



He carried out his experiment by dropping objects from the Leaning Tower of Pisa!



## Galileo Galilei

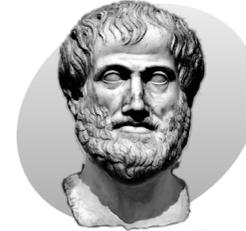
was an Italian scientist who proved that the pull of gravity on an object is always the same, no matter its weight.

## Year Five Forces



Spring 2

## Aristotle



The heavier the object is, the faster it will fall to the ground.

Aristotle was a very famous philosopher and scientist. He was born in northern Greece in around 384BC.



Aristotle v Galileo  
These two famous men had different theories of motion.

## Glossary

**Air resistance**– the force that air exerts on a moving object

**Force**– a push, pull, twist or turn

**Friction**– the force between 2 moving surfaces

**Gravity**– a pushing force exerted by the Earth; it attracts objects towards the centre of the Earth

**Mass**– the measure of how much matter is inside an object; can be measured in g/kg etc

**Mechanisms**– machines or devices which help to achieve a result

**Streamlined**– when an object is shaped to minimise the effects of air or water resistance

**Upthrust**– a force that pushes objects up in water or air

**Water resistance**– the force that water exerts on a moving object

**Weight**– the measure of the force of gravity on an object, measured in Newtons (N)

Water resistance and air resistance are forms of friction.



Forces can make an object:  
change direction  
move  
STOP  
CHANGE SHAPE

Tides are caused by the sun and moon's gravitational pull.

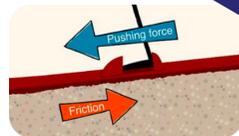
Unsupported objects fall towards the Earth because of the force of gravity.

This is a force metre (or Newton metre) which measures the force acting on an object (its weight)



**Friction** is a force between two surfaces that are sliding, or trying to slide, across each other.

Friction ALWAYS slows a moving object down.



Some mechanisms allow a smaller force to have a greater effect.

