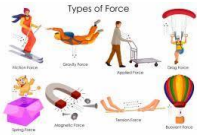

St Bartholomew's Knowledge Organiser	Class 3	Summer 2 Science – Year A	Forces

What we will learn:

In this unit you will learn how to;

- Carry out investigations to explore how objects move on different surfaces e.g. spinning tops/coins, rolling balls/cars, clockwork toys, soles of shoes etc.
- Explore what materials are attracted to a magnet.
- Investigate the force needed to pull an object carrying different weights, then plot data on a bar graph.
- Observe how magnets attract or repel each other and attract some materials and not others
- 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
- Learn that magnets have 2 poles and that same poles repel whilst opposite poles attract.
- Explore how magnets work at a distance e.g. through the table, in water, jumping paper clips up off the table.
- Devise an investigation to test the strength of magnets.

Important Vocabulary

Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole

Science Knowledge:

- Compare how things move on different surfaces.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- 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.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Scientific Skills we will develop:

- Set up simple practical enquiries and comparative and fair tests.
- Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Ask relevant questions and use different types of scientific enquiries to answer them.
- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Gather, record, classify and present data in a variety of ways to help answer questions.
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
