



The Mall School

Curriculum Guide

Science – Autumn Term 2019

Year 4

Teacher: Mrs Beth Salah / Dr Alistair Millar
Lessons: One double and two single 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 understand and follow rules for working safely in the laboratory.
- To develop their investigation skills through a series of practical lessons and a large scale investigation: planning investigations, predicting, observation, measuring, interpreting and conducting investigations.
- To understand the properties of solids liquids and gases.
- To understand how materials can be made to change state.
- Know that some materials dissolve and others do not.
- Know how to filter.
- Know how to produce crystals by evaporation.
- Understand the difference between a temporary and a permanent change.
- Know the fire triangle and how to put out fires.

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

- Safety in the laboratory.
- Scientific investigation.
- Solids, liquids and gases.

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 will complete written work and diagrams in their exercise books.