



The Mall School

Curriculum Guide

Science – Spring Term

Year 8

Lessons: 8(2)- 3 x 80min, 8(1)- 2 x 80min and 1 x 70 min, and 8S- 1 x 80min and 2 x 60min.
Homework: 2 x 30min (8(2) Tuesday & Thursday, 8(1) Wednesday & Friday, and 8S Tuesday and Thursday)

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:

- Understand the need for a balanced diet containing carbohydrates, proteins, fats, minerals, vitamins, fibre and water, and about foods that are sources of these.
- Know that food is used as a fuel during respiration to maintain the body's activity and as a raw material for growth and repair.
- Summarise aerobic respiration in a word equation.
- Understand how the abuse of alcohol, solvents and other drugs affect health.
- Know how the growth and reproduction of bacteria and the replication of viruses can affect health, and how the body's natural defences may be enhanced by medicines.
- Know the difference between sexual and asexual reproduction.
- Understand human reproduction.
- Understand reproduction in flowering plants.

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:

- Food and Diet
- Respiration
- Health
- Reproduction

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 textbook 'So you really want to learn Science' by W. R. Pickering – ISEB course book 2, designed to go with the CE syllabus, and CGP's 'The 13+ Science Study Book for the Common Entrance Exams'.