



# Year 7 Maths

**Curriculum Leader: Mr James McKenzie-Laverty**

The Mathematics Curriculum Team have high expectations and aspirations for all of their students. Our vision is to develop students who have the resilience, adaptability and mathematical skills necessary for modern life and to instil in them an enthusiasm for the subject and a confidence in their own ability.

We want our students to develop an understanding that mathematics is important in everyday life and to provide them with a set of tools that will help them to reach aspirational targets through use of number, problem solving, logical reasoning, thinking in abstract ways and with creativity. We will encourage them to apply these skills across all subjects and to the real world.

## Topics to be covered in Year 7

	Term 1	Term 2	Term 3
<b>Topics to be covered</b>	<p>A selection of these topics will be covered throughout the year, as appropriate to the strength of prior learning and progress made, returning to them as necessary to build deeper understanding and applications.</p> <p>Calculator skills will be covered in every topic in every year.</p> <p><b>Number:</b> times tables, calculations, types of number, ordering values, BIDMAS, money, fractions, decimals and percentages, calculator skills, negative number mastery</p> <p><b>Algebra:</b> Forming and solving equations, sequences, coordinates</p> <p><b>Ratio:</b> sharing in a ratio, time, reading scales</p> <p><b>Shape:</b> measuring, perimeter and area, construction of shapes, tessellation, properties of quadrilaterals</p> <p><b>Statistics:</b> Probability, pictograms, pie charts, questionnaires, averages and range, listing outcomes</p> <p>The basic number topic is covered at the start of the year, to ensure these skills can be used in the following topics. The algebra skills are then tackled, so that each topic from then can be extended to algebraic problems.</p>		
<b>Key vocabulary</b>	<p>Add, subtract, multiply, divide, positive, negative, brackets, indices, multiple, factor, fraction, decimal. equivalent, decimal place, significant figure, percentage, compare, order, numerator, denominator</p> <p>Expression, term, equation, solve, sequence, substitution, plot, coordinates, unknown, variable, inverse operations</p> <p>Ratio, share, timetable, minutes, hours, seconds, scale</p> <p>Metric units, imperial units, perimeter, area, volume, triangle, quadrilateral, construction, tessellation, angle, degree</p> <p>Probability, likelihood, event, likely, evens, unlikely, pictogram, key, questionnaire, leading, mean, median, mode, range, outcome.</p>		
<b>Skills to be developed</b>	<p>Communication skills, written formal mathematical explanation, verbal explanation, using correct terminology.</p> <p>Team skills through both individual and collaborative work.</p> <p>Resilience, reasoning and problem-solving skills through work which stretches and challenges.</p> <p>Planning, analysis and interpretation skills.</p>		
<b>Opportunities for revisiting previous learning</b>	<p>The topics in year 7 build on the work completed in KS2, developing these skills further and deepening understanding. The main topics in KS2 may have included:</p> <p>numbers to three decimal places, Negative numbers, Factors and multiples, Prime numbers less than 100, Square numbers, Cube numbers, times tables , Add, subtract, divide and multiply numbers of up to four digits, equivalents between decimals, fractions and percentages, Ratio and proportion, Basic algebra , Use of brackets, Read and plot coordinates, acute, obtuse, reflex and right angles, sum of angles around a point, on a straight line and in a triangle and quadrilateral, perimeter and area, 2D and 3D shapes, Symmetry, reflection and translation of shapes , length, mass and capacity, units of measurement, Tell the time, calculate time intervals, line graphs, bar charts, pie charts and pictograms, mean</p>		
<b>When will formal assessment of progress take place?</b>	<p>Students are assessed regularly both informally through questioning in lessons and formally via Mid-Year and End of Year examinations which include topics studied from the scheme of work plus some which may be unknown, in order to allow the students to demonstrate ability to apply their skills in both familiar and unfamiliar situations. Students are NOT expected to be able to complete all questions but are encouraged to “have a go”. Each assessment is analysed and feedback given to assist students to be more targeted in their efforts for further improvement. The student is responsible for acting upon the feedback given.</p> <p>Feedback is used continually in lessons in many forms, predominantly modelling, discussion, highlighting misconceptions and suggestions for improvement or extension.</p>		

## Year 7 Useful Resources

### Website Links:

<https://sparxmaths.com/> - Homework Site

<https://corbettmaths.com/> - Corbett Maths

<https://senecalearning.com/en-GB> - Seneca Learning

[www.blooket.com](http://www.blooket.com) - Blooket Learning

### Marking, Assessment and Feedback

Over the course of an academic year students will complete a number of formal assessments, these will be used to assess where students are in their learning journey.

Information from these assessments could be used when making decisions regarding setting of students, reporting progress home and predicting outcomes. Current guidelines mean that we cannot provide as much detailed written feedback as it typical. As a result of this, we will during lessons, evaluate students' learning through a range of activities including quizzes, class discussions, detailed questioning and other strategies. Through this, students will know where they are in their learning journey and what they need to do next to make further progress.

Teachers will continue to provide planned written feedback on selected pieces of work.

### Homework

**We use a homework system called Sparx Maths. All Maths homework tasks will be set on here to submit online, with work in books to support. This will be expected to be an hour a week.**

Homework tasks are designed to prepare students for future learning or consolidate work completed in the classroom. Students are expected to spend an hour a week of time completing Maths homework independently. It will be clear what should be handed in, when it should be handed in and how it should be handed in.

### The Gilbert School

Brinkley Lane, Colchester, Essex CO4 9PU

Tel: 01206 842211

