-

Knowledge Themes in Maths	Number – number and place value Number – addition and subtraction Number – multiplication and division Number – fractions Measurement Geometry Statistics Ratio and proportion Algebra

Year Reception – Maths

Maths in reception is designed with the intent to provide frequent opportunity for re-visiting skills and building upon previous knowledge throughout each term and across the year. Vocabulary is re-visited and built upon across the year to support children in remembering. The learning reflects the starting points of our children as well as the need to support children in making links between the different areas of maths. The identified objectives below are in line with the NCETM Early Years materials.

	Autumn		Spring		Summer	
	Cardinality & Counting Counting to 5 including through songs and rhymes Counting to 10 including through songs and rhymes Counting irregular arrangements of objects Counting things that cannot be seen such as actions and sounds 1:1 correspondence to 5 Linking cardinal number with numeral to 5 Subitise within 5	**Star Words** number names 1-10	**Cardinality & Counting** Counting to 10 including through songs and rhymes Counting irregular arrangements of objects Counting things that cannot be seen such as actions and sounds Subitise within 5 Count out a given number from a larger group Conservation – knowing that the number does not change if the group has been rearranged Linking cardinal number with numeral to 10 1:1 correspondence to 10 Recording quantity	**Star Words** Total Number names 1-10 Amount	**Cardinality & Counting** Counting to 20 and beyond including through songs and rhymes Counting irregular arrangements of objects Counting things that cannot be seen such as actions and sounds Subitise within 5 including when in an irregular arrangement Count out a given number from a larger group Conservation – knowing that the number does not change if the group has been rearranged Linking cardinal number with numeral to 10 and beyond 1:1 correspondence to 10 and beyond Recording quantity	**Star Words** Number names 1-20 Amount Quantity Total Numeral
	Comparison Compare collections of groups identifying which has more and which has less using the language of ‘more than’, ‘less than’, fewer (check by counting 1:1) Identify groups that have equal amounts of objects	More than Less than* Fewer Same Different Equal Unequal Amount *Adults should be aware that the correct term for a smaller amount of countable objects is ‘fewer’	**Comparison** Compare collections of groups identifying which has more and which has less using the language of ‘more than’, ‘less than’, fewer (check by counting 1:1) Comparing numbers using the language of ‘more than’, ‘less than’ Describe the relationship between consecutive numbers, using ‘one more, one less’ and reason about this e.g. If there are 5 frogs and one hops off the log, how many are there left?’	One more One less Fewer How many Altogether Amount	**Comparison** Comparing numbers that are far apart and those that are near to each other e.g. ‘8 is a lot bigger/more than 2 but 3 is only just a little bit bigger’ Describe the relationship between consecutive numbers, using ‘one more, one less’ and reason about this e.g. If there are 5 frogs and one hops off the log, how many are there left?’	More than Less than One more One less Fewer Same Different Equal Unequal Amount Left (as in remaining)

	Composition Explore the parts within a whole e.g. how many different ways 5 can look Partition a number into two groups up to 6 and recombine to make the same total Addition and subtraction to 6 (practical experience of) Counting songs involving adding	Add Plus Subtract Minus Take away How many Total	**Composition** Partition a number into two groups up to 10 and recombine to make the same total Addition and subtraction up to 10 Subtracting by adding up what is left when an amount is taken away Number of the week - exploring numbers to 10 including 0	Part-whole model Left (as in remaining) Zero Add Plus Subtract Minus Take away	**Composition** Number bonds 0-10 Subtraction within 10 Subtracting by adding up what is left Subtracting by counting back Addition by counting on Practical application of addition and subtraction 'There were 10 apples but two have been eaten, how many are left?' Partitioning a number to 10 into more than 2 groups	Count on Count back Addition Subtraction Partition Groups Equal Remaining Half Double
	Pattern Talking about AB patterns Continuing an AB pattern Talking about AB patterns Copying AB patterns Creating their own AB patterns Spotting errors in AB patterns Identifying the 'unit of repeat' in a pattern	Pattern Colour Repeat	**Pattern** Continuing an ABC pattern Move to more complex patterns ABB, ABBC, AABB Make their own ABB, ABBC patterns choosing their own rule Spotting errors in ABB patterns	Rule Error Mistake Pattern	**Pattern** Make patterns in other areas e.g. music Describe pattern rules and apply in other circumstances Make pattern repeats around a circle Make patterns around a border with a fixed number of spaces and identify patterns that work and those that don't Spot patterns in the environment	Musical pattern Rhythm Beat Repeat
	Shape & Space Developing spatial awareness Constructing with various materials including block play Explore shapes and reason about their suitability for purpose e.g. in block play Developing spatial vocabulary – language of position (in, on, under) and direction (up, down, across)	In On Under Up Down Across Build Balance Top Bottom Fall	**Shape & Space** Developing spatial vocabulary – language of relative viewpoint (in front of, behind, forwards, backwards) Block play – progression to towers and enclosures Properties of 2D shapes and exploring their use in pattern making and construction Identifying similarities in shapes	In front of Behind Forwards Backwards Above Below 2D shape 2D shape names side edge corner sort straight curved	**Shape & Space** Developing spatial vocabulary (left and right) Block play – planning and evaluating their structures Properties of 3D shapes Representing spatial relationships through drawings (block play drawings from different viewpoints e.g. the side and above) Identifying similarities in shapes Developing awareness of relationships between shapes e.g. 2 triangles can make up a square	Left Right 3D shape 3D shape names Side Similar Similarities Different

	Measure Recognise attributes in length, height, capacity and weight Compare objects according to attributes Experiencing weight and capacity in the environment and through cooking activities Talking about the routines of the day Days of the week Introduction to months and the seasons	Size Length Height weight big/-ger/-gest small/-er/-est long/-er/-est short/-er/-est full day week month season calendar Autumn Winter names of the days	**Measure** Days of the week Months of the year Seasons Experiencing weight and capacity in the environment and through cooking activities Learning about sequencing and order by observing caterpillars and/or tadpoles over time	Names of the months Spring Summer heavy/-ier/-iest light/-er/-est First Next After Then Finally Time	**Measure** Learning about sequencing and order by observing plants over time Measuring and comparing heights (link to plants) in practical contexts Begin to use units to measure and compare (e.g. unifix, measuring tapes, metre sticks, timers, scales) Sequence practical experienced events Experience specific time durations e.g. timing ourselves to run around the playground, how long until lunch, number of sleeps until an exciting event	Sequence Compare Measuring tape Metre Stick Timer Scales Centimetre Metre Minute Seconds Hours

Year 1 – Maths					
Autumn		Spring		**Summer**	
Knowledge/Learning	Star words	Knowledge/Learning	Star words	Knowledge/Learning	Star words
Numbers to 10 (2 weeks) •Represent, compare and explore numbers within 10 •One more and one less •Doubling and halving	fewer/ greater more/ less part whole number bond double half	**Time (2 weeks)** •Read, write and tell the time to o'clock and half past on analogue clock •Sequencing daily activities •Whole and half turns linked to time	month year date o'clock half past clock second (hand) minute (hand) hour (hand)	**Numbers 50 to 100 and beyond (2weeks)** •Read, write, represent, compare and order numbers to 100 •One more / fewer, ten more / fewer •Identify number patterns	hundreds tens ones count on place value number bond more less fewer compare equal
Addition and subtraction within 10 (2 weeks) •Represent and explain addition and subtraction •Commutativity •Addition and subtraction facts	plus is equal to plus subtraction symbol/ sign partition	**Exploring calculation strategies within 20 (1 week)** •Model, explain and choose addition and subtraction strategies	Star Words part whole number bond (near) double 'make ten' strategy partition strategy	**Addition and subtraction (2 weeks)** •Explore addition and subtraction involving 2-digit numbers and ones •Represent and explain addition and subtraction with regrouping •Investigate number bonds within 20	add subtract part whole tens ones count on difference between regroup known unknown
Shape and patterns (2 weeks) •Identify, describe, sort and classify 2-D and 3-D shapes •Investigate repeating patterns •Use and follow instructional and positional language	curved flat face edge straight surface vertex/vertices	**Numbers to 50 (2 weeks)** •2-digit numbers – represent, sequence, explore, compare. •Count in 2s, 5s and 10s •Describe and complete number patterns	more/ increase less/ decrease group of ten pattern ones digit part whole	**Money (2 weeks)** •Name coins and notes and understand their value •Represent the same value using different coins •Find change	coin round pence (penny) worth notes value pound buy sell afford change
Numbers to 20 (2 weeks) •Identify, represent, compare and order numbers to 20 •Doubling and halving •One more and one less	before after less than more than double half even odd	**Addition and subtraction within 20 (2 weeks)** •Illustrate, explain and link addition and subtraction with equations •Apply 'Make Ten' strategy •Use language to quantify and compare difference	before after less than more than double half even odd	**Multiplication and division (3 weeks)** •Explore arrays •Share equally into groups •Doubling •Link halving to fractions	double half whole altogether equal groups sides repeated addition array fraction

Addition and subtraction within 20 (2 weeks) •Represent and explain addition and subtraction strategies including 'Make Ten' •Use known facts to add and subtract	more less number bond known fact is equal to 'make ten' strategy partition add subtract	**Fractions (1 week)** •Identify 1/2 and 1/4 of a shape or object •Find 1/ 2 and 1/ 4 of a quantity	part whole equal unequal half share divide quarter three quarter clockwise anti-clockwise	**Measures: Capacity and volume (2 weeks)** •Compare capacities, volumes and lengths •Explore litres •Apply understanding of fractions to capacity	compare capacity unit smaller greater half quarter volume equal litre distance length difference
		Measures: length and mass (2 weeks) •Compare and measure lengths and mass using cm and kg •Doubling and halving	tall, taller, tallest short, -er, -est heavy, -er, -est light, -er, -est roughly approximately meter kilogram estimate		

Year 2– Maths					
Autumn		Spring		**Summer**	
Knowledge/Learning	Star words	Knowledge/Learning	Star words	Knowledge/Learning	Star words
Numbers within 100 (2 weeks) Read, write, represent, partition, compare and order numbers to 100 •Explore patterns including, odds and evens, tens and ones	tens ones altogether value worth compare greater than/less than greatest/smallest increasing/decreasing is equal to	**Time (2 weeks)** •Tell the time on an analogue clock: quarter past, quarter to and five minute intervals •Calculate durations of time in minutes and seconds •Sequence daily events •Minutes in an hour and hours in a day	hour minute o'clock half past quarter past quarter to scale earlier later duration	**Numbers within 1000 (1 week)** •Represent in different ways •Compare using symbols •Read scales	hundreds tens ones place value chart regroup part-whole greater than less than the same as scale intervals
Addition and subtraction of 2 digit numbers (2 weeks) •Apply number bonds to add and subtract •Represent and explain addition and subtraction of two 2-digit numbers. •Add three 1-digit numbers	whole part tens ones partition	**Fractions (2 weeks)** •Part-whole relationships •Fractions as part of a whole or a whole set •Relate to division •Equivalent fractions	equal parts whole one share half quarter third divide numerator denominator equivalent	**Measures: capacity and volume (2 weeks)** •Read and measure temperature •Estimate, measure and understand litres and millilitres •Compare and order capacities	thermometer degrees Celsius (○ C) litre millilitre volume capacity estimate measure more than less than bar model half

					double altogether difference
Addition and subtraction word problems (2 weeks) •Introduction to bar models as a representation •Create, label and sketch bar models	add subtract bar model part-whole model value worth known unknown more fewer difference amount	**Addition and subtraction of 2 digit numbers (2 weeks)** •Illustrate, represent and explain addition and subtraction involving regrouping including 'Make Ten', 'Round and adjust' and near doubles strategies	Make ten Round and adjust number bonds ones tens Dienes number line bar model regroup (near) double	**Measures: Mass (1 week)** •Weigh and compare masses in kilograms and grams	kilogram heavier lighter weigh mass unit gram difference total part whole
Measure: length (2 weeks) •Draw and measure lengths in centimetres •Use <, > and = to compare and order lengths in metres and centimetres	length metre centimetre estimate measure about the same as exactly the same as long/-er/-est short/-er/ -est	**Money (2 weeks)** •Recognise coins and notes •Use £ and p accurately •Add and subtract amounts •Calculate change	penny /-ies pence value compare pound coin note total How much? spent change fewest	**Exploring calculation strategies (2 weeks)** •Apply addition and subtraction strategies to solve equations •Illustrate and explain addition and subtraction using column method	Make Ten Round and adjust number bonds partition near doubles part whole known unknown difference is equal to
Graphs (1 week) •Represent and interpret: pictograms, block diagrams, tables and tally charts.	date pictogram table collect sort interpret block diagram tally	**Face, shapes and patterns; lines and turns (3 weeks)** •Explore, sort and describe 2-D shapes •Lines of symmetry in 2-D shapes •Identify 2-D shapes on 3-D shapes •Compare and sort 2-D and 3-D shapes •Use language to describe position, direction and rotation to follow a route	straight lines curved vertex edge right angle vertices apex face symmetry half reflection identical pattern base 2-D shape 3-D shape	**Exploring multiplicative thinking (2 weeks)** •Pattern seek with multiples of 2, 3, 4 5 and 10 using an array •Use known facts to derive facts from the 3 and 4 times tables. •Connect multiplication and division facts using commutativity and inverse	number line bead string product multiple group array share equal groups part whole commutative

Multiplication and division (3 weeks) •Explore multiplication and division through arrays •Explore division as grouping and as sharing •Connect multiplication and division facts using commutativity and inverse •Calculate the times tables of 2, 5, and 10 using different strategies	repeated addition groups of row column commutative part whole share equal double pattern				

Year 3 – Maths					
Autumn		Spring		**Summer**	
Knowledge/Learning	Star words	Knowledge/Learning	Star words	Knowledge/Learning	Star words
Number sense and exploring calculation strategies (3 weeks) Read, write, order and compare numbers to 100 •Calculate mentally using known facts, round and adjust, near doubles, adding on to find the difference •Derive new facts from a known fact	is equal to number bond odd even commutative inverse digit/numeral partition	**Multiplication and division (2 weeks)** • Understanding multiplicative relationships: commutativity and inverse •Exploring multiplication and division facts for 2, 3, 4, 5, 6, 8 and 10	equal parts whole commutative factor product inverse bar model	**Angles and shape (3 weeks)** •Identify angles including right angles and recognise as a quarter of a turn •Identify and draw parallel and perpendicular lines •Draw/make, classify and compare 2-D and 3-D shapes •Measure the perimeter	turn vertex/-ices right angle quarter, half, three quarter acute obtuse perpendicular parallel quadrilateral
Place value (2 weeks) •Read, write, represent, partition, order and compare 3-digit numbers •Find 10 and 100 more or less •Round to the nearest multiple of 10 and 100	round regroup increase/decrease more/fewer greater/less nearest place	**Calculating with multiplication and division (3 weeks)** •Multiply and divide by 10 •Multiply a 2-digit number by a 1-digit number •Divide 2-digit by a 1-digit •Correspondence problems	Star Words equal parts whole column place holder inverse commutative array partition relationship	**Measures (3 weeks)** •Read scales with different intervals when measuring mass and volume •Weigh and compare masses and capacities with mixed units •Estimate mass and capacity	indicator scale interval roughly/estimate difference volume capacity length weight
Graphs (1 week) •Collect, interpret and present data using charts and tables	data symbol represents key axis/axes scale row column	**Time (2 weeks)** •Tell, record, write and order the time analogue and digital l •12-hour, a.m., p.m. •Measure, calculate and compare durations	scale interval hour (hand) minute (hand) minutes to/ past analogue anti-/clockwise chronological	**Applying multiplicative thinking (1 week)** •Representing multiplication and division problems •Solve a onestep problem	commutative array factor product equal part whole regroup

Addition and subtraction (3 weeks) •Develop and use a range of mental calculation strategies •Illustrate and explain formal written methods – column method	part whole number bond partition regroup inverse multiple place value	**Fractions (3 weeks)** •Part-whole relationships •Fractions as part of a whole or a whole set and as a number •Add, subtract, compare and order fractions	part whole unequal equal half, third, quarter, fifth, sixth, seventh, eighth denominator numerator	**Exploring calculation strategies and place values (2 weeks)** •Add and subtract mentally •Find 10, 100 and 1000 more or less •Order and compare beyond 1000 •Round numbers	near-multiple round adjust difference equal parts whole factor product
Length and perimeter (2 weeks) •Measure, draw and compare lengths •Add and subtract lengths •Calculate perimeter	length height width estimate accurate(ly) nearest longer/ shorter perimeter calculate				

Year 4-Maths					
Autumn		Spring		**Summer**	
Knowledge/Learning	Star words	Knowledge/Learning	Star words	Knowledge/Learning	Star words
Reasoning with large numbers (2 weeks) •4-digit place value. Read, write, represent, order and compare •Find 10, 100 or 1000 more or less •Round numbers to the nearest 10, 100 or 1000	place value digit value thousands hundreds tens ones greater than/less than multiple round	**Calculating with multiplication and division (1 week)** Division using partitioning •Short division	even odd pattern digits times product multiplication	**Solving measures and money problems (3 weeks)** •Convert units of measure •Select appropriate units to measure •Use strategies to investigate problems: trial and improvement, organising using lists and tables, working systematically	length mass unit millimetres centimetres gram kilogram litre
Addition and subtraction (3 weeks) •Select appropriate strategies to add and subtract •Illustrate and explain appropriate addition and subtraction strategies including column method with regrouping	commutative inverse known facts derived facts sum difference regroup part whole	**Fractions (4 weeks)** •Explore different interpretations and representations of fractions •Equivalent fractions •Represent fractions greater than one as mixed number and improper fractions •Add and subtract fractions with the same denominator including fractions greater than one	numerator denominator whole equal parts equivalent factor multiple improper fraction mixed number	**Shape and symmetry (2 weeks)** •Classify, compare and order angles •Compare and classify 2-D shapes •Identify lines of symmetry	acute obtuse right angle order compare turn (quadrilateral names) (triangle names) symmetrical
Multiplication and division (4 weeks) •Identify and explore patterns in multiplication tables including 7 and 9 •Distributive property including multiplying three 1-digit numbers	multiple factor array product distributive law groups of product	**Time (1 week)** •Analogue to digital, 12- hour and 24-hour •Convert between units of time	analogue digital to past second minute hour	**Position and direction (2 weeks)** •Describe and plot using coordinates •Describe translations	axes x axis y axis coordinates vertex vertices (shape names)

•Mental multiplication and division strategies using place value and known and derived facts •Short multiplication			convert days weeks months years		translation up/down/left/right
Discrete and continuous data (2 weeks) •Read, interpret and construct pictograms, bar charts and time graphs •Compare tables, pictograms and bar charts	pictogram bar chart time graph tally frequency table data scale axis vertical horizontal	**Decimals (3 weeks)** •Decimal equivalents to tenths, quarters and halves •Compare and order numbers with same number of decimal places •Multiply and divide by 10 and 100 including decimals	decimal point equivalence tenth hundredth fraction part round	**Reasoning with pattern and sequences (2 weeks)** •Roman numerals up to 100 •Place value of other number systems •Number sequences and patterns	Arabic numerals Roman numerals pattern sequence rule term increasing decreasing
		Area and perimeter (2 weeks) •Perimeter of rectangles and rectilinear shapes •Area of rectangles and rectilinear shapes •Investigate area and perimeter	length breadth perimeter double width area cm/m squared squared cm/m	**3D shape (1 week)** •Use understanding of 3-D shapes •Identify 3-D shapes from 2-D representations	edge vertex vertices 2D 3D (shape names)

Year 5 – Maths					
Autumn		Spring		**Summer**	
Knowledge/Learning	Star words	Knowledge/Learning	Star words	Knowledge/Learning	Star words
Reasoning with large whole integers (2 weeks) Read, write, order and compare numbers up to one million •Round numbers within one million to the nearest multiple of powers of ten •Read Roman numerals up to M	place value digit value place value holder hundred thousands ten thousands thousands nearest approximate	**Fractions and decimals (3 weeks)** •Read, write, order and compare decimals •Round decimals to the nearest whole number •Represent, identify, name, write, order and compare fractions (including improper and mixed numbers) •Calculate fractions of amounts	numerator denominator equal parts factor equivalent represent simplify	**Converting units of measure (2 weeks)** Convert between metric units of length, mass and capacity and units of time •Know and use approximate conversion between imperial and metric	unit second/minute/hour interval length breadth gram/kilogram miles tonne kilometre distance approximately
Integer addition and subtraction) (2 weeks) •Use rounding to estimate •Use a range of mental calculation strategies to add and subtract integers •Illustrate and explain the written method of column addition and subtraction •Select efficient calculation strategies	commutative inverse solve multiple estimate regroup round column	**Angles (2 weeks)** •Classify, compare and order angles •Measure a draw angles with a protractor •Understand and use angle facts to calculate missing angles	angle obtuse acute reflex degrees vertex protractor scale	**Calculating with whole numbers and decimals (3 weeks)** •Mental strategies to add and subtract involving decimals •Formal written strategies to add, subtract and multiply involving decimals •Multiply and divide decimal numbers by ten, 100 and 1,000 •Derive addition, subtraction and multiplication facts involving decimals	equal parts times greater times smaller place holder inverse strategy difference array

			straight line quarter half		partition
Line graphs and timetables (2 weeks) •Complete, read and interpret data presented in line graphs •Read and interpret timetables including calculating intervals	data information change axes x axis y axis parallel perpendicular scale interval grid line	**Fractions and percentages (3 weeks)** •Add, subtract fractions with denominators that are multiples of the same number •Multiply fractions (and mixed numbers) by a whole number •Explore percentage, decimal, fractions equivalence	numerator denominator equal parts factor mixed number improper fraction equivalent	**2D and 3D shapes (2 weeks)** •Classify 2-D shapes and reason about regular and irregular polygons •Properties of diagonals of quadrilaterals •Classify 3-D shapes •2-D representations of 3-D shapes.	dimension vert-ex/-ices coordinate parallel perpendicular symmetry polygon (shape names)
Multiplication and division (3 weeks) •Identify multiples and factors •Investigate prime numbers •Multiply and divide by 10, 100 and 1000 (integers) •Multiply and divide using derived facts •Use written methods to multiply and divide •Use a range of mental calculation strategies	factor multiple array row column product regroup double half	**Transformations (2 weeks)** •Coordinates in all four quadrants •Translation and reflection •Calculate intervals across zero as a context for negative numbers	congruent translate/-ion move axes x axis y axis coordinate grid mirror line mirror image reflect/-ion	**Volume (1 week)** •Use cube numbers and notation •Estimate volume •Convert units of volume	square number/ squared cube number/ cubed equal factors product cube cuboid cm^3 mm^3 liquid solid volume
Perimeter and area (1 week) •Investigate area and perimeter of rectilinear shapes •Estimate area of nonrectilinear shapes	length breadth composite perimeter area surface dimension square cm – cm^2 square m – m^2			**Problem solving (2 weeks)** •Negative numbers and calculating intervals across zero •Calculating the mean •Interpret remainders •Investigate numbers: consecutive, palindromic, multiples	negative positive consecutive sum regroup round mean difference regroup palindrome iteration digit sum

Year 6– Maths

The first two units need to be taught before any other units as these cover place value and the four operations and ensure firm foundations for the rest of the learning. The remaining units can be taught in any order with the following caveats:

- The first five lessons of the first Fractions unit should be taught prior to learning on calculating with fractions.
- The Proportion problems unit should only be taught after the units on fractions, decimals and percentages

Teachers should consider the needs of the cohort in identifying which order to teach the units of work. Revisiting and revision of identified gaps will be taught in preparation for KS2 SATS.

Autumn – First 2 units.

Knowledge/Learning	Star words	Knowledge/Learning	Star words	Knowledge/Learning	Star words
1) Integers and decimals (10 lessons) •Represent, read, write, order and compare numbers up to ten million •Round numbers, make estimates and use this to solve problems in context •Solve multi-step problems involving addition and subtraction	Integer Place value Numeral Digit Place holder Ascending Descending Rounding Estimate Strategy	**2) Multiplication and division (15 lessons)** •Identify and use properties of number, focusing on primes •Multiply larger integers and decimal numbers using a range of strategies •Divide integers by 1-digit and 2-digit numbers representing remainders appropriately •Illustrate and explain formal multiplication and division strategies	Ones Tenths Hundredths Decimal Place value Decimal point Multiply Divide/Divisor Prime Square Factor Cube Product Quotient		
Units of work to be covered					
Calculation problems (10 lessons) •Understand the use of brackets •Use knowledge of the order of operations to carry out calculations •Generate and describe linear number sequences •Express missing number problems algebraically •Solve equations with unknown values	Operation BODMAS Order Inverse Brackets Expression Linear N_th Term Algebraic Algebra Variable	**Fractions (10 lessons)** •Deepen understanding of equivalence •Order, simplify and compare fractions, including those greater than one •Recall equivalence between common fractions and decimals •Find decimal quotients using short division •Add and subtract fractions	Fraction Numerator Denominator Value Equivalent Decimal tenths Hundredths Divide Simplest form Multiple Improper fraction Mixed number fraction	**Missing angles and length (5 lessons)** •Compare and classify a range of geometric shapes •Use angle facts to find unknown angles	Angle Acute Obtuse Reflex Right angle Degree Isosceles Scalene Equilateral Parallel Perpendicular Adjacent Vertices
Coordinates and shapes (10 lessons) •Draw a range of geometric shapes using given dimensions and angles •Describe, draw, translate and reflect shapes on a co-ordinate plane •Recognise and construct 3-D shapes •Name and illustrate parts of a circle	Quadrilateral Angle Parallel Vertex/vertices Axis/axes Quadrant Coordinate Translation Point Mirror line Circumference Radius	**Fractions (5 lessons)** •Represent multiplication involving fractions •Multiply two proper fractions •Divide a fraction by an integer	Integer Unit fraction Non-unit fraction Multiply Divide Simplify Product Numerator Denominator	**Decimals and measure (15 lessons)** •Use, read, write, and convert between standard units of measures; length, mass, time, money and volume as well as imperial units •Calculate the area of parallelograms and triangles •Calculate, estimate and compare the volume of cuboids	Decimal Division Measure Mass Volume Imperial Metric Convert Area Perimeter

	Diameter				
Percentage and statistics (10 lessons) Calculate and compare percentages of amounts •Connect percentages with fractions •Explore the equivalence of fractions, decimals and percentages •Calculate the mean •Construct and interpret lines graphs and pie charts •Compare pie charts	Percentage Fraction Decimal Average Mean Equivalent Axis/axes Data Interval Plot Point	**Proportion problems (10 lessons)** •Use fractions to express proportion •Identify ratio as a relationship between quantities and as a scale factor •Unequal sharing involving ratio	Part Whole Proportion Fraction Ratio Compare Equivalent Scale factor Decrease Increase Unequal		