Forces and Magnets	Year 3	Spring 2
What I should already know	Working scientifically skills	
1 Identify and name a variety of everyday	Common how different things	

1 Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

## By the end of the unit, I will know:

- Compare how things move on different surfaces.
- 2 Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- 4 Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
- 5 Describe magnets as having 2 poles.
- 6 Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.

Compare how different things move and group them.

Raise questions and carry out tests to find out how far things move on different surfaces.

Explore the strengths of different magnets and find a fair way to compare them.

Sort materials into those that are magnetic and those that are not.

Look for patterns in the way that magnets behave in relation to each other and what might affect this.

Identify how these properties make magnets useful in everyday items and suggesting creative uses for different magnets.

Key Vocabulary	
Force	A push, pull, twist or turn caused when two objects interact with each other
Magnet	An object or device that attracts iron or another magnetic material .
Magnetic	Objects which are attracted to a magnet are magnetic.
Pole	North and South poles are found at opposite ends of a magnet. It is the area of a magnet where the magnetic force is strongest.
Attract	To pull towards.
Repel	To push away.
Contact	Touching
Non-contact	Not touching

## **Scientists/inventors**

## William Gilbert (1544 - 1603)

He was an Englishman who founded the scientific study of magnetism and also discovered the Earth's own magnetism.