

MTS Year 7 Maths Learning Journey 2023 - 24



Y8

Prime Numbers and Proof

- Multiples, factors
- Factors of algebraic expressions
- Prime numbers
- Square numbers
- Triangular numbers
- HCF and LCM
- Product of primes
- Test conjectures

Sets and Probability

- Set notation
- Venn Diagrams
- Probability
- Sample spaces

Number Sense

- Mental arithmetic
- Fractions of amounts
- Factors
- Rounding
- Estimation
- Fact Families
- Using a calculator

Geometric Reasoning

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

Constructing and Measuring

- Label, measure and draw lines and angles
- Classify angles
- Parallel and perpendicular lines
- Names and properties of shapes
- Construct triangles
- Pie Charts

Addition and Subtraction

- Add and subtract
- Perimeter
- Money
- Tables and timetables
- Frequency Trees
- Bar Charts and line charts
- **Standard Form**

Multiplication and Division

- Factors and multiples
- Multiply and divide
- Metric units
- Order of operations
- Area
- Mean
- Simplify algebraic terms

Fractions and Percentages of Amounts

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

Directed Number

- Recap 4 rules
- Use a calculator
- Substitute
- Solve equations
- Order of operations
- **Powers and roots**

Addition and Subtraction of Fractions

- Represent fractions
- Mixed numbers and improper fractions
- Equivalent fractions
- Add and subtract fractions
- Fractions and decimals
- **Algebraic fractions**

Fractions, Decimals and Percentages

- Represent fractions, decimals and percentages
- Convert between fractions and decimals and percentages
- Interpret pie charts
- Equivalent fractions
- **Mixed Numbers and Improper fractions**

Place Value

- Read and write numbers
- Round numbers
- Order and compare numbers
- Median and range
- Decimals
- **Standard Form**

Equality and Equivalence

- Fact families
- Solve equations
- Form and solve equations
- Algebraic expressions
- Collect like terms

Directed Number

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

Algebraic Notation

- Function machines
- Algebraic expressions
- Substitution

Sequences

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

KS2