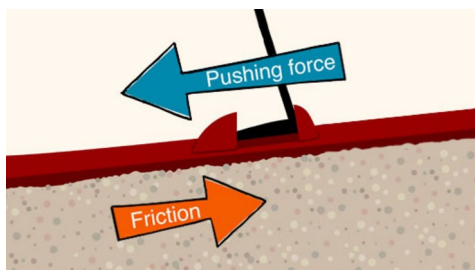




Science	Year 5
Focus: Forces	
Age related scientific vocabulary	Key vocabulary

gravity	Gravity is a force which pulls things towards the centre of Earth. It was discovered by Sir Isaac Newton.	weight	Weight is how strongly gravity is pulling an object down. It is measured in newtons (N).
air resistance	Air resistance is a type of friction between air and another material.	Sir Isaac Newton	Isaac Newton famously developed his theory of gravity when he saw an apple fall to the ground from an apple tree.
water resistance	Water resistance is a type of friction between water and another material.	lever	A lever is a simple machine which helps us to lift objects. It has a long arm and a fulcrum, which is where the arm pivots.
friction	Friction is a force that slows objects down and it can occur when an object moves through water or air.	pulley	A pulley is a simple machine and comprises of a wheel on a fixed axle, with a groove along the edges to guide a rope or cable.
mass	Mass is how much matter (or 'stuff') is inside an object. It is measured in kilograms (kg).	gear	Gears are wheels with teeth that slot together. When one turns, the other turns too.



Key Knowledge

- Objects fall to earth due to the pull of **gravity**.
 - Sir Isaac Newton was an English mathematician, and one of the most influential scientists ever. He created laws on gravitation and motion which would be used for 300 years.
 - The **weight** of an object is caused by gravity pulling it down. Objects with more **mass** have a greater weight, as the force of gravity pulls them down more strongly.
 - Gravity pulls objects down with a force of approximately 1N for every 100g.
 - **Friction** is a force that occurs between two materials—it slows objects down.
- ⇒ **Air resistance** occurs between air and another material.
- ⇒ **Water resistance** occurs between water and another material.
- Some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.