



# MTS Year 7 Maths Learning Journey

Y8

## Working in the cartesian plane

- Read and write coordinates
- Coordinate geometry
- Find midpoints

## Ratio

- Write a ratio
- Find equivalent ratios
- Share in a ratio

## Probability

- The Probability scale
- Outcomes
- Writing a probability
- Experimental probability
- Sample spaces
- Venn diagrams

## Types of Number

- Factors, multiples and primes
- Square, cube and triangle numbers
- Examples and counter examples

## Geometric Reasoning

- Angles on a line and around a point
- Angles in triangles
- Angles in quadrilaterals
- Interior and exterior angles
- Angles in parallel lines

## Addition and Subtraction

- Word problems
- Frequency Trees
- Two-way tables
- Time and timetables
- Perimeter
- Bar Charts and line charts
- Standard Form

## Multiplication and Division

- Multiply and divide
- Order of operations
- Factors and multiples
- Product of prime factors
- HCF/LCM using lists
- Area
- Mean
- Simplify algebraic terms

## Percentages of Amounts

- Percentages of amounts
- Increase and decrease by percentages of amounts
- Use a calculator

## Addition and Subtraction of Fractions

- Mixed numbers and improper fractions
- Add and subtract fractions
- Algebraic fractions
- Add and subtract fractions and decimals

## Constructing and Measuring

- Label, measure and draw lines and angles
- Metric units
- Names and properties of angles and shapes
- Pie Charts
- Construct triangles

## Fractions, Decimals and Percentages

- Read and write fractions
- Represent fractions decimals and percentages
- Convert between fractions and decimals and percentages
- Equivalent fractions
- Order fractions, decimals and percentages
- Fractions of amounts
- Interpret pie charts

## Place Value

- Round numbers
- Estimation
- Median and range
- Midpoints
- Standard Form

## Equality and Equivalence

- Like and unlike terms
- Collect like terms
- Solve equations

## Algebraic Notation

- Function machines
- Algebraic expressions
- Substitution
- Generate a sequence from an algebraic rule

## Directed Number

- Order negative numbers
- Add and subtract with negative numbers
- Multiply and divide with negative numbers

## Sequences

- Describe sequences
- Continue sequences
- Linear and non-linear sequences
- Sequences with diagrams
- Nth term

KS2