Force and Motion Definitions

**energy** - the ability to do work

**kinetic energy** – energy in motion

**potential energy** – stored energy

**speed** – the measure of the change in an objects position in a unit of time

**velocity** – the measure of the speed and direction of motion of an object (speed + direction)

**acceleration** – any change in speed or direction of an object’s motion

**force** - a push or pull that causes an object to move, stop, or change direction

**inertia** – the property of matter that keeps an object at rest or moving in a straight line

**momentum** – measurement of mass in motion (mass x velocity)

**friction** – a force that resists motion between objects that are touching

**gravity** – the force of attraction between Earth and other objects

**simple machine** – a machine with few or no moving parts that you apply just one force to

**lever** – a simple machine made of a bar that pivots on a fixed point

**fulcrum** – the fixed balance point on a lever

**wheel and axle** – a simple machine made of a wheel and an axle that turn together

**inclined plane** – a simple machine that is a slanted surface

**wedge** – a simple machine made of two inclined planes placed back to back

**screw** – a simple machine made of a post with an inclined plane wrapped around it

**pulley** – A simple machine that consists of a wheel with a line around it

**compound machine** – two or more simple machines working together to make work easier