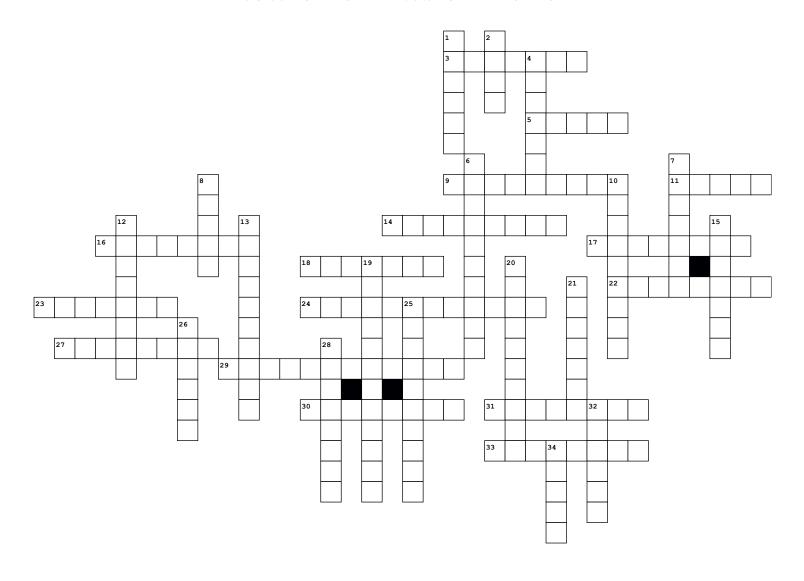
Newton's Laws of Motion



Across

- **3.** The force exerted when a material is stretched or compressed.
- **5.** Calculated by dividing distance by time.
- 9. Stored energy, often from gravity.
- **11.** Newton
- 14. When two objects crash.
- **16.** Action— pairs are described in Newton's Third Law.
- **17.** The force that opposes motion.
- **18.** The friction that causes your hands to heat up when rubbed together.
- **22.** A type of motion in constant acceleration due to Centripetal force.
- **23.** The force that pulls things towards the Earth.

Down

- 1. An arrow that has size and direction.
- 2. The amount of matter in an object.
- **4.** Another stretching force
- **6.** To calculate trajectory, you must first know the initial vertical and ______ velocities.
- **7.** The energy of motion.
- **8.** Type of friction that acts on an object moving through gas or liquid.
- 10. Used to reduce friction.
- velocity is the maximum velocity an object can fall due to air resistance.
- **13.** forces cause acceleration.
- **15.** The friction that a car experiences.
- **19.** How far an object is from where it started.
- **20.** The type of motion calculated with trajectory.

- **24.** Law of ______ of energy states that the energy put into a system is equal to the energy the system produces.
- **27.** Describes the forces when there is no change in motion.
- **29.** The change in velocity.
- **30.** ____ = mass X velocity
- **31.** The actual amount of space covered by an object in motion.
- **33.** The total force felt my an object

- **21.** The resistance to change in motion.
- **25.** Air _____ is the force that slow the acceleration due to gravity.
- **26.** The gravitational force exerted on an object.
- 28. Speed with direction.
- **32.** A force that is perpendicular to a surface (Gravity).
- **34.** A push or pull.