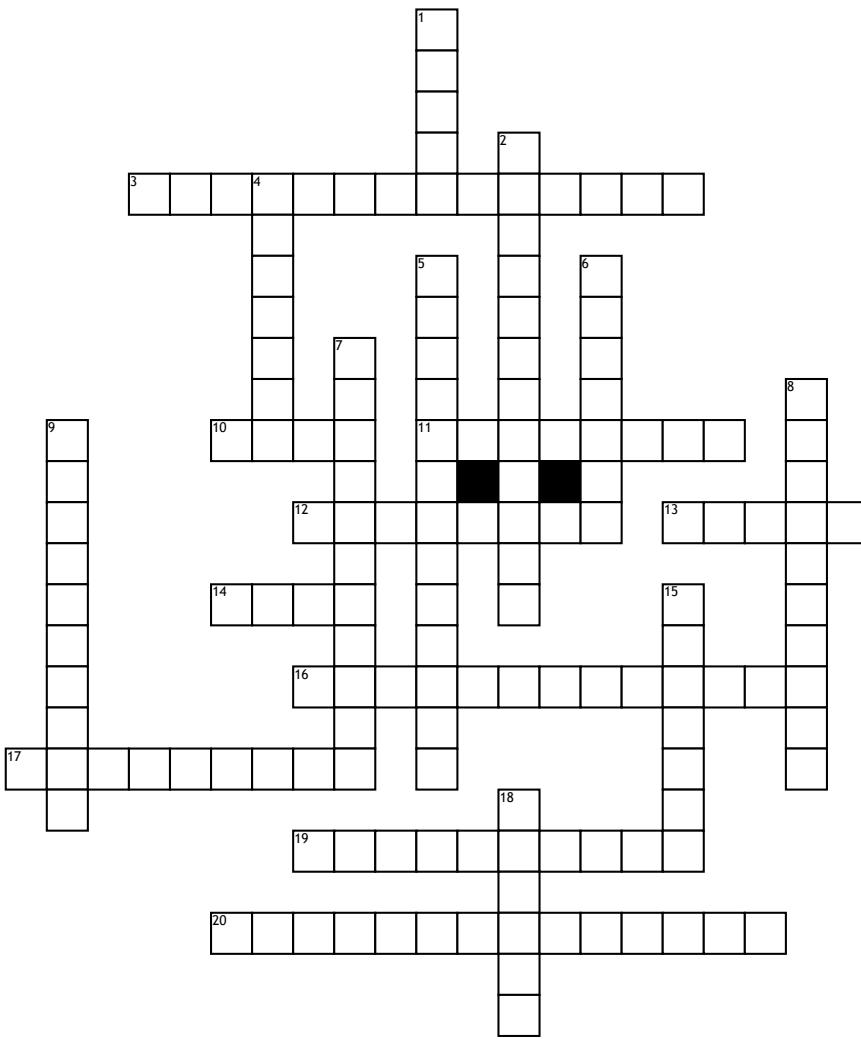


# Force and Motion



## Across

- 3. Newtons Third law of motion
- 10. The quantity of matter
- 11. A balance achieved between two desirable but incompatible features; a compromise
- 12. The resistance that one surface or object encounters when moving over another
- 13. The rate at which someone or something is able to move or operate
- 14. Newtons Second law of motion
- 16. The forces that are in opposition to the relative motion of an object as it passes through the air

17. An instance of one moving object or person striking violently against another

19. A form of energy that is transferred by a difference in temperature

20. The transfer of energy from one object or material to another

## Down

- 1. Strength or energy as an attribute of physical action or movement
- 2. Increase in the rate or speed of something
- 4. Newtons First law of motion
- 5. Energy which a body possesses by virtue of being in motion
- 6. A regularity in the world, in human-made design, or in abstract ideas

7. The action or process of observing something or someone carefully or in order to gain information

8. A scientific procedure undertaken to make a discovery, test a hypothesis, or demonstrate a known fact

9. A thing predicted; a forecast

15. The force that attracts a body toward the center of the earth, or toward any other physical body having mass

18. The quantitative property that must be transferred to an object in order to perform work on, or to heat, the object

## Word Bank

Speed	Prediction	Gravity	Heat Energy	Inertia
Collision	Trade-off	Observation	F=MA	Friction
Force	Action Reaction	Acceleration	Pattern	Air Resistance
Experiment	Kinetic Energy	Mass	Energy Transfer	Energy