Kingsley CP Knowledge Organiser

Science Focus	Forces and Magnets	Class	Team Maple

Key Knowledge

Forces

A force makes things move. A force can be a **push** or a **pull**.

We can make things move faster, slower or even stop if the size of the force changes.

Most forces need contact between 2 objects

Comparing different surfaces (exploration)

- The smoother the surface the easier the object will move.
- The rougher the surface the harder it will be to move the object.

Key Vocabulary

attract	Pull together
repel	Push apart
Force	Makes things move.

Key Knowledge

Magnets

Magnets are metals that attract other metals. Every magnet is a metal, but not all metals are magnets.

Magnets have two poles-

- called North Pole and South Pole
- When two of the same poles are placed close together they **repel** (push apart) each other.
- When two different poles are close, they **attract** (pull together) each other

Magnets only need to be near to each other to attract and repel, they do not need to touch.

Magnetic materials are attracted to/repelled by the forces around the poles of magnets.

There are only 3 magnetic metals -iron, nickel and cobalt.

- If a material is made with one of these metals it will be magnetic. E.g. Steel contains iron - anything made from steel is magnetic like a paperclip.
- Other metals and materials are not magnetic e.g. copper, gold and silver

Investigation

Title: Testing the strength of magnets

I will notice that some forces need contact between two objects, but magnetic objects can act at a distance.

Diagrams and Symbols

Magnet poles:

