

## Force, Motion, and Simple Machines Study Guide

- Force- a push or pull
- o Effort Force- force you use to move something
- o Motion-movement or change in position
- Friction- when 2 objects rub against each other- resistance- rough surfaces cause more friction
- o **Inertia-** tendency of an object to stay at rest or stay in motion
- o Speed- the rate of movement-how fast or slow
- o Gravity- the force that pulls 2 objects together
- o Work- to use energy to make something happen
- o Energy- the ability to do work
- o Direction- the path of movement- where something is going
- o Simple Machine- a machine that makes work easier
- o Inclined Plane- a tilted ramp- to help move things
- <u>Lever-</u> a bar or plank and a fixed point (fulcrum)- helps lift heavy objects or open things
- o Wheel and Axle- a wheel with a bar passing through the center
- o **<u>Pulley-</u>** rope is passed around a wheel-makes it easier to lift things
- <u>Wedge-</u>two inclined planes back to back
- o <u>Screw-</u> an inclined plane twisted into a spiral

## Simple Machines Examples

Levers-wheelbarrow, seesaw, shovel Inclined Plane-ramp Wheel and Axle-door knob, screwdriver Wedge-ax, knife



Screw-light bulb

