Year 3—forces and magnets

New Vocabulary	
Attract	Come together
Repel	Force away
Pole	The end of a magnet

Magnetic materials

We say that some materials are magnetic. This means that they are attracted to a magnet.

Magnetic forces can act at a distance—the magnet does not have to be right next to the material to have an effect on it.

Here are some examples of magnetic materials:

- Iron
- Steel
- Nickle

We can find magnetic objects in the classroom. For example:

- Paperclips
- Table legs
- Scissors

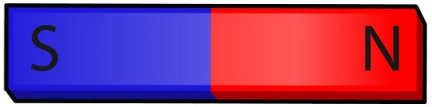
How many more can you find?

Forces

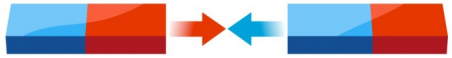
When we push and pull things, we are putting a force on them. When we let go, they return to their original form
Look at this spring:

Magnets

Magnets have two ends. We call these poles—**magnets have 2 poles**.
One end of the magnet is called the North Pole and the other is called the South Pole.

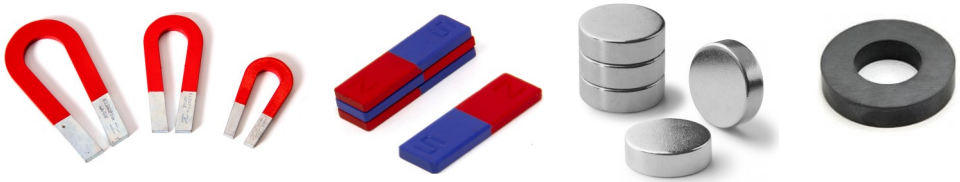


Opposite ends of magnets attract. North attracts South and the South attracts the North.



The same end of a magnet will repel the other. This means that they will push each other away, like this:

Magnets come in different forms, but they all have North and South poles:



Forces

When we put an object on 2 different surfaces, they will move in a different way. For example, if we push a toy car on a shiny surface, it will move quicker than if we pushed it when it was on carpet. Even though we pushed with the same amount of force, the surface material will give a different outcome.

Try pushing a toy car on different surfaces and see which it goes quicker on. Time it with a stopwatch.