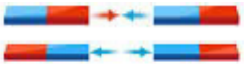
St John's Primary School: Science knowledge organisers

Year group: Year 3

Science focus: Forces and magnets

Key knowledge:

Forces	
What can forces do?	• Make things speed up • Make things slow down • Make things change shape • Make things 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 squeezed to become smaller.
A force that changes the direction of something	 The ball is hit to change the direction its going.
The importance of flowers	
Magnets have a North Pole and a South Pole	 South North
Magnets attract and repel each other	North and South attract  North and North or South and South repel
Types of magnets	

Key vocabulary:

Force	A push or a pull
Magnetic	An object attracted to a magnet
Attract	To come together
Repel	To force away/ push away

Diagrams:

Magnets only attract certain types of materials. Materials such as glass, plastic and wood are not magnetic

Some 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.

Key concepts:

Comparing	Grouping
Noticing	Describing
Observing	Predicting

Possible experiences:

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.