



Subject: Maths

Year 6

Overview

The maths curriculum for year 6 covers key maths areas of study, which aim to build children's confidence in completing maths calculations. The learning material will also support pupils in understanding how mathematics is used in everyday life and help develop their problem-solving and reasoning skills. There are 9 main topic areas of study included in the curriculum for that school year, which are: Number and Place Value, Addition, Subtraction, Multiplication and Division, Fractions, Algebra, Ratio and Proportion, Measurement, Properties of Shape, Position and Direction and Statistics.

Autumn

Autumn Term

Place Value

- Numbers to 1,000,000 / 10,000,000
- Read and write numbers to 10,000,000
- Powers of 10
- Number line to 10,000,000
- Compare and order any integers
- Round any integer
- Negative numbers

Addition, Subtraction, Multiplication, Division

- Add and subtract integers
- Common factors
- Common multiples
- Rules of divisibility
- Primes to 100
- Square and cube numbers
- Multiply up to a 4-digit number by a 2-digit number
- Solve problems with multiplication
- Short division
- Division using factors
- Long division (including with remainders)
- Solve problems with division
- Solve multi-step problems
- Order of operations
- Mental calculations and estimation
- Reason from known facts

Fractions

- Equivalent fractions and simplifying
- Equivalent fractions on a number line
- Compare and order (denominator)
- Compare and order (numerator)
- Add and subtract simple fractions
- Add and subtract any two fractions
- Add mixed numbers
- Subtract mixed numbers
- Multiply fractions by integers
- Multiply fractions by fractions
- Divide a fraction by an integer
- Divide any fraction by an integer
- Mixed questions with fractions
- Fraction of an amount
- Fraction of an amount – find the whole

Measurement (Converting Units)

- Metric measures
- Convert metric measures
- Calculate with metric measures
- Miles and kilometres
- Imperial measures

Assessment:

Formative assessment is ongoing in the classroom: targeted questions, 'show me' on a whiteboard, teacher monitoring

Every unit will have a short 'low-stakes' assessment task at the end to check pupils' knowledge. These will involve a selection of test-style questions and records are kept by the class teacher.

At the end of Autumn term 1, there is a mock KS2 SATS test comprising of an arithmetic and two reasoning papers.

Spring Term	Assessment:
Ratio • Use ratio language • Introduction to the ratio symbol • Ratio and fractions • Scale drawing • Use scale factors • Similar shapes • Ratio problems • Proportion problems • Recipes Algebra • 1-step function machines • 2-step function machines • Form expressions • Substitution • Formulae • Form equations • Solve 1-step equations • Solve 2-step equations • Find pairs of values • Solve problems with two unknowns Decimals • Place value within 1 • Place value – integers and decimals • Round decimals • Add and subtract decimals • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiply decimals by integers • Divide decimals by integers • Multiply and divide decimals in context Fractions, Decimals and Percentages • Decimal and fraction equivalents • Fractions as division • Understand percentages • Fractions to percentages • Equivalent fractions, decimals and percentages • Order fractions, decimals and percentages • Percentage of an amount • Percentages – missing values Area, Perimeter and Volume • Shapes – same area • Area and perimeter • Area of a triangle • Area of a parallelogram • Volume Statistics • Line graphs • Dual bar charts • Read and interpret pie charts • Pie charts with percentages • Draw pie charts • The mean	Formative assessment is ongoing in the classroom: targeted questions, ‘show me’ on a whiteboard, teacher monitoring Every unit will have a short ‘low-stakes’ assessment task at the end to check pupils’ knowledge. These will involve a selection of test-style questions and records are kept by the class teacher. At the end of Spring term 1, there is a mock KS2 SATS test comprising of an arithmetic and two reasoning papers.

Summer Term Shape • Measure with a protractor • Draw lines and angles accurately • Introduce angles • Angles on a straight line • Angles around a point • Calculate angles • Vertically opposite angles • Angles in a triangle • Angles in special quadrilaterals • Angles in regular polygons • Draw shapes accurately • Draw nets of 3-D shapes Position and Direction • The first quadrant • Four quadrants • Translations • Reflections Consolidation topic work: • White Rose Tours • Theme Park Project • Bakery Project • Algebra transition unit	Assessment: Formative assessment is ongoing in the classroom: targeted questions, 'show me' on a whiteboard, teacher monitoring Every unit will have a short 'low-stakes' assessment task at the end to check pupils' knowledge. These will involve a selection of test-style questions and records are kept by the class teacher. In May pupils sit the end of KS2 SATs tests. Summer term- GL assessment. These are used to measure progress across year groups and for year 6s, progress made since the end of year 4 and 5. They cover questions on the full breadth of the curriculum and include a mental maths task.
---	--

Useful resources for supporting your child at home:

- BBC Bitesize
- Videos on Century (<https://www.century.tech>)
- Videos and worksheets on Corbett Maths Primary (<https://corbettmathsprimary.com/>)
- CGP KS2 revision guides/work books

Homework:

Homework will be set once a week.