## NEWTON'S 2ND LAW OF MOTION NOTES



## The net force on an object is equal to the product of its acceleration and its mass. Force $=$ Mass $\times$ Acceleration

Gravity exists between any two objects that have mass.

Weight is the gravitational force between you and Earth.


## Example:

A baseball has a mass of .15 kg . What is the net force on the ball if its acceleration is $40 \mathrm{~m} / \mathrm{s}^{2}$ ?
$F=m a: .15 \mathrm{~kg} \times 40 \mathrm{~m} / \mathrm{s}^{2}=6 \mathrm{~N}$

