

Unit 7

Forces

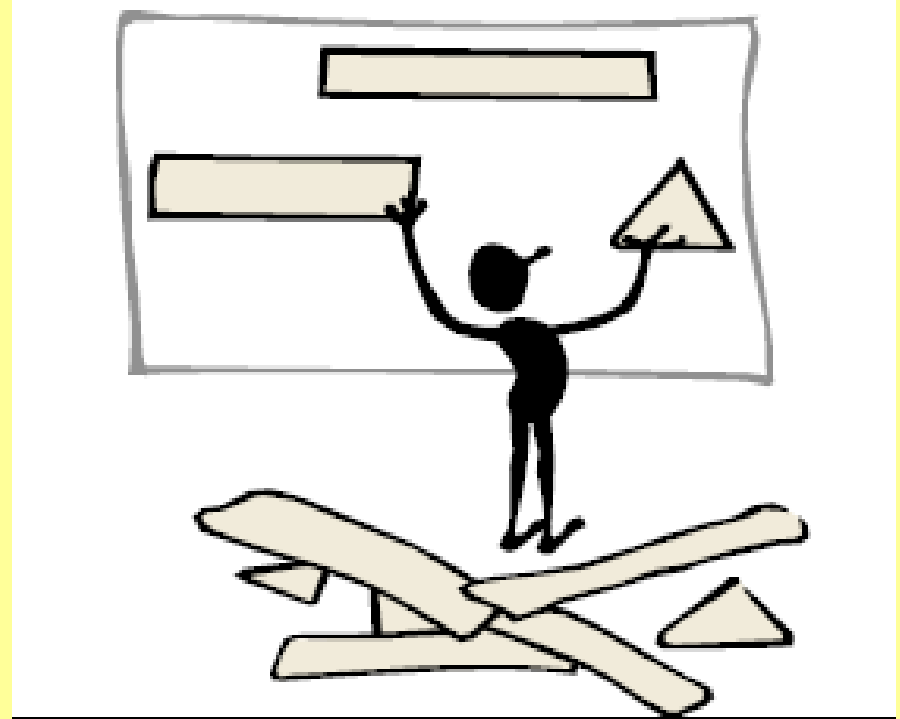
Experiment*

Testing a variable to compare results of something you want to know



Independent Variable*

Any factor that can change in an experiment in order to be tested and compared.



Reliability



Having the **same** results with repeated trials.





motion



An object that is moving or being moved from one location (spot) to another

MOVEMENT



force

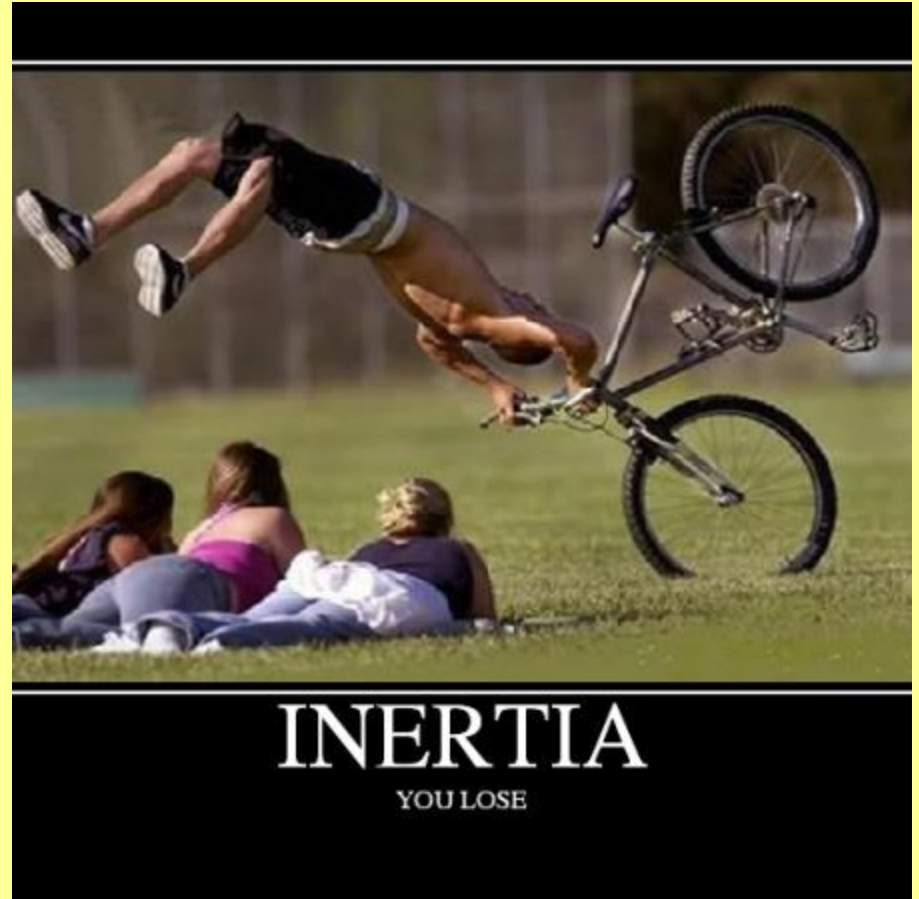
A force is a push or pull on anything that starts or stops motion

A force can change the direction or speed of an object.



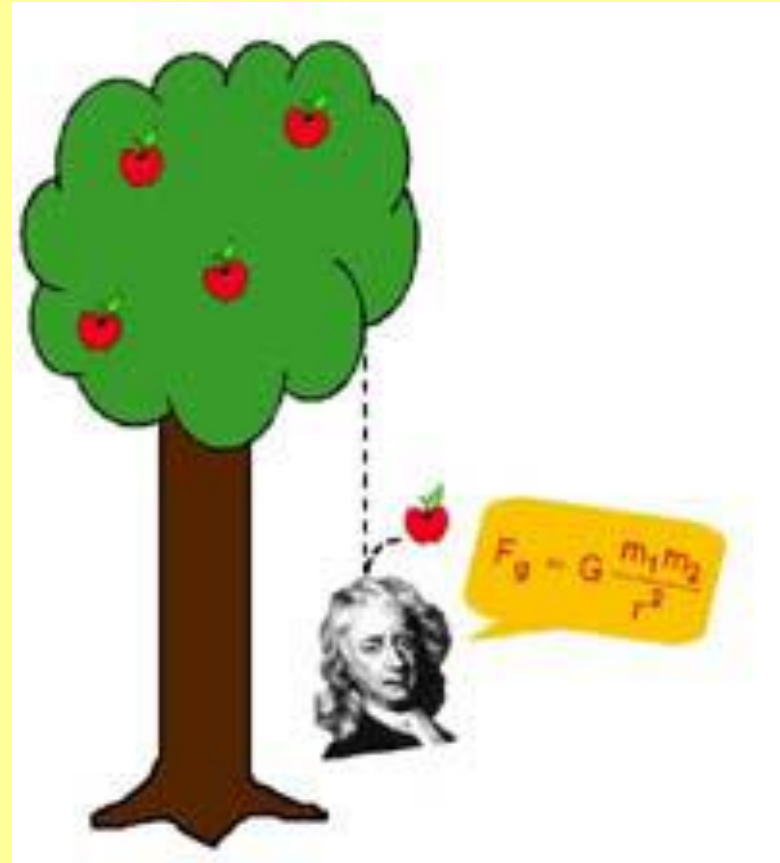
inertia

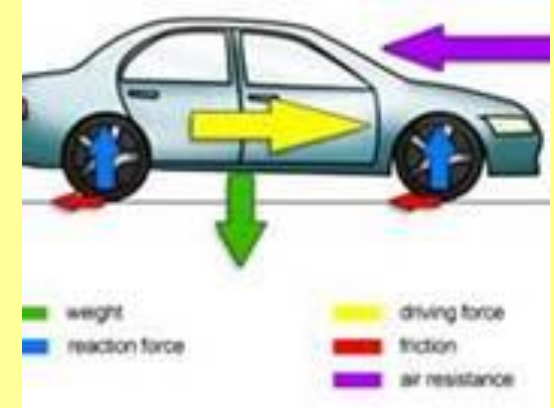
An object to stay at rest or to remain in motion unless an outside force causes a change.



gravity

The force that pulls objects toward each other.





friction

A force that resists motion and slows down moving objects

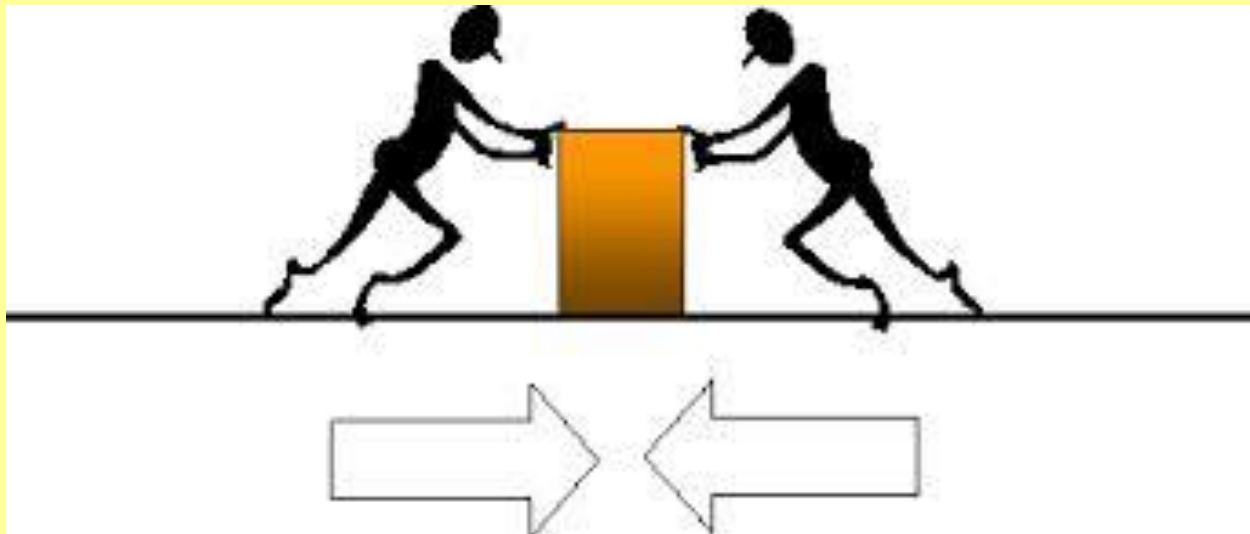
- When an object rubs against another.
- Rougher surfaces have more friction



balanced forces

Forces on an object that are equal
in size but opposite in direction

Forces cancel each other out; object will not move



Unbalanced forces

One force is larger causing a change in motion



Velocity

The direction an object is going and how fast it is moving (speed)

Direction + speed = velocity



Magnetism

A force that can attract or repel material containing nickel, iron, cobalt, or steel

