

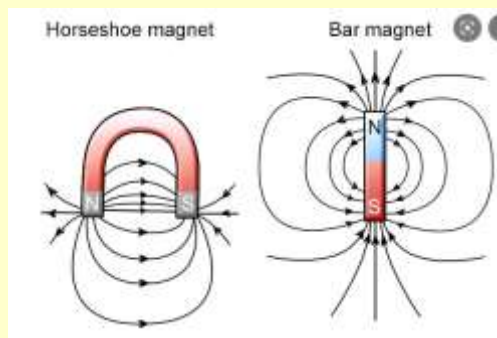
Year 3: Autumn 2

Forces and Magnets (Strand: Physics)



Magnet

Bar Magnet



Horseshoe magnet

Bar magnet

Vocabulary

Magnets
 Bar Magnet
 Horseshoe Magnet
 Attract
 Repel
 North Pole
 South Pole
 Magnetic
 Magnetic Field



Attract



Repel



North Pole

South Pole

What I already know:

This is new learning for Year 3

What I will learn now:

Year 3

- 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 to a magnet, and identify some magnetic materials
- Describe magnets as having two poles
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Key facts

- Magnetic forces can act without direct contact unlike most forces, where direct contact is necessary (for example, opening a door, pushing a swing)
- Different magnets behave in different ways
- Different magnets have different strengths
- Certain materials can be attracted by magnets and others can not.
- Magnets can be useful in everyday life

What I will learn next:

Year 5

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.