

## YEAR 3 FORCES and MAGNETS KNOWLEDGE ORGANISER

### KEY VOCABULARY AND SPELLINGS

**Force** – a push, pull, twist or turn.

**Gravity** – a pushing force exerted by the Earth, it attracts objects towards the centre of the Earth.

**Friction** – the force between 2 moving surfaces.

**Magnetism** – the force of attraction and repelling caused by a magnet

**Magnet** – a material or object that produces a magnetic field, it attracts or repels magnetic objects

**Poles** – 2 sides of a magnet where the magnetism is strongest

**Attract** – to pull towards (opposite of repel)

**Repel** – To push away (the opposite of attract)

### FORCES

**Gravity** – the force that pulls things to the ground. Gravity also holds Earth and other planets in their orbits around the sun.

**Friction** – friction is a force between 2 surfaces that are sliding or trying to slide across each other. Friction works in the opposite direction to which the object is moving. It slows down the moving object.

Smooth surfaces create less friction e.g. polished wood

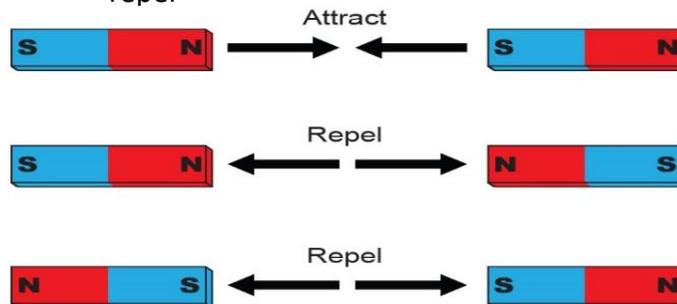
Rough surfaces create more friction e.g. carpet

**MAGNETS** - are objects or materials that produce a magnetic field and attract or repel magnetic objects.

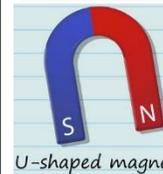
Magnets have 2 poles: north and south.

If you put magnets towards each other:

- 1 south pole and 1 north pole will attract
- 1 south pole and another south pole will repel
- 1 north pole and another north pole will repel



### DIFFERENT TYPES OF MAGNETS



### MAGNETIC MATERIALS

Not all materials are magnetic. Some everyday materials which are magnetic are:

- Fridges
- Metal table legs at school
- Paper clips

