Drove Primary School

Year 3 Science – Term 3
Forces and Magnets

What should I already know?

- To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Scientific Skills:

- To record their observations in written, pictorial and diagrammatic forms
- To put forward own ideas about how to find the answers to questions
- To make relevant observations
- To measure using given equipment
- To select equipment from a limited range
- To suggest improvements in their work
- To evaluate their findings

Key Vocabulary and Definitions:

Attraction	The act or power of drawing toward something. E.g. magnetic attraction
Force	Force is a push or pull on an object. A force can cause an object to accelerate, slow down, remain in place, or change shape.
Gravity	Gravity is a force caused by a large body, such as the Earth. Gravity pulls objects toward the Earth.
Magnet	A lodestone which has the property of attracting iron.
Magnetism	Magnetism is a force. Metallic objects stick to a magnet because its magnetic force is pulling on the objects.
Pull	An example of pull as a force would be opening a door. If you pull on it lightly, the door won't open, but if you pull with greater strength, the door opens enough.
Push	An example of push as a force would be to push on a swing. The force moves the swing in a particular direction.
Repulsion	The force that acts between bodies of like magnetic polarity tending to separate them.

Teaching Sequence

1. To understand that forces are pushes and pulls which can make things move, stop or change shape.

2. To explore forces and discover that gravity and magnetism can act without contact.

3. To answer questions by testing and sorting items using magnets.

4. To understand that magnets have 2 poles and that opposite poles attract and like poles repel.

5. To revise and reinforce knowledge of attraction and repulsion between magnetic poles

6. To explain what magnetism is