



The Mall School

Curriculum Guide

Mathematics – Autumn Term

Year 6

Teachers: Dr Alistair Miller, Mr James Fair & Mr Martyn Miller
Lessons: 3 x 35 min, 1 x 60min and 1 x 70min
Homework: 2 x 30min (Monday & Thursday)

Introduction:

At the start of this term all boys will be sitting computerised tests and the scheme of work will include a great deal of problem solving in preparation for the pre-tests in January. The pupils' knowledge of the four operations is consolidated and extended. This is exercised both mentally and written as a large emphasis is placed on problem solving, especially using real-life examples. The boys also receive a discrete 40minute non-verbal reasoning lesson this term to prepare them for the pre-tests.

Key Objectives:

- Use letter symbols to represent unknown numbers or variables
- Recognise the equivalence of percentages, fractions and decimals.
- Know and use the order of operations.
- Extend mental methods of calculation to include decimals, fractions and percentages.
- Multiply and divide 3 digit by 2 digit whole nos; extend to multiplying and dividing decimals with 1 or 2 places by single digit whole numbers.
- Break a complex calculation into simpler steps, choosing and using appropriate and efficient operations and methods.
- Convert one metric unit to another.
- Read and interpret scales on a range of measuring instruments.
- Solve mathematical problems and puzzles in a range of contexts.
- Explain and justify methods and conclusions.
- Understand the significance of a counter-example when looking for generality.

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:

- Place Value
- Calculations and word problems
- Properties of Number
- Word problems and puzzles
- Fractions, decimals and percentages
- Measures
- Area and perimeter

Resources:

All boys must bring the following equipment to all lessons: Pencil, Rubber, Pencil Sharpener, 30cm Ruler, Protractor, Compass, Colouring Pencils, Highlighter Pens, Glue Stick, Scissors.
Boys have been issued with a textbook 'Essential MATHS 7i' by David Rayner. They also use: 'Collins Primary Maths' Pupil Books 6 and 6+ (ed. Peter Clarke) and 'Maths on Target Year 6' (Stephen Pearce) by Elmwood Press.