



## The Mall School

### Curriculum Guide

#### Science – Spring Term 2020

##### Year 5

Teacher: Dr Alistair Miller  
Lessons: One double and two single lessons per week.  
Homework: 1 x 25 minutes

##### Introduction:

The science syllabus incorporates topics related to physics, chemistry and biology. Over the course of Year 5 the boys will learn about safety in the laboratory; states of matter and changes of state; forces including gravity; the earth in space; life cycles, changes and reproduction; and light. There will be an assessment after each topic studied and an end-of-year exam in the summer term. Boys will have many opportunities to carry out practical experimental work in order to develop their investigation skills and techniques; they will gain an understanding of key scientific concepts; and they will develop an appreciation of the applications of science to our lives, the historical context of scientific discovery, the contributions of great scientists of the past, and modern-day research.

##### Key Objectives:

###### Earth and space

- To understand that the sun, earth & moon are (approximately) spherical bodies
- To know the sizes & relative distances of the sun, earth & moon
- To understand how the earth's rotation explains (a) night & day (b) the movement of the sun
- To understand how earth's rotation round sun explains the seasons
- To know the relative positions and orbit times of the planets of the solar system
- To understand the effects of the moon's orbiting the earth
- To know the contribution of Galileo & his dispute with the church

###### Changes & reproduction

- To understand the stages of human growth & development
- To understand the stages in human/animal gestation periods
- To understand the stages of child development & corresponding needs
- To understand how the body changes during puberty, and how these changes differ for boys & girls
- To understand how the body changes during adulthood & old age

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:

- Earth and space
- Changes & reproduction

##### Resources:

All boys must bring the following equipment to all lessons:

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