

# Year 7 Maths

What will be studied?		
Topic(s)		
<b>Autumn 1</b>	<p><b>Place Value:</b> Base 10-integers, addition, subtraction, base 10-decimals, multiplying and dividing by 10 and 100</p> <p><b>Properties of Arithmetic</b> 4 operations, fact families, commutativity, associativity, decomposition, distributivity, mental multiplication</p> <p><b>Factors and Multiples:</b> Factors, primes, squares, 'lots of', grouping, factor polygons, common multiples, number grids, prime patterns</p>	End of unit assessment
<b>Autumn 2</b>	<p><b>Order of operations:</b> Equal priority, non-equal priority, combined operations</p> <p><b>Positive and Negative Numbers:</b> Negative numbers, order of numbers, absolute value, adding and subtracting with directed numbers, multiplying and dividing with directed numbers</p> <p><b>Expressions, equations and inequalities:</b> Expressions, collecting like terms, expanding brackets, factorising expressions, forming equations, forming inequalities, patterns</p>	End of unit assessment
<b>Spring 1</b>	<p><b>Angles:</b> Comparing angles, measuring and drawing angles, partitioning angles, unknown angles, intersection angles, alternate angles, corresponding and allied angles</p> <p><b>Classifying 2D Shapes:</b> Rotational symmetry, reflectional symmetry, classifying triangles, angles in triangles, classifying quadrilaterals, angles in quadrilaterals, tessellations</p> <p><b>Constructing triangles and quadrilaterals:</b> Exploring circles, constructing triangles</p>	Mid-year exams End of unit assessment

	and quadrilaterals	
<b>Spring 2</b>	<p><b>Coordinates:</b> Coordinate axes, line segments, midpoints, equations of lines, horizontal and vertical lines</p> <p><b>Area of 2D Shapes:</b> Perimeter, area, combining shapes, rectilinear shapes, area of parallelograms and triangles</p> <p><b>Transforming 2D Figures:</b> Translations, rotation, reflection, combining transformations, enlargement</p>	End of unit assessment
<b>Summer 1</b>	<p><b>Prime factor decomposition:</b> Indices, prime factorisation, highest common factors, lowest common multiples</p> <p><b>Conceptualising and comparing fractions:</b> Part-whole model, equality, equivalency, comparing, ordering</p> <p><b>Manipulating and calculating with fractions:</b> Multiplying fractions, dividing fractions, adding and subtracting with fractions,</p>	End of unit assessments
<b>Summer 2</b>	<p><b>Ratios:</b> Grouping, equivalence, proportionality, dividing in a ratio</p> <p><b>Percentages:</b> Percentage number line, converting to fractions, percentage of quantities, comparing, increasing and decreasing by a percentage</p> <p><b>Revision</b></p>	End of year assessment

## End of Year Examination

### How will I be assessed at the end of the year?

Students are given one hour of calculator and one hour of non-calculator assessment comprising of all the topics covered in year 7.

These assessments cover the skills that students have learnt, students should apply their knowledge and solve problems in context.

## How can I help my child?

### Guidance and advice

Students will be given overviews at the beginning of every term outlining the topics which will be covered.

Two pieces of home learning tasks will be set by the teacher. This could be a range of activities from online or worksheets.

- <https://www.mymaths.co.uk/> - school subscription
- <https://hegartymaths.com/login/learner>
- <https://corbettmaths.com/5-a-day>
- <http://studymaths.co.uk>