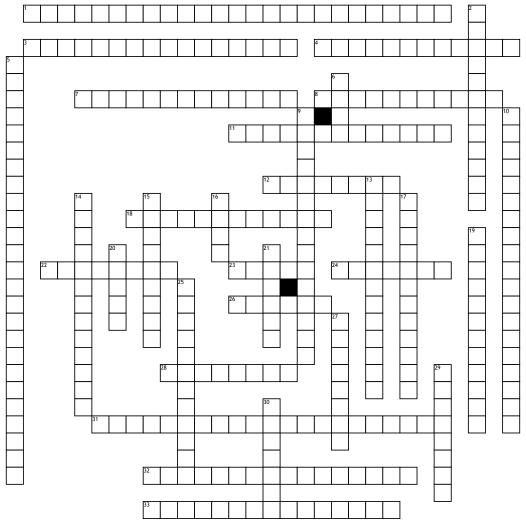
Force, Motion & Energy



Across

- **1.** the total energy of an isolated system remains constant
- 3. the sum of potential and kinetic energy
- 4. lacking all friction
- 7. when the speed remains the same
- 8. a creation of light that can be seen
- 11. the object stays still when forces acted on it are equal
- 12. a speed in a given direction
- 18. how far out of place a object is
- 22. the sum of all forces acting on an object
- 23. the rate in which a object is able to move

thermal energy

- **24.** a force that attract the object to the center of earth
- 26. the action or process of moving

- **28.** pieces of the earths crust that are slowly moving
- **31.** constant that appears in the equation of newtons law of graviton
- 32. it does not change in speed nor direction
- 33. energy held by an object

Down

- 2. distance\time
- 5. newtons second law
- ${\bf 6.}$ a measurable unit using hours, minutes and seconds
- **9.** can change a the direction and motion of a object
- 10. newtons third law
- **13.** heat
- 14. object in motion

- **15.** a path along which someone or something moves
- 16. the amount of matter in a object
- **17.** work
- 19. newtons first law
- 20. a push or pull
- 21. the SI unit of force
- 25. a change in velocity
- **27.** the action of one object rubbing against another
- 29. how far a object moves
- **30.** a object stays at rest or continues to move in a straight line unless a force is acted upon it

Word Bank

force

gravitational constant acceleration friction unbalanced force law of inertia law of force and acceleration distance velocity tectonic direction average speed mass applied force gravity net force mechanical energy balanced force motion constant velocity light energy newton constant speed displacement law of action-reaction inertia kinetic energy potential energy law of conservation of energy

frictionless