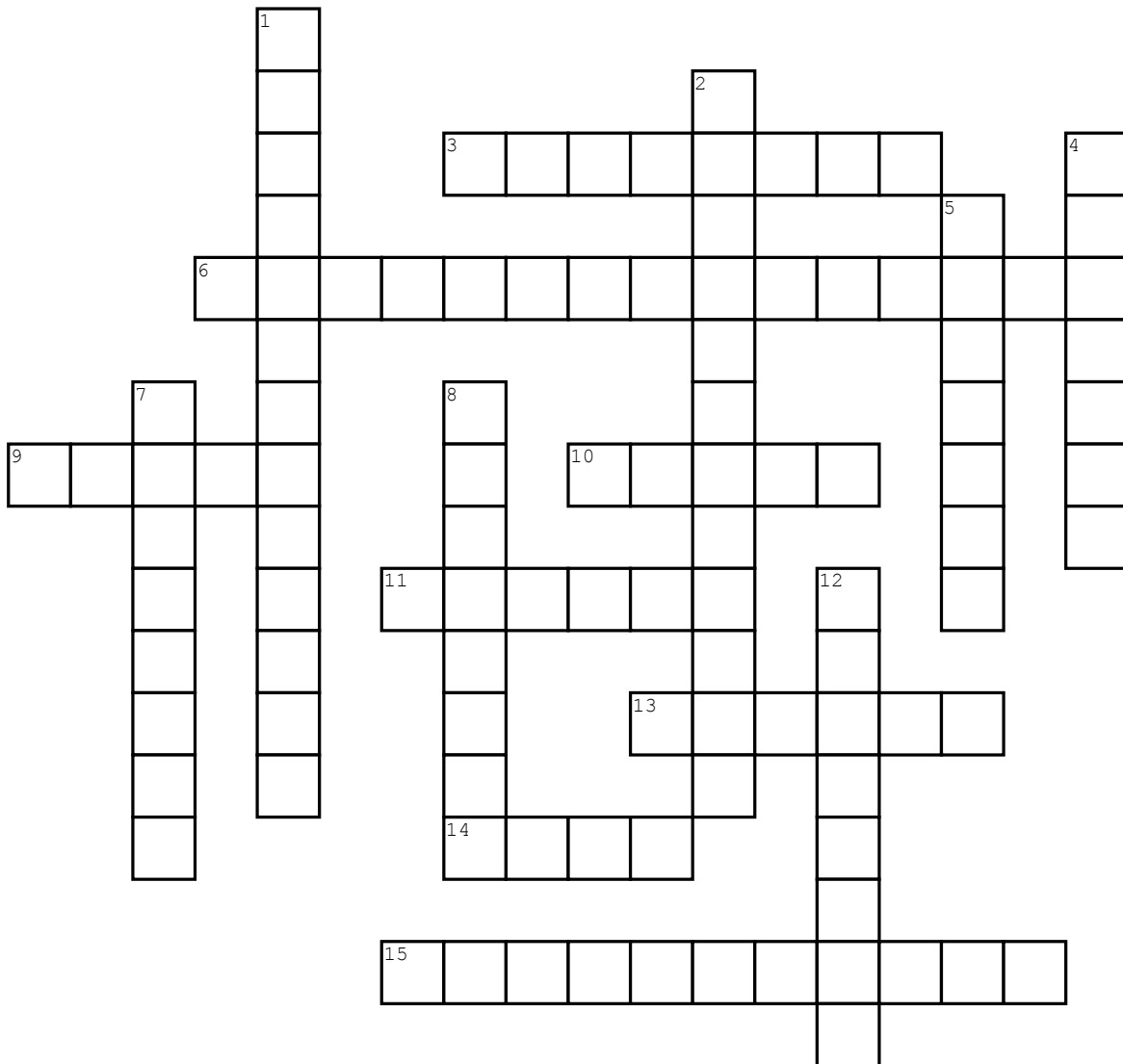


# Force in motion



**Across**

- 3. Speed in a given Direction
- 6. Forces that produce a nonzero net force which changes an object's motion
- 9. The distance an object travels per unit of time
- 10. A push or pull exerted on an object
- 11. The force of gravity on an object at the surface of a planet
- 13. The state in which one object distance from another

- 14. The amount of inertia depends on
- 15. The name often given to the force exerted by the first object on a second object

**Down**

- 1. Equal forces acting on an object in opposite direction
- 2. The rate at which velocity changes
- 4. The tendency of an object to resist any change in its motion

- 5. The force that pulls objects towards each other
- 7. The overall force on an object when all the individual forces acting on it are added
- 8. The product of an object's mass and velocity
- 12. The force that one surface exerts on another when the two surfaces rub against each other