

Key word	Definition
force	a push or a pull
contact force	objects have to touch to push or pull each other
non-contact force	objects DO NOT have to touch to push or pull each other
Newton	The UNIT of Force
acceleration	When an object's speed increases
stationary	When an object is not moving
vector	Something that has a size and a direction
compression	A force which pushes back from a solid object
upthrust	A force pushing up in a liquid or gas
drag	A force caused by liquid or gas particles hitting a moving object
Mass	The amount of matter making up an object
weight	The force on an object because of gravity and its mass and

Measuring Forces

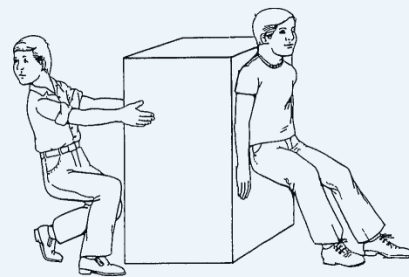
FORCES are measured in **Newtons (N)** using a **Newtonmeter**



direction

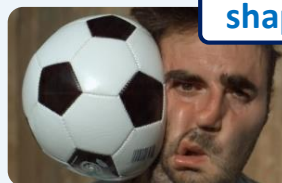
A **FORCE** is a **VECTOR** quantity

A **FORCE** is a **Push** or a **Pull**

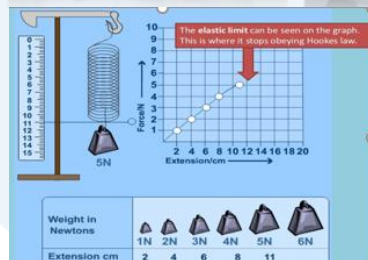


A force can **change** an **OBJECTS**:

shape

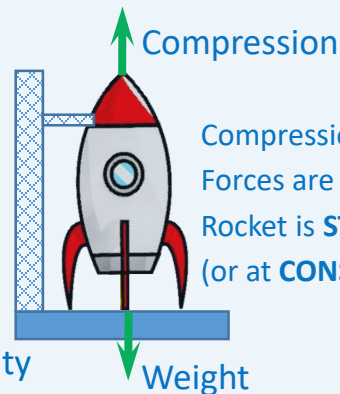


speed



HOOKE'S LAW

BALANCED and **UNBALANCED** Forces



Compression = Weight
Forces are **BALANCED**
Rocket is **STATIONARY**
(or at **CONSTANT**
SPEED)



Thrust larger than Weight
Forces are **UNBALANCED**
Rocket **ACCELERATES**
upwards



electrostatic



weight

...and **NON CONTACT** forces



drag
(air resistance)

friction



tension



compression

There are **CONTACT** forces



upthrust

A straight arrow represents the **direction** and **size** of a force

