



The Mall School

## Curriculum Guide

### Science – Summer Term

#### Year 4

Teacher: Mrs Ann-Maria Upton  
Lessons: Two double lessons per week  
Homework: 1 x 20 minutes

#### Introduction:

The science syllabus incorporates topics related to physics, chemistry and biology. Over the course of Year 4 the boys will learn about safety in the laboratory including the use of the Bunsen burner, investigative methods and skills, measurement, the states of matter; solid, liquid and gas, mixing and separating substances, temporary and permanent changes, materials and their uses, energy, forces, plants and animals. Whilst learning about each topic the boys will be given many opportunities to carry out practical experimental work in order to develop their investigation abilities and techniques. There will be an end of year examination in the summer term which will have an emphasis on using and applying their scientific knowledge in differing scenarios.

#### Key Objectives:

- To be able to describe and group rocks and soils and how to separate them and understand how fossils were formed.
- To understand that sounds are made when objects (e.g. strings on musical instruments) vibrate.
- Know how the ear works
- Understand forces
- Revise magnetism
- Understand the difference between mains and battery electricity and know how to draw simple circuit diagrams.
- Understand the difference between a conductor and insulator.
- Know the characteristics of living things.
- Understand the difference between flowering and non-flowering plants.
- Understand the difference between vertebrates and non-vertebrates.

These key objectives will be covered alongside others in the units of work in each term. The topic areas to be covered for the Summer Term are as follows:

- Rocks and Soils
- Sound and Hearing
- Understanding Forces
- Electricity and Magnetism
- Discovering Plants and Animals

#### Resources:

All boys must bring the following equipment to all lessons:

Pen or Biro (blue ink), pencil, rubber, pencil sharpener, 30cm transparent ruler, colouring pencils, and a glue stick.

All boys have been issued with an introductory booklet: 'Investigation Skills', and will complete written work and diagrams in their exercise books.