



The Mall School

Curriculum Guide

Science – Autumn Term 2019

Year 8

Introduction:

The science syllabus is split into biology, chemistry and physics. The 13+ Common Entrance syllabus is covered over the course of Years 7 and 8, although pupils are expected to remember the work covered in previous years from the 11+ Common Entrance syllabus. The Common Entrance examinations in science are made up of three papers: one biology, one chemistry and one physics. Each paper is 40 minutes long. At least 25% of the paper will be testing how science works. The scholarship science examination is 90 minutes long and divided into three sections: A (biology), B (chemistry) and C (physics). Each section is worth 25 marks, but the number of questions will vary. There will be an assessment after each unit studied in Year 8, and the boys will record their results on their tracking sheet. The tracking sheet can be used for the boys to check their progress throughout the year and to identify areas, which they need to spend more time revising before their examinations.

Key Objectives:

- To learn electronics symbols and revise electricity symbols.
- To understand how to use electronics components Understand how And and Or circuits work.
- To understand waves
- To know that sound is caused by vibration.
- To understand sound as a wave.
- To understand light as part of the electromagnetic wave spectrum.
- To understand reflection and refraction.
- To know the colours of the spectrum.
- To understand the position of metals in the reactivity series from experiments.
- To know what displacement reactions are and give examples.

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

- Electronics
- Sound
- Light
- Reactivity Series of Metals

Resources:

All boys must bring the following equipment to all lessons:

Pen (black or blue), pencil, rubber, pencil sharpener, 30cm ruler, calculator, colouring pencils, and a glue stick.

All boys have been issued with the ISEB Galore Park textbooks by Ron Pickering for Biology, Chemistry and Physics.