Science Knowledge Organiser

Year 4	Forces	Summer 1

Key Vocabulary

attract	To pull towards.
contact	When objects touch.
distance	The length between two objects.
force	A push or pull that acts on an object that can cause it to move, change shape or change direction.
friction	The force that acts upon one surface when it moves against another.
gravity	A pull force that acts at a distance.
pull	To move something towards.
push	To move something away.
repel	To push away.

Sticky Knowledge

What is a force?

A force is a push or pull that **acts upon an object**. **We can't see forces**, but they are an important part of our everyday lives. We **push and pull** objects to do many different things. When we push or pull objects we can **move** the object, **change the shape** of the object **or make the object change direction**.

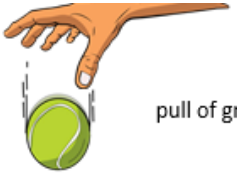
Friction

Friction is a **force created between two surfaces when they rub together**. Friction creates heat and always **slows down an object**. Rough surfaces create more friction than



Gravity

Gravity is a force which **acts at a distance**. It is a **pull force** that pulls objects towards the centre of the Earth.



pull of gravity

The planets and the Sun do not touch, yet the **planets stay in orbit** around the Sun due to the force of gravity.

