

# Year 3 Knowledge Organiser: Forces and magnets

## Skills

### **-Classifying:**

Sorting materials (metal/non-metal and magnetic/not magnetic)

Sorting toys (e.g. push/pull)

### **Comparative/Fair Testing:**

How objects move on different surfaces e.g. cars, spinning tops, wind-up/clockwork toys

Testing the strength of different magnets.

### **Researching:**

Finding out how magnets are used in everyday life.

## Knowledge

To know that force is a push or a pull and when an object moves on a surface, the texture of the surface and the object affect how it moves

To know that magnets have two poles – a north pole and a south pole. If two like poles e.g. two north poles, are brought together they will repel. If two unlike poles e.g. a north and south, are brought together they will attract.

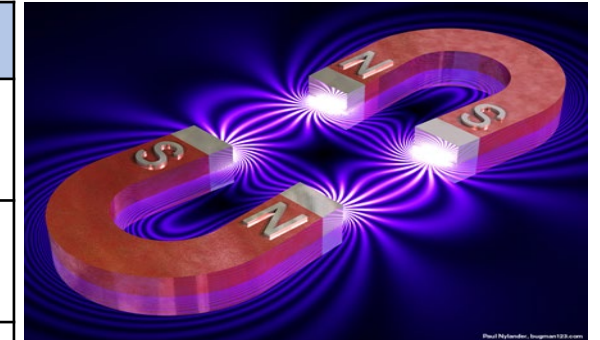
To know that a magnet does not need to touch the object that it attracts/repels.

To know that some metals but not all are magnetic.

# Year 3 Knowledge Organiser: Forces and magnets (Autumn 2 and Spring 1)

Questions	Essential knowledge
<b>What is friction?</b>	A force between 2 surfaces or objects that are moving, or trying to move, across each other.
<b>What is a force?</b>	A force is when things push or pull to start or stop a movement.
<b>What does magnetic mean?</b>	Objects which are attracted to magnets.
<b>What does non-magnetic mean?</b>	Objects that are not attracted to a magnet.
<b>What are poles?</b>	North and south poles are found at different ends of a magnet?
<b>When do things attract?</b>	When a force pulls objects together?
<b>When do things repel?</b>	When a force pushes objects away from each other.

Essential vocabulary	
<b>metal</b>	Usually magnetic, shiny solids that conduct heat or electricity.
<b>push</b>	A force that changes the direction of an object away from you.
<b>pull</b>	A force that changes the direction of an object towards you.
<b>magnet</b>	A magnet is a rock or a piece of metal that can pull certain types of metal toward or away from itself.
<b>magnet</b>	A magnet is a rock or a piece of metal that can pull certain types of metal toward or away from itself.
<b>Hypothesis</b>	A hypothesis is an educated guess, or a guess you make based on information you already know.



**Bridging forwards:**  
Year 5 Forces



**Bridging backwards:** Year 2  
Everyday materials

