



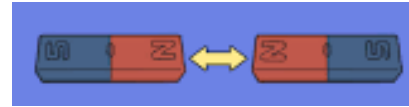
**Topic: Forces and Magnets**

**Year: 3**

**Strand: Physics**

**What should I already know?**

In Year 2, you found out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.



	Key Vocabulary
repel	When a magnetic pole repels another magnetic pole, it gives out a force that pushes the other pole away.
attract	If an object attracts another object, it causes the second object to move towards it.
north pole/ south pole	The pole of a freely suspended magnet, which is attracted to the earth's magnetic North/South Pole.
material	A solid substance.
metal	A type of material (e.g. lead, steel, gold, lead)
magnetic	Being able to attract certain substances (like iron and steel)
surfaces	The flat top part of an object or the outside of it.
forces	The pulling or pushing effects that something has on something else.
compare	Discover the difference and similarities between things.
friction	The force that makes it difficult for things to move freely when they are touching each other.
movement	A change of position from one place to another.
explore	Think about an idea or suggestion carefully and investigate or examine carefully.
strength	The force of something, its power or speed.

What will I know by the end of the unit?	
How many poles does a magnet have?	Two, a north pole and a south pole.
What happens when two of the same poles meet? (north and north, south and south)	They repel each other.
What happens when two different poles meet?	They attract each other.
Which materials are attracted to magnets?	Iron, nickel and steel (which contains iron) are magnetic.
Which are the strongest parts of a magnet?	The poles
What affects the movement of an object across a surface?	The texture of the surface and the surface of the object.
Which force can act at a distance?	Magnetism
How would you know if something was magnetic?	It would be attracted to a magnet.

**Scientific Enquiry**

- *Make and record a prediction before testing*
- Explain what you have found out using measurements and say whether this helps answer the question

**Objectives**

- Compare how things move on different surfaces.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Compare and group together a variety of everyday materials on the basis of whether they are attracted