Year 8 Maths

Our mathematic course covers National Curriculum Course for Year 8 in the United Kingdom.

As well as learning mathematics skills on this course, you will also learn how to use these skills. One of the most important mathematical skills you will learn is how to solve problems.

During this course, you will learn lots of facts, information and techniques. You will start to think like a mathematician. You will discuss ideas and methods with your teacher and your peers. These discussions are an important part of developing your mathematical skills and understanding.

Term 1

Lesson 1	Integers, powers and roots	• Arithmetic with integers
Lesson 2	Integers, powers and roots	• Multiples, factors and primes • More about prime numbers • Powers and roots
Lesson 3	Sequence, expressions and formulae	• Generating sequences • Finding rules for sequences • Using the nth term
Lesson 4	Sequence, expressions and formulae	• Using functions and mappings • Constructing linear and expressions • Deriving and using formulae
Lesson 5	Place value, ordering and rounding	• Multiplying and dividing by 0.1 and 0.01 • Ordering decimals • rounding
Lesson 6	Place value, ordering and rounding	• Adding and subtracting decimals • Dividing decimals • Multiplying decimals
Lesson 7	Place value, ordering and rounding	• Dividing by decimals • Estimating and approximating
Lesson 8	Length, mass and capacity	• Mid term test • Choosing suitable units • Kilometres and miles
Lesson 9	Angles	• Parallel Lines • Explaining angle properties • Solving angle problems
Lesson 10	Panning and Collecting data	• Collecting data

		• Types of data • Using frequency tables
Lesson 11	Fractions	• Finding equivalent fractions, decimals and percentages • Converting fractions to decimals • Ordering fractions
Lesson 12	Fractions	• Adding and subtracting fractions • Finding fractions of a quantity • Multiplying an integer by a fraction • Dividing an integer by a fraction • Multiplying and dividing fractions
Lesson 13	Shapes and geometric reasoning	• Recognising congruent shapes • Identifying symmetry of 2D shapes • Classifying quadrilaterals
Lesson 14	Shapes and geometric reasoning	• Drawing nets of solids • Making scale drawings
Lesson 15	Simplifying expressions and solving equations	• Collecting like terms • Expanding brackets • Constructing and solving equations
Lesson 16	Review and Test	• End of term test

Term 2

Lesson 1	Processing and presenting data	• Calculating statistics from discrete data • Calculating statistics from grouped or continuous data • Using statistics to compare two distributions
Lesson 2	Percentages	• Calculating percentages • Percentages increases and decreases

		• Finding and using percentages
Lesson 3	Construction	• Drawing circles and arcs • Drawing perpendicular bisectors
Lesson 4	Construction	• Drawing an angle bisector • Constructing triangles
Lesson 5	Graphs	• Drawing graphs of equations • Equations of the form y=mx+c • The midpoint of a line segment • Graphs in real-life contexts
Lesson 6	Ratio and proportion	• Simplifying ratios • Sharing a ratio • Solving problems
Lesson 7	Probability	• The probability that an outcome does not happen • Equally likely outcomes
Lesson 8	Probability	• Mid term test • Listing all possible outcomes • Experimental and theoretical probabilities
Lesson 9	Position and Movement	• Transforming shapes • Enlarging shapes
Lesson 10	Area perimeter and volume	• The area of a triangle • The area of a parallelogram and trapezium
Lesson 11	Area perimeter and volume	• The area and circumference of a circle • The area of compound shapes
Lesson 12	Area perimeter and volume	• The volumes and surface area of cuboids • Using s of solids to work out surface areas
Lesson 13	Pythagoras	• Pythagoras Theorem
Lesson 14	Interpreting and discussing results	• Interpreting and drawing line charts

		• Interpreting and drawing stem and leaf diagrams • Drawing conclusions
Lesson 15	Revision	• Topic revision in preparation for end of course test
Lesson 16	End of course test	• Course review and end of course test