

1. force- a push or pull

example: pulling chair out,  
pushing chair in

2. motion- a change in  
position

\* every motion starts and stops  
with a force

3. speed- the measure of how  
fast something moves  
over a certain distance

4. gravity- pulling force  
between objects

5. weight- measure of the pull of gravity on an object

6. The amount of force needed to lift an object depends on the object's mass.

7. friction- is the rubbing of one object against another, it causes moving objects to slow down.

Example: driver pushes on the brakes, friction causes the car to stop

Experiment 1 :

penny vs pen

Do you think these 2 things when dropped would hit the ground at the same time?

\*\* All things, when dropped near the surface of earth, accelerate at the same rate due to earth's gravity.

## Experiment 2:

Which marble is will roll  
down faster?

\*\* When objects travel down an inclined plane, gravity is pulling them downward, but the plane is exerting a force on the object, which makes it fall along the plane rather than straight down. Two marbles, regardless of size, will accelerate at the same rate. The two marbles should reach the bottom of the plane at the same time.