*Changes in Force and Motion*

Resting Position - Refers to an object remaining in the same spot relative to another object.

Motion - The change in an object's position with respect to time and in comparison with the position of other objects used as reference points.

Direction - The path that an object is moving or facing.

Speed - The rate of change of position (or distance traveled) with respect to time; units in which speed is measured are expressed as distance per time (example: meters per second).

Distance-Time Graph - This type of graph illustrates changes in motion. Time is graphed on the x-axis and distance is graphed on the y-axis.

Line Graph - A graph in which the data are represented by points connected by one or more lines.

X-Axis - The horizontal line with labels on a coordinate grid; time is represented on the x-axis.

Y-Axis - The vertical line with labels on a coordinate grid; distance is represented on the y-axis.

Average Speed - Average speed is calculated by dividing the total distance an object traveled by the total time it took the object to travel the distance (s= d/t).Speed describes the rate of movement.

Force - A push or pull that can change the motion of an object, measured with a spring scale in Newton (N) units.

Balanced Forces - Forces on an object that do not change the motion of the object.

Unbalanced Forces - Forces on an object that cause change in the motion of the object.

Potential Energy - Energy that is stored in a system or object.

Kinetic Energy - Energy of motion.