












Paganel Primary School –Knowledge Organiser

Year Group: 3 Topic: Forces

What? (Key Knowledge)	
Forces	
What is a force?	A force is either: <ul style="list-style-type: none"> • A push or • A pull
Forces can make things...	<ul style="list-style-type: none"> • Speed up • Slow down • Change shape • Change direction
A force that speeds something up	The child is pushing the car to speed it up. 
A force that slows something down	The girl is pulling the dog to slow it down. 
A force that changes the shape of something	The can is being squeezed so that it changes shape and becomes smaller. 
A force that changes the direction of something	When the ball is hit with the racket, it will change direction. 
Magnetic Forces	
Why is magnetism different?	All of the forces above needed contact between two objects for them to happen. Magnetic forces can act at a distance.
Magnets have a North Pole and a South Pole	
Magnets attract or repel each other	Attract:  Repel:  North and South attract. But North and North or South and South will repel.
Types of magnets	
Bar	
Ring	
Button	
Horseshoe	
Can magnets only attract magnets?	
No - Magnets can attract other things too. See the diagram on the opposite side.	

What? (Key Vocabulary)	
Spelling	Definition/Sentence
push	a push is the force that moves an object away from something,
pull	a pull is the force of bringing an object closer
magnet	is a rock or a piece of metal that can pull certain types of metal toward itself
attract	to draw to or toward something else A magnet attracts iron.
repel	to push something away
North Pole	the most northern point of the earth
South Pole	the most southern point of the earth

Take it further at home...

- Explore the uses of magnets in everyday objects
- Group everyday objects into magnetic and non- magnetic by testing with magnets
- Design a mechanism that requires a magnet to enable it to work
- Fill in the vocabulary chart – try and do some from memory.

Diagram and symbols

Magnets only attract certain types of metals, other materials such as glass, plastic and wood aren't attracted.



Metals such as iron, nickel and cobalt are attracted to magnets.



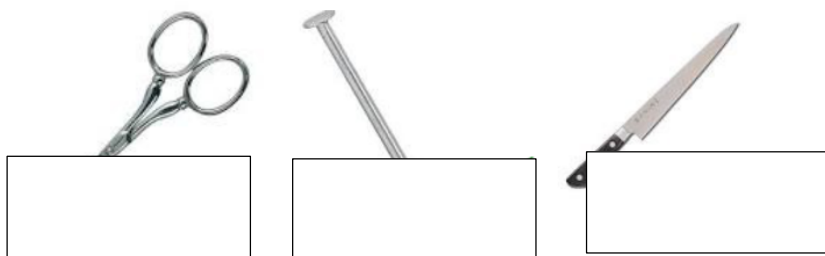
Most metals however are not attracted to magnets, these include copper, silver, gold, magnesium, platinum, aluminium and more.



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