

gravity  $\rightarrow$  the weakest  
force in the  
Universe!

$\uparrow$  Mass =  $\uparrow$  gravity

$\uparrow$  mass =  $\uparrow$  inertia (fighting back  
of change)

All  $\rightarrow 9.8 \text{ m/s}^2$

Things  
fall with this  
Acceleration  
on the  
Earth!

$v = 0$  speed

1 sec =

$9.8 \text{ m/s}$

2 sec =

$9.8 + 9.8$

$19.6 \text{ m/s}$

3 sec =

$9.8 + 9.8 + 9.8 \rightarrow$

$29.4 \text{ m/s}$

Newton's = 4.45 x lbs!

Moon  $\frac{1}{6}$ th the weight on Earth!