



Somerset Bridge Primary School  
Aspire - Brave - Care - Collaborate

# Science: Forces

## Autumn 1: Year 5

### Newton



Isaac Newton was a scientist who was interested in forces.

He noticed that unsupported objects always fell towards the Earth after observing apples falling from their tree.

He called this force Gravity.

Forces are measured in units called Newtons.

We use a Force Meter (or Newton Meter) to measure the effect of a force.



### Resistance Forces



Resistance forces, including friction, slow down moving objects.

They act between an object and its surroundings.

They can be helpful or unhelpful in everyday life:



By controlling variables in a fair test, we can explore the effects of resistance forces.

### Links to Real Life

A mechanism reduces the force required for a task:



Levers

Pulleys

Gears

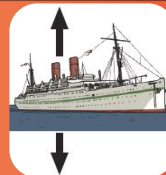
### Key Vocabulary



Force	A push or pull.	
Gravity	The force that pulls unsupported objects towards Earth.	
Friction	The force between a moving object and the surface it is touching.	
Air resistance	The force acting on an object moving through the air.	
Water resistance	The force acting on an object moving through water.	
Buoyancy	This is how well an object floats.	
Accelerate	To speed up / move faster.	
Decelerate	To slow down / move slower.	

Balanced and unbalanced forces:

When forces are balanced, objects are stationary or moving at a consistent speed.



When forces are unbalanced, objects are accelerating or decelerating.

