Preston Primary School Knowledge Organiser

Communication | Critical-Thinking | Collaboration | Creativity

Topic: Science- Forces and magnets	Term: Summer 1	Year: Unit 3	Duration: 4 Weeks

The Powerful Knowledge we will take away from this Learning Enquiry (what children will be learning):

Develop our previous learning about how things move on different surfaces.

Magnetism is a force of nature that can pull (attract) or push away (repel) certain types of metals. Children will explore how magnets attract or repel each other and attract some materials but not others. We will observe that some forces need contact between two objects, but magnetic forces can act at a distance.

Different everyday materials will be classified on the basis of whether they are attracted to a magnet or not, and we will identify some magnetic materials.

Magnets have two ends, known as the poles. There is a North Pole and a South Pole. These points are at either end of a magnet where the magnetic force is concentrated or strongest. It is also the two regions on Earth which attract a compass needle due to their magnetic force.

Key vocabulary will be used to describe the effect of magnets on various materials, and to discuss the properties of the materials tested.

Our Key Vocabulary:

Word	Meaning
Force	A force is a push or a pull. Forces can make things move, change shape or speed.
Magnets	A magnet is a rock or piece of metal that can pull (attract) or push away (repel) certain types of metals towards or from itself.
Magnetic	Acting like a magnet. Exercising attraction.
Magnetic Field	The area around a magnet that has magnetic force.
Attract	To be pulled or drawn towards something.
Repel	To push away.
Poles (North and South Pole)	Two points at either end of a magnet where the magnetic force is concentrated or strongest. The two small areas on Earth which attract a compass needle.

Website links:

What is a force? - BBC Bitesize

What is a magnet? - BBC Bitesize

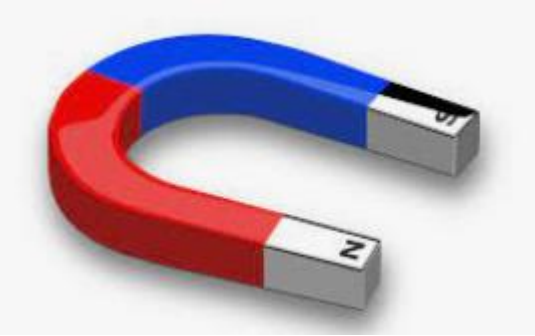
Magnets and Magnetism Facts for Kids (Must-Read) (coolkidfacts.com)

What I already know:

In Unit 2, the children have studied everyday materials. They will have identified and named a variety of everyday materials and described their simple physical properties. They have worked on comparing and grouping together materials according to their properties.

In Unit 3, the children revisited properties of materials and classified them in various ways.

A magnet is a rock or a piece of metal that can pull certain types of metal toward itself. The force of magnets, called magnetism, is a basic force of nature, like electricity and gravity. Magnetism works over a distance. This means that a magnet does not have to be touching an object to pull it.



A magnet has two points at either end where the magnetic force is concentrated or strongest. These are the poles. There is a North pole and a South pole.