Maths	**Oak pathway**   *Subject specific curriculum*
Curriculum cycle – Year 1 (2024-2025)	

	Autumn		Spring		Summer	
Sunflower	**I am Special!**	**We're not scared!**	**The Egyptians**	**Nature Detectives**	**How can I travel?**	**Splish, splash, splosh into the sea**
The majority of pupils are working at point 1. The maths curriculum will focus on a cohesive learning experience at point 1 and be adapted to meet individual learning needs accordingly.						
	Number - Place Value – Counting Number – Addition and subtraction Geometry – Shape Number – Place Value		Number - Place Value – Counting Number – Addition and subtraction Measurement – Length and height Measurement – Mass and volume Number – Addition and subtraction		Number – Multiplication and division Number - Fractions Geometry – Position and direction Measurement – Money Measurement – Time	

Key Learning	Counting, recognising and comparing numbers 0 – 10 Counting to and from 20 Counting in tens - decade numbers Comparing quantities - part whole relationships Additive structures: addition Additive structures: addition and subtraction Recognise, compose, decompose and manipulate 2D and 3D shape**s**		Composition of numbers 11 to 19 Pattern in counting from 20 to 100 Numbers 0 to 20 in different contexts Solving problems in a range of contexts Measuring height and length in non-standard units		Counting in multiples of two, five, ten Position and direction including fractions of turns Using directional language Using positional and proportional language Unitising and coin recognition - value of a set of coins Time - sequencing events and telling the time to the hour and half hour	
Key Vocabulary	Count, counting, part, whole, 2 dimensional, 3 dimensional, add, subtract		Pattern, sequence, length, height, tall, long, short		Turn, position, direction, forwards, backwards, group(s), event, order, chronological, weeks, months, years	
Trips and Visits					Manchester/Liverpool Airport, Liverpool Docks	
	Autumn		**Spring**		**Summer**	
Daffodil	**Look at Me!**	**Winter Wonderland**	**China**	**Extreme Earth**	**Local History - Warrington**	**Adventures**
The majority of pupils are working at point 1. The maths curriculum will focus on a cohesive learning experience at point 1 and be adapted to meet individual learning needs accordingly.						
	Number - Place Value – Counting Number – Addition and subtraction Geometry – Shape Number – Place Value		Number - Place Value – Counting Number – Addition and subtraction Measurement – Length and height Measurement – Mass and volume Number – Addition and subtraction		Number – Multiplication and division Number - Fractions Geometry – Position and direction Measurement – Money Measurement – Time	

Key Learning	Counting, recognising and comparing numbers 0 – 10 Counting to and from 20 Counting in tens - decade numbers Comparing quantities - part whole relationships Additive structures: addition Additive structures: addition and subtraction Recognise, compose, decompose and manipulate 2D and 3D shape**s**	Composition of numbers 11 to 19 Pattern in counting from 20 to 100 Numbers 0 to 20 in different contexts Solving problems in a range of contexts Measuring height and length in non-standard units	Counting in multiples of two, five, ten Position and direction including fractions of turns Using directional language Using positional and proportional language Unitising and coin recognition - value of a set of coins Time - sequencing events and telling the time to the hour and half hour
Key Vocabulary	Count, counting, part, whole, 2 dimensional, 3 dimensional, add, subtract	Pattern, sequence, length, height, tall, long, short	Turn, position, direction, forwards, backwards, group(s), event, order, chronological, weeks, months, years
Trips and Visits			Fish Market, Alice in Wonderland, Beatrix Potter @ Daresbury, Cenotaph
Rabbit	*The majority of pupils are working at point 4. The maths curriculum will focus on a cohesive learning experience at point 1 and be adapted to meet individual learning needs accordingly.*		
	Autumn	Spring	Summer
	Number - Place Value Number – Addition and subtraction Measurement - Shape	Number – Multiplication and division Measurement – Length and perimeter Number - Fractions Number - Decimals	Measurement - Money Measurement - Time Statistics Geometry – Position and direction

		Measurement - Area	
Key Learning	Secure place value to 1000: apply to addition and subtraction: multiples of 100 Comparing, ordering and rounding 4-digit numbers Review of column addition and subtraction Column addition and subtraction with 4-digit numbers Understand and represent multiplicative structures Apply the distributive law to multiplication Properties of 2D and 3D shapes and symmetry	Represent counting in threes and sixes as the 3 and 6 times tables 7 times table: odd and even patterns, square numbers and tests of divisibility Represent counting in nines as the 9 times table Division with remainders Understand what happens when a number is multiplied or divided by 10 and 100 Calculation and conversion of measures Perimeter Calculate the area of squares and rectangles Convert mass and capacity	**Coordinates** Time: Convert between 12 and 24 hour clocks: analogue and digital Tallys charts and bar charts- interrogating and drawing Making different amounts of money Adding and subtracting different amounts of money

		Composition of fractions greater than one Compare and order mixed numbers and position on a number line Addition and subtraction of fractions and mixed numbers (within a whole) Convert improper fractions to mixed numbers and vice versa Efficient strategies for adding and subtracting mixed numbers (crossing a whole) Understand the concept of a tenth	
Key Vocabulary	Place value, Thousands, hundreds, tens, ones, columns, addition, subtraction, regroup, multiply, 2D, 3D, symmetry, line symmetry	Multiply, divide, area, perimeter, length, fraction, improper fraction, whole	Co-ordinate, quadrant, digital, analogue graph, chart, axis
Trips and Visits	Local parks, shopping, cafe visit		
Badger	*The majority of pupils are working at point 3. The maths curriculum will focus on a cohesive learning experience at point 1 and be adapted to meet individual learning needs accordingly.*		
	Autumn	Spring	Summer
	Number - Place Value Measurement – Shape Number – Addition and subtraction	Number – Multiplication and division Measurement – Length and perimeter Measurement – Mass and capacity	Number – Fractions Measurement – Money Measurement – Time Measurement – Shape Statistics

Key Learning	Securing place value to 100 and applying to addition and subtraction Representing 3-digit numbers, comparing and positioning on number lines Bridging 100: counting on and back in 10s, adding/subtracting multiples of 10 2D and 3D shapes recognition including properties Parallel and perpendicular sides in polygons (and perimeter) Right angles Review strategies for adding and subtracting across 10 Securing place value to 100 and applying to addition and subtraction Informal and mental strategies for adding and subtracting two 3-digit numbers Understand additive relationships and apply them to rearrange equations Column addition and subtraction	2, 4 and 8 times tables: using times tables to solve problems Use knowledge of the divisibility rules for divisors of 2 and 4 to solve problems Use knowledge of the divisibility rules for divisors 8 to solve problems Measuring length and recording in tables Work out simple perimeters of squares Become familiar with scales with different intervals when measuring in grams Measure the mass of objects using grams Measure mass in whole kilograms and grams Understanding capacity and volume Measuring the volume of liquids using millilitres. Measure volume in whole litres and millilitres Comparing and estimating mass and volume	Unit fractions as part of a whole Identify parts and wholes in different contexts Compare and order unit fractions Calculate the value of a part (fractions as operators) Non-unit fractions Composition of non-unit fractions: addition and subtraction **Te**ll the time to the nearest minute and compare units of time Coin recognition and making different amounts Use graphs to represent lengths and heights Analyse and interrogate bar charts

		Estimate then measure mass and volume and record in a table Solve problems involving mass Solve problems involving volume	
Key Vocabulary	Add. Subtract, count on, count back, total, parallel, perpendicular, perimeter, calculate, 2D, 3D	Mass, volume, amount, measure, centimetre, millimetre, litre, millilitre, gram, capacity, multiply, divide, group	Fraction, whole, part, unit, non-unit fraction, length, height, minute, nearest minute
Trips and Visits	Local parks, shopping, cafe visit		
Fox	*The majority of pupils are working at point 2. The maths curriculum will focus on a cohesive learning experience at point 1 and be adapted to meet individual learning needs accordingly.*		
	Autumn	Spring	Summer
	Number - Place Value Number – Addition and subtraction Geometry – Shape	Measurement – Money Number – Multiplication and division Measurement – Length and height Measurement – Mass, capacity and temperature	Number – Fractions Measurement – Time Statistics Geometry – Position and direction Number - Place Value

Key Learning	Composition of multiples of 10 Counting and representing the numbers 20 to 99 Comparing, ordering and partitioning 2-digit numbers Addition and subtraction of two 2-digit numbers Secure fluency of addition and subtraction facts within 10 Calculating within 20 Adding and subtracting ones and tens to and from 2-digit numbers Shape: discuss and compare 2D and 3D shapes	Money: recognise coins and use £ and p symbols Grouping objects in different ways and relating to multiplication Representing counting in 2s, 5s and 10s as the 2, 5 and 10 times tables Representing counting in 5s as the 5 times table and link to the 10 times tables Introduction to division structures Sense of measure - capacity, volume and mass Measuring in m and cm	Fractions: identify equal parts and be familiar with halves, thirds and quarters Describe turns as a quarter, half, three-quarter or full turn Order and arrange objects in patterns and explain the patterns write and tell the time to five minutes Complete surveys that then become tally charts
Key Vocabulary	Count, count on, compare, order, add, subtract, take away, 2D, 3D, shape, polygon	Pounds, pence, pennies, penny, group, multiply, divide capacity, amount, volume, mass, weight, metre, centimetre	Fraction, part, whole, halve, half, third, equal part, quarter, survey, tally, repeat, pattern, sequence, analogue, hour, minute, second
Trips and Visits	Local parks, shopping, cafe visit		

Key Stage 4 - AQA

Pupils are streamed in mathematics. By streaming groups pupils benefit from:

1. **Tailored Instruction**: When pupils are grouped according to their ability advanced learners can be challenged with more complex problems, while those who need extra support can focus on foundational concepts without feeling left behind. This ensures that all students receive instruction that is appropriate for their current level, promoting deeper understanding.
2. **Increased Confidence**: Pupils who are placed in an ability-appropriate stream are more likely to experience success in their learning. This can boost their confidence and motivation. Confidence is a key factor in improving academic performance.
3. **Effective Use of Time and Resources**: Streaming allows teachers to use their time and resources more efficiently. For instance, they can provide more challenging tasks to advanced groups, while allocating time for more intensive support to struggling students. This approach helps in making the most of both teaching and learning time.
4. **Promotes Peer Learning**: When students are grouped by ability, they are more likely to be working with peers who are at a similar level of understanding. This promotes effective collaboration, as students can help each other and engage in meaningful discussions about mathematical concepts. Peer learning can be especially valuable in a subject like maths, where explaining concepts to others can reinforce understanding.
5. **Encourages Academic Progress**: Ability-based streaming can motivate students to aim for higher levels of achievement. They can see the progress they're making relative to their peers, which can inspire them to push their boundaries.

Streaming is done thoughtfully and allows opportunities for movement between streams if required, so that all students have a chance to progress.

Group 1

- AQA Components 1-8 (Number, Four operations, Ratio, Time, Money, Geometry, Measures, Statistics) at Entry Level 1

Group 2

- AQA Components 1-8 (Number, Four operations, Ratio, Time, Money, Geometry, Measures, Statistics) at Entry Levels 2

Group 3

- AQA Components 1-8 (Number, Four operations, Ratio, Time, Money, Geometry, Measures, Statistics) at Entry Level 3
- Functional Skills Level 1

End of topic assessment - AQA portfolio sheets and NEAs for each component

Woodpecker, Hawk and Robin

Autumn	Spring	Summer
Number – Component 1	Number – Component 4	Handling Data – Component 7
Number – Component 2	Space and Measure – Component 5	Handling Data – Component 8
Number – Component 3	Shape, Space and Measures - Component 6	

Component 1 - Number			Use of number and the number system
Entry Level 1	Entry Level 2	Entry Level 3	Functional Skills Level 1
1.1 Count reliably up to 20 items 1.2 Read, write, order and compare numbers up to 20, including zero 1.3 1.3 Complete a number line up to 20	2.1 Read, write, order and compare numbers up to 100 2.2 Recognise place value in two digit numbers 2.3 Count from 0 in steps of two, three and five 2.4 Round numbers less than 100 to the nearest 10 2.5 Understand and identify odd and even numbers	3.1 Read and write numbers up to 1,000 3.2 Order and compare numbers up to 1,000 3.3 Recognise place value in three digit numbers 3.4 Round numbers less than 1,000 to the nearest 10 3.5 Round numbers less than 1,000 to the nearest 100 3.6 Find 10 or 100 more or less than a given number 3.7 Recognise and use multiples of 2, 3, 4, 5, 8, 10, 50 and 100	Read, write, order and compare large numbers (up to one million) Recognise and use positive and negative numbers Multiply and divide whole numbers and decimals by 10, 100, 1000 Use multiplication facts and make connections with division facts Use simple formulae expressed in words for one or two-step operations Calculate the squares of one-digit and two-digit numbers Follow the order of precedence of operators Read, write, order and compare common fractions and mixed numbers

			Find fractions of whole number quantities or measurements Read, write, order and compare decimals up to three decimal places Add, subtract, multiply and divide decimals up to two decimal places Approximate by rounding to a whole number or to one or two decimal places Read, write, order and compare percentages in whole numbers Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof Estimate answers to calculations using fractions and decimals Recognise and calculate equivalences between common fractions, percentages and decimals Work with simple ratio and direct proportions

Key Vocabulary	Count, order, tens, ones, round, rounding, round up/down, sequence, equivalent, whole, unit fraction, decimal, tenth, multiply, divide, percent, percentage, 'out of 100'		
Component 2 – The four operations			Uses of measure shape and space
Entry Level 1	Entry Level 2	Entry Level 3	Functional Skills Level 1
1.1 Add two whole numbers with a total up to 20 1.2 1.2 Subtract one number up to 20 from another 1.3 1.3 Understand and use the + and – signs to solve simple number problems	2.1 Add whole numbers with a total up to 100 2.2 Subtract one number up to 100 from another 2.3 Multiply using single digit whole numbers 2.4 Use and interpret +, -, × and = in real-life situations for solving problems 2.5 Recall and use multiplication facts for the 2, 5 and 10 multiplication tables	3.1 Add and subtract using three digit numbers 3.2 Multiply a two digit whole number by a single digit whole number 3.3 Divide a two digit whole number by a single digit whole number 3.4 Use and interpret +, –, x ,÷ and = in real-life situations for solving problems 3.5 Use inverse operations to find missing numbers 3.6 Estimate the answer to a calculation 3.7 Recall and use multiplication facts for the 3, 4 and 8 multiplication tables	Calculate simple interest in multiples of 5% on amounts of money Calculate discounts in multiples of 5% on amounts of money Convert between units of length, weight, capacity, money and time, in the same system Recognise and make use of simple scales on maps and drawings Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles Calculate the volumes of cubes and cuboids Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles

			Interpret plans, elevations and nets of simple 3-D shapes Use angles when describing position and direction, and measure angles in degrees
Key Vocabulary	Add, subtract, multiply, divide, inverse, multiple, sequence, estimate, capacity, mass, weight, volume, convert, kilogram, gram, millilitre, litre, kilometre, metre, centimetre, millimetre, 2D, 3D, edges, vertices, faces, properties, angle, acute, obtuse, straight line, reflex, right angle, degree		
Component 3 - Equality			Functional Skills Level 1
Entry Level 1	Entry Level 2	Entry Level 3	Handling information and data
1.1 Understand equality 1.2 1.2 Identify or show one half of a quantity up to 20 1.3 1.3 Work out half of an even number up to 20	2.1 Identify or show one third or one quarter of a quantity up to 24 2.2 Work out one third or one quarter of a number up to 24 2.3 Count in fractions of one half or one third or one quarter 2.4 Work out amounts two, three or four times the size of a given amount 2.5 Recognise the equivalence of $\frac{1}{2}$ and 2/4	3.1 Identify or show unit fractions up to one tenth of a quantity up to 100 3.2 Work out unit fractions to one tenth of a number up to 100 3.3 Identify or show any number of thirds, quarters, fifths or tenths of a quantity 3.4 Work out any number of thirds, quarters, fifths or tenths of an amount 3.5 Recognise and identify equivalent fractions 3.6 Add and subtract fractions with the same denominator within one whole	Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs Group discrete data and represent grouped data graphically Find the mean and range of a set of quantities Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events Use equally likely outcomes to find the probabilities of simple

		3.7 Work out amounts 5, 8 or 10 times the size of a given amount	events and express them as fractions
Key Vocabulary	Half, halve, third, quarter, fifths, tenths, denominator, improper, mixed number, equivalent, numerator, denominator, common multiple, common denominator, likely, unlikely, impossible, certain, even chance, discrete, continuous, axis, bar/line/pie chart		
Component 4 - Money			Functional Skills Level 1
Entry Level 1	Entry Level 2	Entry Level 3	Solving mathematical problems and decision making
1.1 Recognise coins and notes up to £20 1.2 Exchange money up to 20p for an equivalent amount in other denominations 1.3 1.3 Add up to 20 coins	2.1 Appreciate the purchasing power of amounts of money (coins) 2.2 Convert from pence to pounds and vice versa 2.3 Make amounts of money up to £2 from given coins 2.4 Make amounts of money in multiples of £5 from £5, £10 and £20 notes 2.5 Calculate with amounts of money in pence up to £1 and whole pounds up to £100 and give change	3.1 Appreciate the purchasing power of amounts of money (notes) 3.2 Exchange notes for an equivalent value in coins 3.3 Use decimal notation for money 3.4 Interpret a calculator display 3.5 Solve real life problems involving what to buy and how to pay 3.6 Add amounts of money and give change 3.7 Carry out investigations involving money	Learners at Level 1 are expected to be able to: • read, understand and use mathematical information and mathematical terms used at this level • address individual problems as described above • use knowledge and understanding to a required level of accuracy • identify suitable operations and calculations to generate results • analyse and interpret answers in the context of the original problem • check the sense, and reasonableness, of answers and • present results with appropriate explanation and

			interpretation demonstrating simple reasoning to support the process and show consistency with the evidence presented.
Key Vocabulary	Pounds, pennies, pence, change, amount, cash, money, purchase		
Component 5 – The calendar and time			
Entry Level 1	Entry Level 2	Entry Level 3	
1.1 Know the days of the week and their order 1.2 Read the time to the hour or half hour on an analogue clock and draw the hands on a clock to show these times 1.3 Order familiar events	2.1 Know the seasons and months and their order 2.2 Know that 1 week = 7 days; 1 day = 24 hours; 1 hour = 60 minutes; 1 minute = 60 seconds 2.3 Read the time displayed on an analogue or 12 hour digital clock in hours, half hours and quarter hours and draw the hands on a clock or the digital display to represent these times 2.4 Read the time to the nearest five minutes on an analogue clock, draw the hands on a clock to show the time, and read any time on a digital clock 2.5 Find the difference between two times given in hours, half hours and quarter hours.	3.1 Solve problems involving time 3.2 Know that there are 365 days in a year, 366 days in a leap year, 12 months in a year and 52 full weeks in a year 3.3 Use a calendar and write the date correctly (day/month/year) 3.4 Tell and write the time from an analogue clock, including using Roman numerals from I to XII 3.5 Understand and use the 12-hour and 24-hour clock systems and convert from one system to the other 3.6 Convert between hours, minutes and seconds 3.7 Add up to three lengths of time given in minutes and hours	

Key Vocabulary	Day, week, year, minute, hour, seconds, analogue, digital, past, to, o'clock, half past, quarter past/to, numeral, 12/24 hour clock

Component 6 – Measures		
Entry Level 1	Entry Level 2	Entry Level 3
1.1 Compare lengths, heights, weights and capacities 1.2 Give the length of a line drawn on a centimetre grid 1.3 Describe capacity in fractions	2.1 Choose appropriate standard units of length, capacity and weight 2.2 Compare and order lengths, capacities and weights in the same units 2.3 Select a possible length, capacity or weight for a given item 2.4 Measure or draw a length using a ruler 2.5 Estimate the weight, capacity or length of given items	3.1 Add lengths, capacities and weights and compare the total to another total or a requirement 3.2 Convert standard units of length, capacity and weight 3.3 Compare and order lengths, capacities and weights in different standard units 3.4 Measure the perimeter of a simple shape 3.5 Choose an appropriate measuring instrument 3.6 Read values from an appropriate scale 3.7 Read and compare temperature including temperature with negative values

Key Vocabulary	capacity, mass, weight, volume, convert, kilogram, gram, millilitre, litre, kilometre, metre, centimetre, millimetre, estimate, temperature, degrees, perimeter

Component 7 - Geometry		
Entry Level 1	Entry Level 2	Entry Level 3
1.1 Recognise and name squares, rectangles, triangles, circles, and cubes 1.2 Compare and order a group of shapes or pictures or similar	2.1 Recognise and name shapes including pentagons, hexagons and octagons and identify a right-angled triangle from a set of triangles	3.1 Recognise and name prisms, cylinders and cones 3.2 Draw lines of symmetry on shapes or pictures 3.3 Recognise and draw nets of cubes and cuboids 3.4 Identify whether an angle is less or more than a right angle

shapes of different size and recognise congruent shapes 1.3 Use and understand positional vocabulary	2.2 Recognise and name cuboids, pyramids and spheres 2.3 Describe the properties of 2D shapes, including straight and curved edges 2.4 Describe the properties of solids 2.5 Understand angle as a measure of turn	3.5 Identify horizontal, vertical and parallel lines 3.6 Denote the position of a point on a grid by its coordinates or identify a point or item given its coordinates 3.7 Use North (N), East (E), South (S) and West (W) to give directions or position from a map
Key Vocabulary	Congruent, 2D and 3D shape names, prism, horizontal, vertical, parallel, perpendicular, co-ordinate, quadrant, angle, half/three quarter/full turn	
Component 8 - Statistics		
Entry Level 1	Entry Level 2	Entry Level 3
1.1 Sort and classify objects using a single criterion 1.2 Interpret and draw conclusions from a list or group of objects 1.3 Construct and interpret simple line graphs	2.1 Sort and classify objects using more than one criterion 2.2 Collect information by survey 2.3 Record results in lists, tally charts and tables 2.4 Construct and interpret pictograms where one picture represents one item 2.5 Interpret simple tables, diagrams, lists and graphs	3.1 Construct and interpret bar charts with the vertical axis scaled in ones or twos 3.2 Construct and interpret pictograms where one picture represents more than one item 3.3 Extract numerical information from lists, tables, diagrams and charts 3.4 Complete a frequency table given the original list of results 3.5 Complete a tally chart and the resulting frequency table 3.6 Compare two or more diagrams 3.7 Solve one-step and two-step problems based on statistical information

Key Vocabulary	Data, criteria, tally, frequency, bar/line/pie chart, pictogram, axis, scale, survey, table