



St Leo's and Southmead
Catholic Nursery and

Year 5

Science Knowledge Organiser

Summer
Term

Amazing Activities

During whole school assembly chn to demonstrate what they have learnt to the rest of the school

Forces

Key Concepts

Explain why objects fall towards the centre of earth

Understand and explain the causal link between the mass of an object and the amount of force with which gravity acts upon it.

Define friction and know that it can be useful, giving examples of this

Design and perform a fair test

Know that water resistance slows an object through moving water

Plan and carry out a fair test designed to test water resistance

Draw conclusions and predict results

Recognise that levers and pulleys allow a small force to have a greater effect

Explore effects of changing parts of their model

Recognise that the speed or amount of force is affected by changing the size of gears in a transmission

Key Vocabulary

Air resistance - the force that occurs when air pushes against a moving object causing it to slow down.

Driver gear - the gear that provides the power

Fair test - A test where only one of the variables is changed

Following gear - the other gears in the transmission

Friction - the action of one surface or object rubbing against another

Gravitational force - The force that causes **Gravity** - the force that pulls objects towards the centre of the earth

Streamlined - shape that offers the least resistance allowing it to move freely through a substance

Transmission - when 2 or more gears are working together

Water resistance - the force that pushes against objects as they pass through water

Weight - How heavy something is

Skills

Use different types of scientific enquiries to answer questions,

Choose the most appropriate equipment and explain how to use it accurately.

Begin to use test results to make predictions to set up further comparative and fair tests

Begin to report and present findings from enquiries.

Begin to draw conclusions based on their data and observations, use evidence to justify their ideas



Curriculum Links

- Maths - measurement, statistics
- English - Speaking & listening.
- Historical study - looking at different scientists & the lives of who have influenced the way we view forces