

## Year 7 Maths

Our mathematic course covers the National Curriculum Course for Year 7 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	<ul style="list-style-type: none"><li>• Using negative numbers</li><li>• Adding and subtracting negative numbers</li><li>• multiples</li></ul>
Lesson 2	Integers	<ul style="list-style-type: none"><li>• Factors and tests for divisibility</li><li>• Prime Numbers</li><li>• Squares and square roots</li></ul>
Lesson 3	Sequences, expressions and formulae	<ul style="list-style-type: none"><li>• Generating sequences</li><li>• Representing simple functions</li></ul>
Lesson 4	Sequences, expressions and formulae	<ul style="list-style-type: none"><li>• Constructing expressions</li><li>• Deriving and using formulae</li></ul>
Lesson 5	Place Value, ordering and rounding	<ul style="list-style-type: none"><li>• Understanding decimals</li><li>• Multiplying by 10, 100 and 1000</li><li>• Ordering decimals</li><li>• rounding</li></ul>
Lesson 6	Place Value, ordering and rounding	<ul style="list-style-type: none"><li>• rounding</li><li>• adding and subtracting decimals</li><li>• multiplying decimals</li><li>• dividing decimals</li><li>• estimating and approximating</li></ul>
Lesson 7	Length, mass and capacity	<ul style="list-style-type: none"><li>• Knowing metric units</li><li>• Choosing suitable units</li><li>• Reading scales</li></ul>
Lesson 8	Mid Term Test	<ul style="list-style-type: none"><li>• <b>Mid term test</b></li></ul>

Lesson 9	Angles	<ul style="list-style-type: none"> <li>• Labelling and estimating angles</li> <li>• Drawing and measuring angles</li> <li>• Calculating angles</li> <li>• Solving angle problems</li> </ul>
Lesson 10	Planning and Collecting Data	<ul style="list-style-type: none"> <li>• Planning to collect data</li> <li>• Collecting data</li> <li>• Using frequency tables</li> </ul>
Lesson 11	Fractions	<ul style="list-style-type: none"> <li>• Simplifying fractions</li> <li>• Recognising equivalent fractions, decimal and percentages</li> <li>• Comparing fractions</li> </ul>
Lesson 12	Fractions	<ul style="list-style-type: none"> <li>• Improper fractions and mixed numbers</li> <li>• Adding and subtracting fractions</li> <li>• Finding fractions of a quantity</li> <li>• Finding remainders</li> </ul>
Lesson 13	Symmetry	<ul style="list-style-type: none"> <li>• Recognising and describing 2D shapes and solids</li> <li>• Recognising line symmetry</li> <li>• Recognising rotational symmetry</li> <li>• Symmetry properties of triangles, special quadrilaterals</li> </ul>
Lesson 14	Expressions and Equations	<ul style="list-style-type: none"> <li>• Collecting like terms</li> <li>• Expanding brackets</li> </ul>
Lesson 15	Expressions and Equations	<ul style="list-style-type: none"> <li>• Constructing and solving equations</li> </ul>
Lesson 16	End of term test and review	<ul style="list-style-type: none"> <li>• Review and end of term test</li> </ul>

## Term 2

Lesson 1	Averages	<ul style="list-style-type: none"> <li>• Averages and range</li> <li>• The mean</li> <li>• Comparing distribution</li> </ul>
Lesson 2	Percentages	<ul style="list-style-type: none"> <li>• Simple percentages</li> <li>• Calculating percentages</li> <li>• Comparing quantities</li> </ul>

Lesson 3	Constructions	<ul style="list-style-type: none"> <li>• Measuring and Drawing Lines</li> <li>• Drawing perpendicular and parallel lines</li> </ul>
Lesson 4	Construction	<ul style="list-style-type: none"> <li>• Constructing triangles</li> <li>• Constructing squares, rectangles and polygons</li> </ul>
Lesson 5	Graphs	<ul style="list-style-type: none"> <li>• Plotting coordinates</li> <li>• Lines parallel to the axes</li> <li>• Other straight lines</li> </ul>
Lesson 6	Ratio and proportion	<ul style="list-style-type: none"> <li>• Simplifying ratios</li> <li>• Sharing in a ratio</li> <li>• Using direct proportion</li> </ul>
Lesson 7	Time	<ul style="list-style-type: none"> <li>• The 12- and 24-hour clock</li> <li>• Timetables</li> <li>• Real-life graphs</li> </ul>
Lesson 8	Probability	<ul style="list-style-type: none"> <li>• <b>Mid term test</b></li> <li>• The probability scales</li> <li>• Equally likely outcomes</li> </ul>
Lesson 9	Probability	<ul style="list-style-type: none"> <li>• Mutually exclusive outcomes</li> <li>• Estimating probabilities</li> </ul>
Lesson 10	Position and Movement	<ul style="list-style-type: none"> <li>• Reflecting Shapes</li> <li>• Rotating Shapes</li> </ul>
Lesson 11	Position and Movement	<ul style="list-style-type: none"> <li>• Translating Shapes</li> </ul>
Lesson 12	Area, Perimeter and Volume	<ul style="list-style-type: none"> <li>• Converting between units for area</li> <li>• Calculating the area and the perimeter of rectangles</li> </ul>
Lesson 13	Area, Perimeter and Volume	<ul style="list-style-type: none"> <li>• Calculating the area and perimeter of compound shapes</li> </ul>
Lesson 14	Area, Perimeter and Volume	<ul style="list-style-type: none"> <li>• Calculating the volume of cuboids</li> <li>• Calculating the surface area of cubes and cuboids</li> </ul>
Lesson 15	Interpreting and discussing results	<ul style="list-style-type: none"> <li>• Interpreting and drawing pictograms, bar charts, bar-line graphs and frequency diagrams</li> </ul>

		<ul style="list-style-type: none"> <li>• Interpreting and drawing pie charts</li> <li>• Drawing conclusions</li> </ul>
Lesson 16	End of term test and review	<ul style="list-style-type: none"> <li>• Review and end of course test</li> </ul>