Curriculum Planning

Enrich Academy

Maths

Curriculum Intent

Our intent is to ensure that all students have the best possible opportunity to succeed and to have the knowledge and skills to not only secure outcomes in maths but to be confident in using maths in functional, real-life situations.

Mathematics is essential in our everyday lives. The Maths curriculum is designed to provide students with a strong foundation in mathematical concepts, skills and problem-solving strategies, enabling them to confidently apply mathematical concepts to real-world situations.

Our curriculum aims to develop students' understanding of mathematical concepts by providing a structured and coherent progression of learning through sequential skill points, ensuring that knowledge is fully embedded before moving onto their next concept. The curriculum allows students to follow different pathways that reflect their current stage of learning and that is best suited to their needs.

Curriculum Implementation

Our maths curriculum is designed to be inclusive. By the end of Year 10, our aim is that all students will have gained an entry level 3 qualification in maths. Securing this outcome ensures basic maths skills and knowledge has been acquired, raises students' confidence as they continue to learn and ensures all students leave with at least one outcome in maths.

The curriculum is designed to allow for a personalised approach. In Year 10, entry level topics are taught alongside those from Edexcel Award Level 1 in number and measure (equivalent to GCSE grade 2). In Year 11, topics from Edexcel Award Level 1 and Level 2 (equivalent of GCSE grade 4) are also matched each half term. This allows students to follow the pathway that is right for them and move easily between pathways depending on their skills, engagement and taking into account any gaps in their prior knowledge. The topics covered in the Edexcel Awards link to GCSE content and our more able students can also access this qualification.

Sparx maths is used to enhance students' learning, encourage independence and allows students to access additional learning from home.

Students are encouraged to develop fluency, reason mathematically and solve problems to allow a solid foundation of skills and understanding and the ability to master concepts.

Curriculum Impact

We aim that by the end of the students' time at Enrich, all students have engaged with maths, feel confident in their skills and made good progress. In addition to achieving good outcomes in maths, we strive for students to have acquired the necessary skills and knowledge to support their next steps and increase their opportunities for future success.

Maths Curriculum Year 10

Autumn 1

Key Content	Entry level	Key Content	Functional 1	SEMH	Reading	Careers Links and Cultural Capital
Using numbers and the number system – whole numbers	Count, read, write, order and compare numbers up to 1000 Add and subtract using three-digit whole numbers Divide three-digit whole numbers by single- and double-digit whole numbers and express remainders Multiply two-digit whole numbers by single and double-digit whole numbers Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results Recognise and continue linear sequences of numbers up to 100	**Number size and rounding** **Types of number** **Integers and the 4-rules**	Read, write, order and compare positive integers up to 1000 Multiply and divide Understand and use multiples, factors, common factors and understand prime numbers Add and subtract positive integers Multiply and divide by positive integers (single digit multiplier and divisor for non-calculator section) Understand negative numbers and use a number line to order, add and subtract negative numbers	Students build confidence through small-step number work, using predictable routines and supportive scaffolds. Trauma-informed approaches and THRIVE strategies promote calm problem-solving, resilience and independence while practising calculations, ordering numbers and checking answers. Learners experience success and develop a secure sense of capability.	Students develop key maths vocabulary and practise extracting essential information from short, accessible word problems. Visual scaffolds and sentence stems support comprehension, enabling learners to follow instructions and interpret simple contexts involving	Students connect number skills to real-life applications in finance, retail, construction and digital roles. Exploring number systems, patterns and primes builds cultural awareness, while money calculations and estimation develop practical numeracy essential for adulthood, employment and confident participation in everyday life.

			Round decimals to one decimal place and the nearest integer, and round money in calculations to the nearest penny Check solutions to questions and problems by considering whether the answer is sensible Add, subtract, multiply and divide quantities of money (integers)		integers, rounding and money.	

Autumn 2

Key Content	Entry level	Key Content	Functional 1	SEMH	Reading	Careers Links and Cultural Capital
Using numbers and the number system – fractions and decimals	Read, write and understand thirds, quarters, fifths and tenths, including equivalent forms Read, write and use decimals up to two decimal places Recognise and continue sequences that involve decimals Rounding decimals	**Fractions**	Read, write, order and compare fractions and mixed numbers Use equivalent fractions Write fractions in their simplest form Add and subtract simple fractions (with the same denominator, excluding mixed fractions)	Students build confidence through small-step work with **fractions** and **decimals**, supported by visual scaffolds and predictable routines. Trauma-informed	Students learn key vocabulary and interpret short, accessible problems involving **fractions** and **decimals**. Visual models and sentence	Students link fraction and decimal skills to real-life numeracy in **finance**, retail, construction and digital roles. Exploring number systems and proportional reasoning builds cultural awareness

		Decimals	Multiply a fraction by a positive integer, and find a fraction of a whole number quantity (positive integers only) Read, write, order and compare decimals up to two decimal places, and understand place value Add and subtract decimals up to two decimal places Multiply decimals with up to two decimal places (single digit whole number multiplier for non-calculator section) Divide decimals with up to two decimal places, using a calculator Round decimals to one decimal place and the nearest integer	strategies promote calm problem-solving, resilience and a secure sense of capability when simplifying, comparing and calculating.	stems support comprehension, enabling learners to follow instructions and extract essential information.	and strengthens practical skills for adulthood and employment.

Spring 1

Key Content	Entry level	Key Content	Functional 1	SEMH	Reading	Careers Links and Cultural Capital
Using common measures, shape and space	Calculate with money using decimal notation and express money correctly in writing in pounds and pence Round amounts of money to the nearest £1 or 10p Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division Compare metric measures of length, including millimetres, centimetres, metres and kilometres Compare measures of weight, including grams and kilograms Compare measures of capacity, including millilitres and litres Use a suitable instrument to measure mass and length	**Converting units** **Reading scales**	Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units eg imperial units include miles, inches, feet, pounds, gallons and pints Add and subtract units of measure Convert units of measure in the metric system Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units eg imperial units include miles, inches, feet, pounds, gallons and pints Read integer scales Draw and measure lines and angles, accurate to the nearest cm and degree	Students build confidence through structured, practical work with **measures** and scales. Predictable routines, visual supports and hands-on tasks reduce anxiety, helping learners regulate, persevere and develop a secure sense of capability when comparing, converting and measuring.	Students interpret short, accessible problems involving **measures**, scales and money. Visual scaffolds support comprehension, enabling learners to extract key information, follow instructions and understand labelled and unlabelled divisions on common measuring instruments.	Students connect measurement skills to real-life numeracy in **construction**, retail, catering and engineering. Understanding metric and imperial units builds cultural awareness, while accurate measuring and converting strengthen essential skills for adulthood and employment.

Spring 2

Key Content	Entry level	Key Content	Functional 1	SEMH	Reading	Careers Links and Cultural Capital
	Adding and subtracting decimals Sort 2-D and 3-D shapes using properties, including lines of symmetry, length, right angles, angles, including in rectangles and triangles Using appropriate positional vocabulary to describe position and direction, including eight compass points and full/ half/quarter turns	**Perimeter and area** **Volume**	Work out the perimeter of rectangles and shapes made from rectangles Work out the area of rectangles and shapes made from rectangles Work out the volume of a cuboid	Students build confidence through structured, hands-on work with **2-D and 3-D shapes** and measurement. Predictable routines and visual supports reduce anxiety, helping learners regulate, persevere and feel capable when calculating perimeter, area, volume and describing position.	Students interpret short, accessible problems involving **shape vocabulary**, position and measurement. Visual scaffolds support comprehension, enabling learners to extract key information, follow instructions and understand symmetry, turns and basic geometric properties.	Students link shape and measurement skills to real-life numeracy in **construction**, design, engineering and logistics. Understanding angles, perimeter, area and volume builds cultural awareness and strengthens essential skills for adulthood and employment.

	Read, measure and record time using am and pm Read time from analogue and 24-hour digital clocks in hours and minutes	**Time and timetables**	Read, measure and record time using digital and analogue clocks in 12-hour and 24-hour format Use units of time including seconds, minutes, hours, days, weeks, months and years Work out intervals of time and convert between units of time Read, measure and record events on calendars Read, construct and use everyday tables and charts, eg tables and timetables (bus, train and airlines).	Students build confidence through structured, practical work with **time** and timetables. Predictable routines and visual supports reduce anxiety, helping learners regulate, persevere and feel capable when reading clocks, calculating intervals and interpreting schedules.	Students interpret short, accessible problems involving **time vocabulary**, calendars and timetables. Visual scaffolds support comprehension, enabling learners to extract key information, follow instructions and understand 12-hour, 24-hour and analogue formats.	Students link time skills to real-life numeracy in **transport**, retail, catering and logistics. Understanding timetables, intervals and calendars builds cultural awareness and strengthens essential skills for adulthood, employment and independent living.

Summer 1

Key Content	Entry level	Key Content	Functional 1	SEMH	Reading	Careers Links and Cultural Capital
Handling information and data	Extract information from lists, tables, diagrams and charts and create frequency tables Interpret information to make comparisons and record changes, from different formats, including bar charts and simple line graphs Organise and represent information in appropriate ways, including tables, diagrams, simple line graphs and bar charts	**Tables and charts**	Read, construct and use everyday tables and charts, eg mileage charts, bar charts, line graphs, currency conversion tables and timetables (bus, train and airlines).	Students build confidence through structured, supported work with **tables and charts**. Predictable routines and visual clarity reduce anxiety, helping learners regulate, persevere and feel capable when extracting, organising and interpreting information from different formats.	Students interpret short, accessible problems involving **data vocabulary**, charts and diagrams. Visual scaffolds support comprehension , enabling learners to extract key information, follow instructions and understand comparisons, changes and simple graphical representations.	Students link data-handling skills to real-life numeracy in **logistics**, retail, transport and digital roles. Understanding charts, tables and graphs builds cultural awareness and strengthens essential skills for adulthood, employment and informed decision-making.

Summer 2

Key Content	Entry level	Key Content	Functional 1	SEMH	Reading	Careers Links and Cultural Capital
Fractions, decimals and percentages	Convert simple fractions to decimals (up to 2 decimal places) and vice versa Read, order and compare simple percentages, eg 10%, 25%, 20%, 50% and 75%	**Fractions, decimals and percentages** **Percentages and applications**	Convert simple fractions to decimals (up to 2 decimal places) and vice versa eg and multiples of these fractions Read, write, order and compare simple percentages, eg 10%, 25%, 20%, 50% and 75% Use equivalencies between decimals, fractions and percentages eg 25% = = 0.25 Work out simple percentages of quantities, including VAT Add, subtract, multiply and divide quantities of money, household finance, utility bills, shopping bills, interest (for 1 year)	Students build confidence through structured work with **fractions, decimals and percentages**. Predictable routines and visual supports reduce anxiety, helping learners regulate, persevere and feel capable when converting, comparing and applying these skills to real-life money contexts.	Students interpret short, accessible problems involving **percentage vocabulary** and conversions. Visual scaffolds support comprehension, enabling learners to extract key information, follow instructions and understand equivalences between fractions, decimals and percentages.	Students link percentage and conversion skills to real-life numeracy in **finance**, retail and employment. Understanding VAT, interest and money calculations builds cultural awareness and strengthens essential skills for adulthood and informed financial decision-making.

Links to spec:

Entry level 3 entry-level-mathematics-specification.pdf

Edexcel Award in Number and Measure W035165_Edxl_Awd_L12_NM_Issue_3.pdf

Maths Curriculum Year 11

Autumn 1

Key Content	Functional 1	Key Content	Functional 2	SEMH	Reading	Careers Links and Cultural Capital
Number size and rounding **Types of number** **Integers and the 4-rules**	Read, write, order and compare positive integers up to 1000 Multiply and divide Understand and use multiples, factors, common factors and understand prime numbers Add and subtract positive integers Multiply and divide by positive integers (single digit multiplier and divisor for non-calculator section) Understand negative numbers and use a number line to order, add and subtract negative numbers Round decimals to one decimal place and the	**Number size and rounding** **Types of number** **Integers and the 4-rules**	Multiply and divide positive integers by 10, 100, 1000 1.6 Round positive integers to the nearest 10, 100 and 1000 Read, write, order and compare positive and negative integers of any size Check solutions to questions and problems by using suitable approximations Understand and use multiples, factors, common factors and prime numbers Find the Highest Common Factor and Lowest Common	Students build confidence through structured work with **integers**, rounding and number properties. Predictable routines and visual supports reduce anxiety, helping learners regulate, persevere and feel capable when calculating, comparing and checking answers using	Students interpret short, accessible problems involving **number vocabulary**, factors, multiples and negative numbers. Visual scaffolds support comprehension, enabling learners to extract key information, follow instructions and understand mathematical language linked	Students link integer operations and number properties to real-life numeracy in **finance**, construction, engineering and digital roles. Understanding factors, primes, rounding and estimation builds cultural awareness and strengthens essential skills for adulthood and employment.

	nearest integer, and round money in calculations to the nearest penny Check solutions to questions and problems by considering whether the answer is sensible Add, subtract, multiply and divide quantities of money (integers)		Multiple of any two positive integers Read, write and use squares, cubes and square roots Read, write and use index notation for small positive integer powers Understand negative numbers and use a number line to order, add and subtract negative numbers Add, subtract, multiply and divide integers of any size Multiply and divide using negative integers	sensible approximations.	to operations and rounding.	

Autumn 2

Key Content	Functional 1	Key Content	Functional 2	SEMH	Reading	Careers Links and Cultural Capital
Fractions	Read, write, order and compare fractions and mixed numbers	**Fractions**	Use equivalent fractions	Students build confidence	Students interpret short, accessible	Students link fraction and decimal skills to

Decimals	Use equivalent fractions Write fractions in their simplest form Add and subtract simple fractions (with the same denominator, excluding mixed fractions) Multiply a fraction by a positive integer, and find a fraction of a whole number quantity (positive integers only) Read, write, order and compare decimals up to two decimal places, and understand place value Add and subtract decimals up to two decimal places Multiply decimals with up to two decimal places (single digit whole number multiplier for non-calculator section) Divide decimals with up to two decimal	**Decimals**	Multiply fractions, including mixed numbers Divide fractions, including mixed numbers, using a calculator Add and subtract fractions with different denominators and mixed numbers Use fractions to compare quantities Express one number as a fraction of another Divide decimals with up to two decimal places, using a calculator Multiply decimals with up to two decimal places (two digit multiplier and divisor for non-calculator section) Round decimals to two decimal places Add and subtract any decimal	through structured work with **fractions** and **decimals**. Predictable routines and visual supports reduce anxiety, helping learners regulate, persevere and feel capable when simplifying, comparing, converting and calculating in real-life contexts.	problems involving **fraction and decimal vocabulary**. Visual scaffolds support comprehension, enabling learners to extract key information, follow instructions and understand equivalences, place value and calculation language.	real-life numeracy in **finance**, retail, catering and engineering. Understanding conversions, comparisons and money calculations builds cultural awareness and strengthens essential skills for adulthood and employment.

	places, using a calculator Round decimals to one decimal place and the nearest integer		Check solutions to questions and problems by using suitable approximations Add, subtract, multiply and divide quantities of money, household finance, utility bills, shopping bills			

Spring 1

Key Content	Functional 1	Key Content	Functional 2	SEMH	Reading	Careers Links and Cultural Capital
Converting units **Reading scales**	Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units eg imperial units include miles, inches, feet, pounds, gallons and pints Add and subtract units of measure Convert units of measure in the metric system	**Converting units**	Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units and degrees eg imperial units include miles, inches, feet, pounds, gallons and pints Convert units of measure in its same systems Convert between metric and imperial units eg 5 miles = 8 km 12 inches = 1	Students build confidence through structured, practical work with **units and scales**. Predictable routines and visual supports	Students interpret short, accessible problems involving **measurement vocabulary** and scales. Visual scaffolds support comprehension, enabling learners to	Students link unit conversion and scale reading to real-life numeracy in **construction**, catering, engineering and transport. Understanding metric and

	Know and use units of measure for length, weight, angles, capacity, temperature, including metric and imperial units eg imperial units include miles, inches, feet, pounds, gallons and pints Read integer scales Draw and measure lines and angles, accurate to the nearest cm and degree	**Reading scales**	foot = 30 cm 2.2 pounds = 1 kg 8 pints = 1 gallon = 4 Draw lines and angles, accurate to the nearest cm and degree Read decimal scale	reduce anxiety, helping learners regulate, persevere and feel capable when converting units, reading scales and measuring accurately.	extract key information, follow instructions and understand metric, imperial and angle-related language.	imperial systems builds cultural awareness and strengthens essential skills for adulthood and employment.

Spring 2

Key Content	Functional 1	Key Content	Functional 2	SEMH	Reading	Careers Links and Cultural Capital
Perimeter and area	Work out the perimeter of rectangles and shapes made from rectangles Work out the area of rectangles and shapes made from rectangles	**Perimeter and area**	Round decimals to two decimal places Work out the area and perimeter of rectangles, triangles, circles and semi-circles Work out areas of composite shapes made	Students gain confidence through practical work with **perimeter, area and volume**, using	Students interpret short problems involving **geometric measurement vocabulary**.	Students connect measurement skills to real-life applications in **construction**, design,

Volume	Work out the volume of a cuboid	**Volume**	from rectangles, triangles, circles and/or semi-circle Volumes of prisms and cylinders	clear diagrams and step-by-step methods. Structured tasks support regulation as learners calculate lengths, surface areas and simple volumes, building a sense of accuracy and control.	Visual models help them identify key information, follow instructions and understand terms linked to rectangles, triangles, circles, composite shapes and cuboid or prism volume.	landscaping and manufacturing. Understanding area, perimeter and volume strengthens practical numeracy essential for planning spaces, estimating materials and engaging confidently in everyday environments.
Time and timetables	Read, measure and record time using digital and analogue clocks in 12-hour and 24-hour format Use units of time including seconds, minutes, hours, days, weeks, months and years Work out intervals of time and convert between units of time	**Ratio and proportion**	Use direct proportion in simple problems Use ratio notation Divide a quantity into 2 or 3 parts in a given ratio Convert between currencies	Students develop confidence through structured work with **time and timetables**, using clear routines and visual cues. Breaking tasks into	Students interpret short problems involving **time vocabulary**, calendars, tables and ratio notation. Visual scaffolds help them identify key	Students connect time and ratio skills to real-life numeracy in **transport**, catering, retail and finance. Understanding timetables, intervals, currency

	Read, measure and record events on calendars Read, construct and use everyday tables and charts, eg tables and timetables (bus, train and airlines).			manageable steps supports regulation as learners read clocks, interpret schedules and work with simple ratios and proportional changes.	information, follow multi-step instructions and understand units, intervals, currency changes and proportional relationships.	conversion and proportional division strengthens independence and practical competence for everyday life and employment.

Summer 1

Key Content	Functional 1	Key Content	Functional 2	SEMH	Reading	Careers Links and Cultural Capital
Tables and charts	Read, construct and use everyday tables and charts, eg mileage charts, bar charts, line graphs, currency conversion tables and timetables (bus, train and airlines)	**Tables and charts**	Read, write and use everyday tables, charts eg mileage charts, bar charts, line graphs, currency conversion tables and timetables (bus, train and airlines). Draw and interpret pie charts and frequency tables	Students build confidence by working with **tables and charts** in clear, structured steps. Predictable layouts and visual routines	Students interpret short tasks involving **data-handling vocabulary**, extracting information from tables, charts and	Students connect data-handling skills to real-life numeracy in **transport**, finance, retail and digital roles. Reading charts, timetables and

				support emotional regulation as learners interpret mileage charts, bar charts, line graphs and currency tables.	graphs. Visual scaffolds help them follow instructions, compare values and understand pie charts and frequency tables.	conversion tables strengthens practical decision-making and cultural awareness in everyday contexts.

Summer 2

Key Content	Functional 1	Key Content	Functional 2	SEMH	Reading	Careers Links and Cultural Capital
Fractions, decimals and percentages	Convert simple fractions to decimals (up to 2 decimal places) and vice versa eg and multiples of these fractions Read, write, order and compare	**Fractions, decimals and percentages**	Convert simple fractions to decimals (up to 2 decimal places) and vice versa eg and multiples of these fractions Use equivalencies between decimals (up to 2 decimal places) fractions and	Students strengthen confidence by working step-by-step with **fractions, decimals and percentages**.	Students interpret short tasks involving **percentage and conversion vocabulary**, extracting key information	Students connect percentage and money handling skills to real life numeracy in **finance**, retail, employment

	simple percentages, eg 10%, 25%, 20%, 50% and 75% Use equivalencies between decimals, fractions and percentages eg 25% = = 0.25 **Fractions, decimals and percentages** Work out simple percentages of quantities, including VAT Add, subtract, multiply and divide quantities of money, household finance, utility bills, shopping bills, interest (for 1 year)	**Percentages and applications**	percentages eg 25% = = 0.25 Find percentages of quantities of any value Calculate percentage increase and decrease Express one number as a percentage of another Calculate simple interest Calculate wages and salaries, including national insurance and tax deductions	Clear visual models and predictable routines support emotional regulation as learners convert, compare and apply percentage skills to real-life financial situations such as VAT, bills and wages.	from financial and numerical contexts. Visual scaffolds help them follow multi-step instructions, understand equivalences and interpret language linked to increases, decreases and proportional comparisons.	and budgeting. Understanding interest, deductions, currency conversion and percentage change strengthens independence and informed decision making in adult life.

Links to spec:

Edexcel Award in Number and Measure W035165_Edxl_Awd_L12_NM_Issue_3.pdf

GCSE Maths Switch to Pearson Edexcel GCSE (9-1) Mathematics | Pearson qualifications