

Year 7 Mathematics
Curriculum



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Introduction

This document outlines what students will learn in Mathematics in Year 7.

Learning Objectives:

1. Number

Place Value:

- Place value of any number up to 10,000,000
- Reading, writing, and ordering numbers.
- Rounding numbers to the nearest 10,100,1000,10,000 and 100,000.

Addition and Subtraction:

- Adding and subtracting numbers up to 10,000,000.
- Using the formal written methods of addition and subtraction.
- Mental addition and subtraction strategies.

Multiplication and Division:

- Multiplying and dividing numbers up to 10,000.
- Using the formal written methods of multiplication and division.
- Mental multiplication and division strategies.
- Long division (including remainders).

Fractions:

- Equivalent fractions.
- Simplifying fractions.
- Adding and subtracting fractions with the same denominator.
- Multiplying and dividing fractions by whole numbers.

Decimals:

- Place value of decimals.
- Reading, writing and ordering decimals.
- Adding, subtracting, multiplying and dividing decimals.
- Converting between fractions and decimals.



2. Ratio, Proportion, and Algebra

Ratio:

- Understanding ratio.
- Simplifying ratios.
- Finding equivalent ratios.
- Dividing quantities in a given ration.

Proportion:

- Understanding proportion.
- Solving problems involving direct and inverse proportion.

Algebra:

- Introduction to algebra.
- Forming and solving simple equations.
- Substitution into formulae.
- Patterns and sequences.

3. Geometry

Angles:

- Angles (acute, obtuse, right, reflex).
- Triangles (scalene, isosceles, equilateral).
- Quadrilaterals (square, rectangle, parallelogram, trapezium, rhombus).
- Polygons (regular and irregular).
- Lines of symmetry.
- Rotations.
- Translations.

Area and Perimeter:

- Calculating the area and perimeter of 2D shapes (rectangles, squares, triangles, parallelograms).

4. Statistics and Probability

Statistics:

- Collecting, organising, and interpreting data.
- Bar charts, line graphs, and pie charts.
- Averages (mean, median, mode).
- Range.

Probability:

- Understanding probability.
- Calculating probabilities of simple events.
- Theoretical and experimental probability.



Evaluation and Review

The curriculum will be reviewed annually to ensure its effectiveness. Feedback from students, teachers, and parents will be considered in the review process.

Updated August 2024

Next review: August 2025