Three Peaks Primary Academy
Maths Key Skills Progression
ADDITION AND SUBTRACTION

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
NUMBER AND PLACE VALUE	**COUNTING**	Recite numbers past 5. Say one number name for each item in order: 1, 2, 3, 4, 5.	Count objects, actions and sounds. Count beyond 10 Verbally count beyond 20, recognising the pattern of the counting system (ELG)	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number			Count backwards through zero to include negative numbers	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	Use negative numbers in context, and calculate intervals across zero
		Know that the last number reached when counting a small set of objects tells you how many there are in total (cardinal principle)	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	Count forwards and backwards in multiples of twos, fives and tens and count forwards and backwards through the odd numbers.	Count in steps of 2, **3, 4** and 5 from 0, and in tens from any number, forward or backward	Count from 0 in multiples of 2,3,4,5,**6,7, 8, 9** Count from 0 in multiples of 50 and 100;	Count from 0 in multiples of 2,3,4,5,6,7, 8, 9 and **11** Count in multiples of 25 and 1000	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	Know that the last number reached when counting a small set of objects tells you how many there are in total (cardinal principle)
			Understand the 'one more than/one less than' relationship between consecutive numbers.	Identify one more and one less from a given number		Know how to find 10 or 100 more or less than a given number	Know how to find 1000 more or less than a given number		
	COMPARING NUMBER	Compare quantities using the language 'more than/fewer than'	Use the language of: equal to, more than, less than (fewer), most, least	Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	Compare and order numbers from 0 up to 100; use <, > and = signs	Compare and order numbers up to 1000	Order and compare numbers beyond 1000 *Compare numbers with the same number of decimal places up to two decimal places* (copied from Fractions)	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)	Read, write, order and compare numbers up to 10 000000 and determine the value of each digit (appears also in Reading and Writing Numbers)
					Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.	Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10	Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100	Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.	Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system

NUMBER AND PLACE VALUE	IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS	Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). Show 'finger numbers' up to 5.	Subitise up to 5 (ELG) Link the number symbol (numeral) with its cardinal number value.	Identify and represent numbers using objects and pictorial representations including the number line,	Identify, represent and estimate numbers using different representations, including the number line	Identify, represent and estimate numbers using different representations	Identify, represent and estimate numbers using different representations	Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). Show 'finger numbers' up to 5.	Subitise up to 5 (ELG) Link the number symbol (numeral) with its cardinal number value.
	READING AND WRITING NUMBERS (INCLUDING ROMAN NUMERALS)	Experiment with their own symbols and marks as well as numerals.	Experiment with their own symbols and marks as well as numerals. Read and write numbers from 1 -10 in numerals	Read and write numbers from 1 to 20 in numerals and words.	Read and write numbers to at least 100 in numerals and in words	Read and write numbers up to 1000 in numerals and in words	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers)	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Understanding Place Value)
		Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.	Link the number symbol (numeral) with its cardinal number value.			*Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24- hour clocks* (copied from Measurement)	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals - revision
	UNDERSTANDING PLACE VALUE	Show 'finger numbers' up to 5 using the language of 'add 1 more'	Understand the 'one more than/one less than' relationship between consecutive numbers.	Know the place value of each digit in a two-digit number (tens, ones) up to 20	Know the place value of each digit in a two-digit number (tens, ones)	Know the place value of each digit in a three-digit number (hundreds, tens, ones)	Know the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Know how to read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)	Know how to read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)
			Explore the composition of numbers to 10 Have a deep understanding of numbers to 10, including the composition of each number (ELG)	Explore the composition of numbers to 20 Have a deep understanding of numbers to 20, including the composition of each number	Compose and decompose two-digit numbers using standard and non-standard partitioning.	Compose and decompose three-digit numbers using standard and non-standard partitioning.	Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.	Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.	Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning.

Three Peaks Primary Academy
Maths Key Skills Progression
ADDITION AND SUBTRACTION

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
ADDITION AND SUBTRACTION	NUMBER BONDS		Automatically recall number bonds for numbers 0-5 and some to 10.	Use addition and subtraction facts to 10 fluently, and derive and use number bonds and related subtraction facts within 20	Use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Secure fluency in addition and subtraction facts that bridge 10			
	MENTAL CALCULATION	Know that the last number reached when counting a small set of objects tells you how many there are in total (cardinal principle)	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts (ELG)	Add and subtract one-digit and two-digit numbers to 20, including zero	Add and subtract numbers mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers	Add and subtract numbers mentally, including: a three-digit number and one, a three-digit number and tens, a three-digit number and hundreds		Add and subtract numbers mentally with increasingly large numbers	Perform mental calculations, including with mixed operations and large numbers
					Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot				I know how to use my knowledge of the order of operations to carry out calculations involving the four operations
	WRITTEN METHODS	Experiment with their own symbols and marks as well as numerals.	Experiment with their own symbols and marks as well as numerals.	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	Add and subtract numbers with up to two digits, using formal written methods of column addition and subtraction	Add and subtract numbers with up to three digits, using formal written methods of column addition and subtraction	I know how to add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate	I know how to add and subtract whole numbers with more than 4 digits, including using formal written methods (column addition and subtraction)	
	INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS		Explore the composition of numbers to 10 Have a deep understanding of numbers to 10, including the composition of each number (ELG)	Explore the composition of numbers to 20 Have a deep understanding of numbers to 20, including the composition of each number	Use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Estimate the answer to a calculation and use inverse operations to check answers	Estimate and use inverse operations to check answers to a calculation	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	Estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.

ADDITION AND SUBTRACTION	PROBLEM SOLVING			Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly (ELG)	solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9	solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods *solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change* (copied from Measurement)	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division

Three Peaks Primary Academy
Maths Key Skills Progression
MULTIPLICATION AND DIVISION

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
MULTIPLICATION AND DIVISION	MULTIPLICATION & DIVISION FACTS	*I can count in multiples of twos, fives and tens* (copied from Number and Place Value)	*I can count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward* (copied from Number and Place Value)	*I can count from 0 in multiples of 4, 8, 50 and 100* (copied from Number and Place Value)	*I can count in multiples of 6, 7, 9, 25 and 1000* (copied from Number and Place Value)	*I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000* (copied from Number and Place Value)		*I can count in multiples of twos, fives and tens* (copied from Number and Place Value)	*I can count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward* (copied from Number and Place Value)
			I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	I can recall multiplication and division facts for multiplication tables up to 12 × 12				I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
MULTIPLICATION AND DIVISION	MENTAL CALCULATION					I can write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	I can use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	I can multiply and divide numbers mentally drawing upon known facts	I can perform mental calculations, including with mixed operations and large numbers
					I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot		I recognise and use factor pairs and commutativity in mental calculations (appears also in Properties of Numbers)	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	*I associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)* (copied from Fractions)

MULTIPLICATION AND DIVISION	WRITTEN CALCULATION							
					I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs	I can write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Mental Methods)	I can multiply two-digit and three-digit numbers by a one-digit number using formal written layout	I can multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
								I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	I can divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
									I can use written division methods in cases where the answer has up to two decimal places (copied from Fractions (including decimals))

MULTIPLICATION AND DIVISION	**PROPERTIES OF NUMBERS: MULTIPLES, FACTORS, PRIMES, SQUARE AND CUBE NUMBERS**						I can recognise and use factor pairs and commutativity in mental calculations (repeated)	I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. / I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers / I can establish whether a number up to 100 is prime and recall prime numbers up to 19	I can identify common factors, common multiples and prime numbers / *I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination* (copied from Fractions)
MULTIPLICATION AND DIVISION								I can recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	*I can calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units such as mm^3 and km^3* (copied from Measures)
	ORDER OF OPERATIONS								I use my knowledge of the order of operations to carry out calculations involving the four operations
	INVERSE OPERATIONS, ESTIMATING AND CHECKING					*I can estimate the answer to a calculation and use inverse operations to check answers* (copied from Addition and Subtraction)	*I can estimate and use inverse operations to check answers to a calculation* (copied from Addition and Subtraction)		I can use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy

PROBLEM SOLVING		I can solve one-step problems involving repeated addition and sharing, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	I can solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	I can solve problems involving addition, subtraction, multiplication and division	I can solve one-step problems involving repeated addition and sharing, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
								I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	
								I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	*I can solve problems involving similar shapes where the scale factor is known or can be found* (copied from Ratio and Proportion)

Three Peaks Primary Academy
Maths Key Skills Progression
FRACTIONS AND DECIMALS

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
FRACTIONS AND DECIMALS	COUNTING IN FRACTIONAL STEPS				*Pupils should count in fractions up to 10, starting from any number and using the 1/2 and 2/4 equivalence on the number line (Non Statutory Guidance)*	I can count up and down in tenths	I can count up and down in hundredths		
	RECOGNISING FRACTIONS	Explore shapes in the environment	Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.	I can recognise, find and name a half as one of two equal parts of an object, shape or quantity	I can recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity		I can recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (appears also in Equivalence)	
					I can recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10.				
		Learn and use new vocabulary half and whole	Learn and use new vocabulary half, whole, equal	I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators				
FRACTIONS AND DECIMALS	COMPARING FRACTIONS					I can compare and order unit fractions, and fractions with the same denominators		I can compare and order fractions whose denominators are all multiples of the same number	I can compare and order fractions, including fractions >1
	COMPARING DECIMALS						I can compare numbers with the same number of decimal places up to two decimal places	I can read, write, order and compare numbers with up to three decimal places	I can identify the value of each digit in numbers given to three decimal places

	ROUNDING INCLUDING DECIMALS							I can round decimals with one decimal place to the nearest whole number	I can round decimals with two decimal places to the nearest whole number and to one decimal place	I can solve problems which require answers to be rounded to specified degrees of accuracy
FRACTIONS AND DECIMALS	**EQUIVALENCE (INCLUDING FRACTIONS, DECIMALS AND PERCENTAGES)**					I can write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	I can recognise and show, using diagrams, equivalent fractions with small denominators	I can recognise and show, using diagrams, families of common equivalent fractions	I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination
								I can recognise and write decimal equivalents of any number of tenths or hundredths	I can read and write decimal numbers as fractions (e.g. 0.71 = $\frac{71}{100}$) I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	I can associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)
								I can recognise and write decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$	I can recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100 as a decimal fraction	I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
	ADDITION AND SUBTRACTION OF FRACTIONS						I can add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$)	I can add and subtract fractions with the same denominator	I can add and subtract fractions with the same denominator and multiples of the same number I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$)	I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

FRACTIONS AND DECIMALS	**MULTIPLICATION AND DIVISION OF FRACTIONS**							I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	I can multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$)
									I can multiply one-digit numbers with up to two decimal places by whole numbers
									I can divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$)
	MULTIPLICATION AND DIVISION OF DECIMALS								I can multiply one-digit numbers with up to two decimal places by whole numbers
							I can find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths		I can multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
									I can identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
									I can associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)
									I can use written division methods in cases where the answer has up to two decimal places

TOPIC	ASPECT								
PROBLEM SOLVING							I can solve problems that involve all of the above	I can solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	I can solve problems involving numbers up to three decimal places
								I can solve simple measure and money problems involving fractions and decimals to two decimal places.	I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25.

	Three Peaks Primary Academy
	Maths Key Skills Progression
	MAP, RATIO AND PROPORTION

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
MAP, RATIO AND PROPORTION		**Statements only appear in Year 6 but should be connected to previous learning, particularly fractions and multiplication and division**							I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
									I can solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
									I can solve problems involving similar shapes where the scale factor is known or can be found
									I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Three Peaks Primary Academy
Maths Key Skills Progression
ALGEBRA

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
ALGEBRA	EQUATIONS			I know how to solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and **missing number problems** such as 7 = □ - 9	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and **missing number** problems.	I can solve problems, including **missing number** problems, using number facts, place value, and more complex addition and subtraction.		Use the properties of rectangles to deduce related facts and find **missing lengths and angles**	I can express missing number problems algebraically
						I can solve problems, including **missing number** problems, involving multiplication and division, including integer scaling			I know how to enumerate all possibilities of combinations of two variables
				I can represent and use number bonds and related subtraction facts within 20	I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				I can find pairs of numbers that satisfy number sentences involving two unknowns
	FORMULAE						I know that perimeter can be expressed algebraically as 2(a + b) where a and b are the dimensions in the same unit.		I can use simple formulae
									I can recognise when it is possible to use **formulae** for area and volume of shapes
	SEQUENCES			I know how to sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening	I know how to compare and sequence intervals of time				I know how to generate and describe linear number sequences
					I know how to order and arrange combinations of mathematical objects in patterns				

Three Peaks Primary Academy
Maths Key Skills Progression
MESUREMENT

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
MESUREMENT	COMPARING AND ESTIMATING	I can make comparisons between objects relating to size, length, weight and capacity.	I can compare length, weight and capacity.	I can compare, describe and solve practical problems for: lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] mass/weight [e.g. heavy/light, heavier than, lighter than] capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] time [e.g. quicker, slower, earlier, later]	I can compare and order lengths, mass, volume/capacity and record the results using >, < and =	I can estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Telling the Time)	I can estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)	I can calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm ^{2}) and square metres (m ^{2}) and estimate the area of irregular shapes (also included in measuring)	I can calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm ^{3}) and cubic metres (m ^{3}), and extending to other units such as mm ^{3} and km ^{3}.
		I can begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...'	I can describe a sequence of events, real or fictional, using words, such as 'first', 'then...'	I can sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	I can compare and sequence intervals of time	I can compare durations of events, for example to calculate the time taken by particular events or tasks		I can estimate volume (e.g. using 1 cm ^{3} blocks to build cubes and cuboids) and capacity (e.g. using water)	
	MEASURING and CALCULATING	I recognise that some objects are used in measuring e.g scales, tape measure, height chart	I can explore measuring length, weight and capacity.	I can measure and begin to record the following: **lengths and heights mass/weight capacity and volume time** (hours, minutes, seconds**)**	I can choose and use appropriate standard units to estimate and measure **length/height** in any direction (m/cm); **mass** (kg/g); **temperature** (°C); **capacity** (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	I can measure, compare, add and subtract: **lengths** (m/cm/mm); **mass** (kg/g); **volume/capacity** (l/ml)	I can estimate, compare and calculate **different measures,** including **money in pounds and pence** (appears also in Comparing)	I can use all four operations to solve problems involving measure (e.g. **length, mass, volume, money**) using decimal notation including scaling.	I can solve problems involving the calculation and conversion of **units of measure**, using decimal notation up to three decimal places where appropriate (appears also in Converting)
						measure the **perimeter** of simple 2-D shapes	measure and calculate the **perimeter** of a rectilinear figure (including squares) in centimetres and metres	measure and calculate the **perimeter** of composite rectilinear shapes in centimetres and metres	recognise that shapes with the same areas can have different **perimeters** and vice versa

MESUREMENT	**MEASURING and CALCULATING**			I can recognise and know the value of different denominations of **coins and notes**	I can recognise and use symbols for pounds **(£) and pence (p)**; combine amounts to make a particular value I can find different combinations of coins that equal the same amounts of money **I can solve simple problems** in a practical context involving addition and subtraction of money of the same unit, including giving change	I can add and subtract amounts of **money** to give change, using both £ and p in practical contexts	
							I can find the area of rectilinear shapes by counting squares	I can calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes *recognise and use square numbers and cube numbers, and the notation for squared $(^2)$ and cubed $(^3)$* (copied from Multiplication and Division)	I can calculate the area of parallelograms and triangles I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [e.g. mm^3 and km^3]. I can recognise when it is possible to use formulae for area and volume of shapes

MESUREMENT	**TELLING THE TIME**	I can begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...'	I can describe a sequence of events, real or fictional, using words, such as 'first', 'then...'	I can tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	I can tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	I can tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	I can read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)		
		I can begin to recognise what season it is and what day of the week it is with support	I can recognise and use language relating to dates; including the seasons, days of the week and months of particular significance to me e.g the month of my birthday	I can recognise and use language relating to dates, including days of the week, weeks, months and years	I can know the number of minutes in an hour and the number of hours in a day. (appears also in Converting)	I can estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Comparing and Estimating)			
						I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Converting)	I can solve problems involving converting between units of time		
	CONVERTING			I know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)	I know the number of seconds in a minute and the number of days in each month, year and leap year	I can convert between different units of measure (e.g. kilometre to metre; hour to minute)	I can convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	I can use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places	I know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)
						I can read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)	I can solve problems involving converting between units of time	I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Measuring and Calculating)	
						I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Telling the Time)	I can understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	I can convert between miles and kilometers	

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
GEOMETRY	IDENTIFYING SHAPES AND THIER PROPERTIES	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'.		I can recognise and name common 2-D and 3-D shapes, including: 2-D shapes [e.g. rectangles (including squares), circles and triangles] 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].	I can identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line		I can identify lines of symmetry in 2-D shapes presented in different orientations	I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations	I can recognise, describe and build simple 3-D shapes, including making nets (appears also in Drawing and Constructing)
					I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces				I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
					I can identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]				
	DRAWING AND CONSTRUCTING	Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. Combine shapes to make new ones–an arch, a bigger triangle, etc.				draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	complete a simple symmetric figure with respect to a specific line of symmetry	draw given angles, and measure them in degrees ($^\circ$)	draw 2-D shapes using given dimensions and angles
									recognise, describe and build simple 3-D shapes, including making nets (appears also in Identifying Shapes and Their Properties)

COMPARING AND CLASSIFYING		Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.		I can compare and sort common 2-D and 3-D shapes and everyday objects		I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	I can use the properties of rectangles to deduce related facts and find missing lengths and angles I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles	I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
ANGLES						I can recognise angles as a property of shape or a description of a turn	I can know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	
						I can identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle	I can identify acute and obtuse angles and compare and order angles up to two right angles by size	I can identify: angles at a point and one whole turn (total 360°) angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90°	I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
						I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines			

Three Peaks Primary Academy
Maths Key Skills Progression
POSITION AND DIRECTION

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
POSITION AND DIRECTION	POSITION, DIRECTION AND MOVEMENT	I can understand position through words alone–for example, "The bag is under the table," – with no pointing. I can describe a familiar route. I can discuss routes and locations, using words like 'in front of' and 'behind'.	I can draw information from a simple map. I can use positional language to describe where I am and/or to follow simple instructions e.g. 'put teddy in between the bowls'	I can describe position, direction and movement, including half, quarter and three-quarter turns.	I can use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)		I can describe positions on a 2-D grid as coordinates in the first quadrant	I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	I can describe positions on the full coordinate grid (all four quadrants)
							I can describe movements between positions as translations of a given unit to the left/right and up/down		
							I can plot specified points and draw sides to complete a given polygon		I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
	PATTERN	Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. Extend and create ABAB patterns– stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern.	I can continue, copy and create repeating patterns such as AABB, ABC, AABBCC, using objects, shapes and numerals	I can recognise and create repeating patterns with objects and with shapes.	I can order and arrange combinations of mathematical objects in patterns and sequences				

Three Peaks Primary Academy
Maths Key Skills Progression
STATISTICS

TOPIC	ASPECT	NURSERY	RECEPTION	YEAR1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
STATISTICS	INTERPRETING, CONSTRUCTING AND PRESENTING DATA				I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables	I can interpret and present data using bar charts, pictograms and tables	I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	I can complete, read and interpret information in tables, including timetables	I can interpret, construct pie charts and line graphs and use these to solve problems
					I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity				
					I can ask and answer questions about totalling and comparing categorical data				
	SOLVING PROBLEMS					I can solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	I can solve comparison, sum and difference problems using information presented in a line graph	I can calculate and interpret the mean as an average