

## Newton's 1st and 2nd Law's of Motion

First law - an object in motion, with no force acting on it, tends to stay in motion/rest (moves with a constant velocity in one direction, (i.e. planets))

Also called the Law of Inertia

Inertia = tendency of an object not to accelerate

Second law  $F = ma$  (in words via lab)

Weight = mass X force of gravity

Terms: kinematics - how objects move

dynamics - why objects move

force - push/pull on an object (EM, gravity,

weak. strong)

inertia - tendency of an object to not change its motion

static - start of motion

kinetic - relative motion

friction or coefficient of friction - resistance to motion

(3rd law later.. .Action/reaction)