**Physics Vocabulary Words**

1. Physics – the science that deals with matter, energy, motion and force
2. Position – location of an object
3. Reference point – a location to which you compare other locations
4. Motion – the change of position over time
5. Speed – a measure of how fast something moves or the distance it moves, in a given amount of time
6. Velocity – speed with a specific direction
7. Acceleration – the rate at which velocity changes with time
8. Force – a push or a pull
9. Inertia – the resistance of an object to a change in speed or the direction of its motion
10. Gravity – the force that objects exert on each other because of their masses
11. Friction – a force that resists the motion between two surfaces in contact
12. Air resistance – friction due to air
13. Kinetic energy – energy of motion
14. Potential energy – stored energy
15. Thermal energy – energy an object has due to the motion of its molecules
16. Chemical energy – energy stored in chemical bonds
17. Nuclear energy – energy stored in the nucleus of an atom
18. Electromagnetic energy – energy associated with electrical and magnetic interactions
19. Electrical energy – energy from the movement of electrons
20. Mechanical energy – energy possessed by an object due to its motion or position
21. Law of conservation of energy – no matter how energy is transferred or transformed, all of the energy is still present somewhere in one form or another
22. Machine – any device that helps people do work
23. Mechanical advantage – the advantage that a machine gives you which makes work easier
24. Simple machine – six machines on which all other mechanical machines are based
25. Lever – a simple machine that is a solid bar that rotates, or turns, around a fixed point
26. Wheel and Axle – a simple machine made of a wheel attached to a shaft
27. Pulley – a simple machine that is a wheel with a grooved rim and a rope that rides in the groove
28. Inclined plane – a simple machine that is a sloping surface
29. Wedge – a simple machine that has a thick end and a thin end
30. Screw – a simple machine that is an inclined plane wrapped around a cylinder or cone to form a spiral