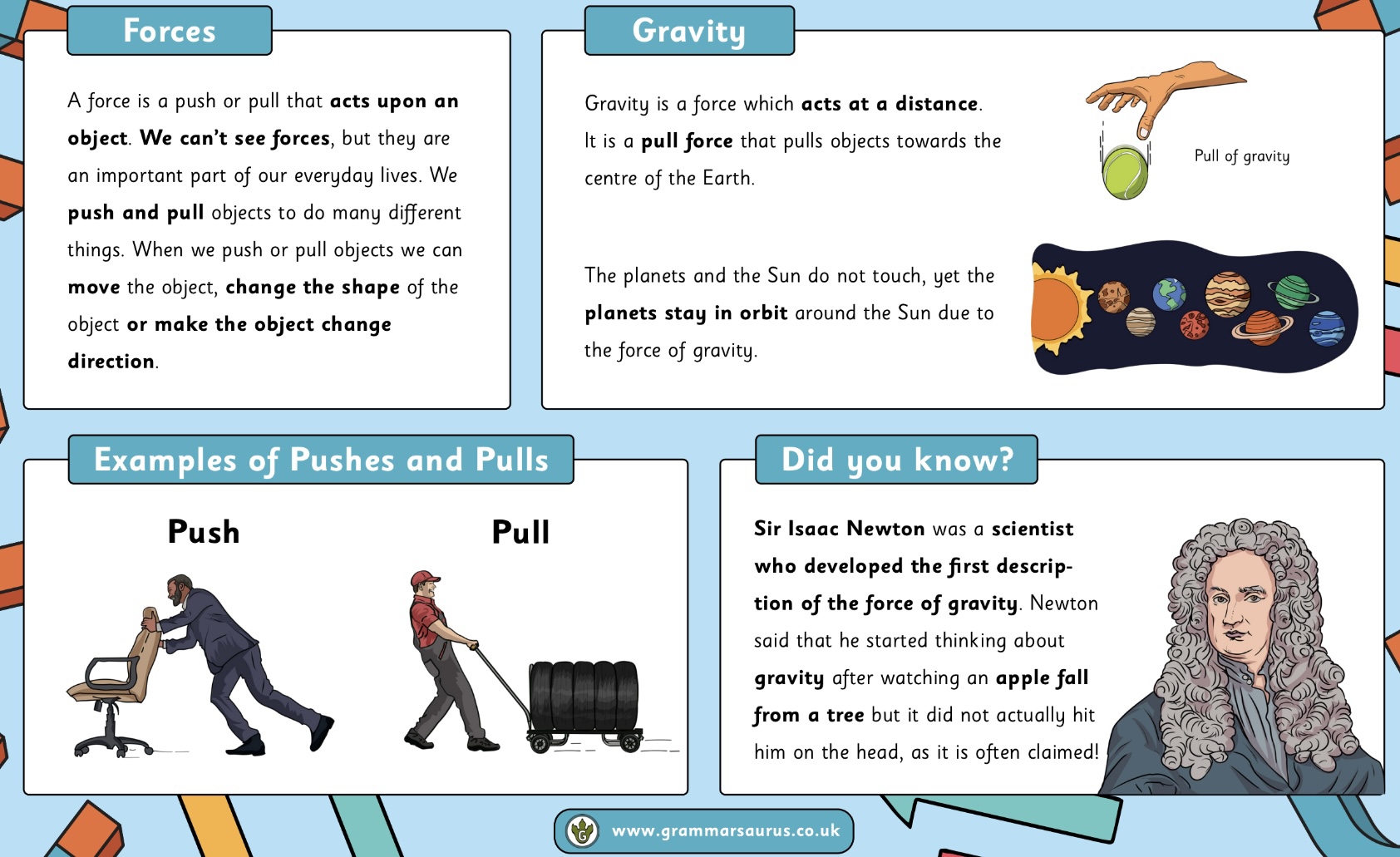
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| **Harting C of E Primary School – Science** | | |
| **Topic: FORCES & MAGNETS** | **Years 4 & 5** | **SUMMER I** |

**Important Information**





**Forces & Magnets (Y4/5)**

Within this unit, children will be able to:

* explain that unsupported objects fall towards the Earth because of the force of **gravity** acting **between the Earth and the falling object**
* identify the **impact of air resistance, water resistance and friction**, that act between moving surfaces
* recognise that some mechanisms, including **levers, pulleys and gears, allow a smaller force to have a greater impact**

**Investigations**: Which surface provides the best friction for a shoe? Which material provides the most friction?

How can we test air resistance using parachutes?

**Progression of skills in Science: Working Scientifically**

**Year 4**

Throughout the year, pupils will:

* ask relevant questions and use different types of scientific enquiries to answer them
* set up simple practical enquiries, comparative and fair tests
* make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
* record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
* gather, record, classify and present data in a variety of ways to help in answering questions
* identify differences, similarities or changes related to simple scientific ideas and processes
* report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
* use straightforward scientific evidence to answer questions or to support their findings
* use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further

questions

**Year 5**

Throughout the year, pupils will:

* plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
* take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
* record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
* identify scientific evidence that has been used to support or refute ideas or arguments
* report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
* use test results to make predictions to set up further comparative and fair tests