SCIENCE: YEAR 3 – FORCES AND MAGNETS

Key Vocabulary

forces	Pushes or pulls.
friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.
surface	The top layer of something.
magnet	An object which produces a magnetic force that pulls certain objects towards it.
magnetic	Objects which are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt metals are magnetic.
magnetic field	The area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.
poles	North and south poles are found at different ends of a magnet.
repel	Repulsion is a force that pushes objects away.
attract	Attraction is a force that pulls objects together.

Objectives

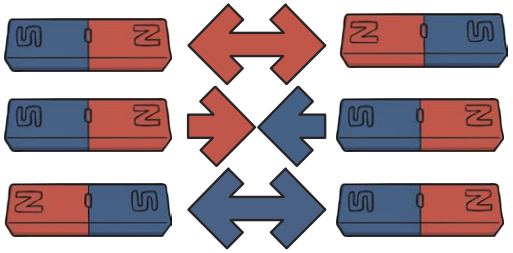
- To compare how things move on different surfaces.
- To notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- To observe how magnets attract or repel each other and attract some materials and not others.
- To compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
- To describe magnets as having two poles.
- To predict whether two magnets will attract or repel each other, depending on which poles are facing.

Forces

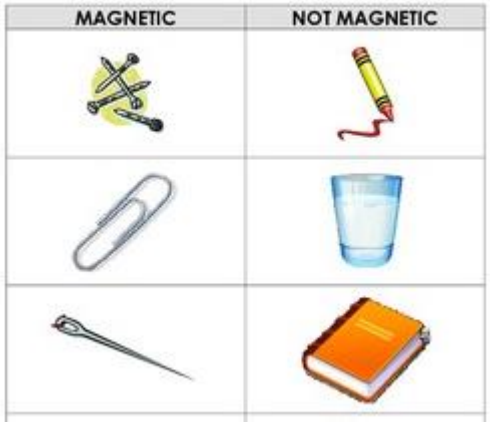
- Forces either make an object start to move, speed it up, slow it down or change direction.
- Different surfaces create different amounts of friction
- **Friction** will slow a moving object down.
- An object will move quicker on a smooth surface with less **friction.**

Magnets

- Like poles repel (N and N).
- Opposite poles attract (N and S)



- Objects that contain iron, nickel or cobalt are magnetic. Not all metal objects are magnetic.



Push

Pull