

					Yearly C	Overview	v: Recep	tion					
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
Autumn	 Patte Cour 	hing and Sorting rns (AB Pattern ting, compariso	s) n, cardinality, a	urs, size & shap	(0-3)	0	 9 IU II I2 Counting, comparison, cardinality, and composition (0-5) 2D and 3D Shapes Addition and Subtraction (within 5) Subitising up to 5 and automatic recall of numbers up to five 						
Spring	CourOneRevis		nd counting bac ₋ess hapes	kwards (within		 Addition and Subtraction within 10 Double facts (to 10) Automatic recall of number bonds Automatic recall of some numbers to 10 including double facts 							
Summer	 Explo Meas Revis Explo 	and Even (Revisoring complex particular part	10 including eve	ens, odds and	 Counting teen numbers and identifying that it is 10 and some 1s (Place Val Measurement (Time, Mass & Weight) Revisit concepts that children found challenging Verbally count beyond 20 recognising patterns of the counting system 								



	<u>Baseline</u>	Sorting Objects	Patterns (AB)	Counting, comparison, cardinality, and composition (0-	<u>Counting, comparison,</u> cardinality, and composition (0-	2D and 3D Shapes
				<u>3)</u>	<u>5)</u>	
<u>Early Learning Goal</u>	 Part of the Mathematical programme 	 Explore and represent numbers and patterns up to 10 including evens, odds, and double facts 	 Explore and represent numbers and patterns up to 10 including evens, odds, and double facts 	 Addition and Subtraction (within 5) Subitising up to 5 and automatic recall of numbers up to five Have a deep understanding of numbers to 10, including the composition of each number. 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. 	 Addition and Subtraction (within 5) Subitising up to 5 and automatic recall of numbers up to five Have a deep understanding of numbers to 10, including the composition of each number. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly. 	 Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.



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	٠	Count objects	•	Sort into sets	•	Continuing an AB	•	Counting: saying number words in	•	Counting: saying number words in	٠	Identifying
		using 1-1	٠	Match according to		pattern		sequence		sequence		similarities between
		correspondence		features	•	Copying an AB pattern	٠	Counting: tagging each object with	٠	Counting: tagging each object with		shapes
	•	Using number	•	People sorting	•	Make their AB pattern		one number word		one number word	•	Showing awareness
		names in play	•	Sort and compare	•	Spotting an error in an	•	Counting: knowing the last number	•	Counting: knowing the last number		of properties of
	•	Recite numbers		sets with multiple		AB pattern		counted gives the total		counted gives the total		shape
		to 5		options			•	Subitising: recognising small	•	Subitising: recognising small	•	Describing properties
	•	Recognise	•	More than/Less than				quantities without needing to count		quantities without needing to count		of shape
		number quantities	•	Comparing amounts				them all		them all	•	Developing an
		on a dice		of continuous			•	Numeral meanings	•	Numeral meanings		awareness of
	•	Using words		quantities			•	Conservation: Knowing a number		Conservation: Knowing a number		relationships
		most, less,		quantitioo			-	does not change when rearranged	-	does not change when rearranged		between shapes
		biggest, smallest						does not change when rearranged		does not change when realitanged		bothoon onapoo
	•	Identify basic 2D										
	•	shapes										
		Shapes										
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N N												
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Small Steps (NCETM												
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S												



		unting, comparison, cardinality, and composition (0-10)	n, <u>Counting forwards and</u> <u>counting backwards</u> (within 10)		counting backwards Less		counting backwards					Addition and ubtraction within 10		Double facts (to 10)	<u>Αι</u>	itomatic recall of facts
Early Learning Goal	•	Automatic recall of some numbers to 10 including double facts Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Have a deep understanding of numbers to 10, including the composition of each number.	•	Automatic recall of some numbers to 10 including double facts Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Have a deep understanding of numbers to 10, including the composition of each number.	•	Automatic recall of some numbers to 10 including double facts	•	Participate in small group, class and one- to-one discussions, offering their own ideas, using recently introduced vocabulary.	•	Automatic recall of some numbers to 10 including double facts Have a deep understanding of numbers to 10, including the composition of each number. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	•	Automatic recall of some numbers to 10 including double facts Have a deep understanding of numbers to 10, including the composition of each number. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	•	Automatic recall of some numbers to 10 including double facts Have a deep understanding of numbers to 10, including the composition of each number. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.		



Small Steps (NCETM progression/Big Ideas)	 Counting: saying number words in sequence Counting: tagging each object with one number word Counting: knowing the last number counted gives the total Subitising: recognising small quantities without needing to count them all Numeral meanings Conservation: Knowing a number does not change when rearranged 	 Part–whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Inverse operations A number can be partitioned into different pairs of numbers A number can be partitioned into more than two numbers Number bonds: knowing which pairs make a given number 	 More than / less than Knowing the 'one more than/one less than' relationship between counting numbers Comparing numbers and reasoning 	 Identifying similarities between shapes Showing awareness of properties of shape Describing properties of shape Developing an awareness of relationships between shapes 	 Part–whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Part–whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Inverse operations A number can be partitioned into different pairs of numbers A number can be partitioned into more than two numbers Number bonds: knowing which 	 Part-whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Part-whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Inverse operations A number can be partitioned into different pairs of numbers A number can be partitioned into different pairs of numbers A number can be partitioned into more than two numbers Number bonds: knowing which 	 Part-whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Part-whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Inverse operations A number can be partitioned into different pairs of numbers A number can be partitioned into mumbers A number can be partitioned into more than two numbers Number bonds: knowing which pairs make a given number
Small Ste							



	Odd and Even Numbers	Exploring Complex Patterns	<u>Measurement:</u> Size and Length	Counting teen numbers and identifying that it is 10 and some 1s	<u>Measurement:</u> <u>Time, Mass & Weight</u>	<u>Revisit:</u>
Early Learning Goal	 Explore and represent numbers and patterns up to 10 including evens, odds, and double facts 	 Explore and represent numbers and patterns up to 10 including evens, odds, and double facts 	 Participate in small group, class and one- to-one discussions, offering their own ideas, using recently introduced vocabulary. 	Verbally count beyond 20 recognising patterns of the counting system	 Participate in small group, class and one- to-one discussions, offering their own ideas, using recently introduced vocabulary. 	•
Small Steps (NCETM progression/Big Ideas)	 Continuing an AB pattern Copying an AB pattern Make their AB pattern Spotting an error in an AB pattern 	 Identifying the unit of repeat Continuing an ABC pattern Continuing a pattern which ends mid-unit Make their own ABB, ABBC patterns Spotting an error in an ABB pattern Symbolising the unit structure Generalising structures to another context or mode Making a pattern which repeats around a circle Making a pattern around a border with a fixed number of spaces Pattern-spotting around us 	 Comparing amounts of continuous quantities Showing awareness of comparison in estimating and predicting Comparing indirectly Recognising the relationship between the size and number of units Recognising the relationship between the size and number of units Comparing amounts of continuous quantities 	 Part-whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total) Inverse operations A number can be partitioned into different pairs of numbers A number can be partitioned into more than two numbers Number bonds: knowing which pairs make a given number 	 Comparing amounts of continuous quantities Showing awareness of comparison in estimating and predicting Comparing indirectly Recognising the relationship between the size and number of units Recognising the relationship between the size and number of units Beginning to use time to sequence events Beginning to experience specific time durations Comparing amounts of continuous quantities 	•



					• <u>Ye</u>	arly Ove	erview:	Year 1				
	Week	Week	Week	Week	Week 5	Week	Week	Week 8	Week	Week	Week 11	Week
	1	2	3	4		6	7		9	10		12
Number: Place Value (within 10)				Number:Geometry:Addition and SubtractionShape 2D			Measurement: Time	Number: Place Val (within 20		Revisit		
Spring	Number: Addition and SubtractionMeasurement: Money				Geometry: Shape 3DNumber: Place Value (within 50) (Multiples 2, 5 & 10)				Measuremen and Height	t: Length	Measurement: Time (Revisit)	Revisit
Summer	(Reinforc	tion and D e multiples be include	s of 2, 5	Measurement : Volume	Weight and	Number: Fi	ractions	Measurement: Time (Revisit)	Geometry: Position and Direction	Number: (within 10	Place Value 0)	Revisit



	Number: Place Value	Number: Addition and Subtraction	Shape 2D	Measurement: Time	Number: Place Value
NC: Year 1 Autumn	 (within 10) Count to ten, forwards and backwards, beginning with 0 or 1 or from any given number. Count, read and write numbers to 10 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representation including the number line, and use the language of equal to, more than, less than (fewer), most, least. 	 (within 10) Represent and use number bonds and related subtraction facts within 10. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Add and subtract one-digit number to 10, including zero. Solve one-step problems that involve addition and subtraction using concrete objects and pictorial representations and missing number problems. 	 Recognise and name common 2D shapes including rectangles (including squares), circles and triangles. 	 Sequence events in chronological order using language (e.g. before and after; next; first; today; yesterday; tomorrow; morning; afternoon and evening). Recognise and use language relating to dates, including days of the week, weeks, months and years) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Compare, describe and solve practical problems for time (e.g. quicker, slower, earlier, later). Measure and begin to record time (hours, minutes, seconds) 	 (within 20) Count to twenty, forwards and backwards, beginning with 0 or 1 from any given number. Count, read and write numbers to 20 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line and use language of equal to, more than, less than (fewer), most and least.
WRM: Small steps	 Sort objects Count objects Represent objects Count, read and write forwards from any number 0 to 10. Count, read and write backwards from any number 0 to 10. Count one more Count one less One-to-one correspondence to start to compare groups Compare groups using language such as equal, more/greater, less/fewer Introduce <, > and = symbols Compare numbers Order groups of objects Order numbers The number line 	 Part-whole model Addition symbol Fact families – addition facts Find number bonds within 10 Systematic methods for number bonds within 10 Compare number bonds Addition – adding together Addition – adding more Finding part Subtraction – taking away, how many are left? Crossing out Subtraction – taking away, how many are left? Introducing the subtraction symbol Subtraction – finding a part, breaking apart Fact families – the 8 facts Subtraction – finding the difference Comparing addition and subtraction statements a + b > c Comparing addition and subtraction statements a + b > c + d 	 Recognise and name 2D shapes Sort 2D shapes 	 Before and after Dates Time to the hour Time to the half hour Writing time Comparing time 	 Count forwards and backwards and write numbers to 20 in numerals and words Numbers from 11 – 20 Tens and ones Count one more and one less Compare groups of objects Compare numbers Order groups of objects Order numbers



	Number: Addition and	Measurement: Money	Shape 3D	Number: Place Value (within	Measurement: Length and
	Subtraction (within 20)			<u>50) (Multiples 2, 5 & 10)</u>	<u>Height</u>
NC: Year 1 Spring	 Represent and use number bonds and related subtraction facts within 20. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Add and subtract one-digit and two-digit numbers to 20, including zero. 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 know the value of different denominations of coins and notes. 	 Recognise and name common 3D shapes including cuboids (including cubes), pyramids and spheres. 	 Count to 50 forwards and backwards, beginning with 0 or 1, or from any number. Count, read and write numbers to 50 in numerals. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including number line, and use the language if equal to, more than, less than (fewer), most, least. Count in multiples of twos, fives and tens. 	 Compare, describe and solve practical problems for length and heights (e.g. long/short, longer/shorter, tall/short, double/half)
WRM: Small steps	 Add by counting on Find and make number bonds Add by making 10\ Subtraction – Not crossing 10 Subtraction – Crossing 10 (1) Subtraction – Crossing 10 (2) Related facts Compare number sentences 	 Recognising coins Recognising notes Counting in coins 	 Recognise and name 3D shapes. Sort 3D shapes Patterns with 3D and 2D shapes 	 Numbers to 50 Tens and ones Represent numbers to 50 One more one less Compare objects within 50 Order numbers within 50 Count in 2s Count in 5s Count in 10s 	 Compare lengths and heights Measure length Measure length



	Number: Multiplication and	Measurement: Weight and	Number: Fractions	Geometry: Position and	Number: Place Value
	Division	Volume	<u></u>	Direction	(within 100)
<u>NC: Year 1 Summer</u>	 Count in multiples of twos, fives and tens. Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 	 Measure and begin to record mass/weight, capacity and volume. Compare, describe and solve practical problems for 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 full). 	 Recognise, find and name a half as one of the two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. Compare, describe and solve practical problems for length and heights (e.g. long/short, longer/shorter, tall/short, double/half). Compare, describe and solve practical problems for 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 full). 	Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	 Count to and across 100, forwards and backwards, beginning with 0 or 1 from any given number. Count, read and write numbers to 100 in numerals. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line and use language of equal to, more than, less than (fewer), most and least.
WRM: Small steps	 Count in 10s Make equal groups Add equal groups Make arrays Make doubles Make equal groups – grouping Make equal groups – sharing 	 Introduce weight and mass Measure mass Compare mass Introduce capacity and volume Measure capacity Compare capacity 	 Find a half (1) Find a half (2) Find a quarter (1) Find quarter (2) 	 Describe turns Describe position (1) Describe position (2) 	 Counting to 100 Partitioning numbers Comparing numbers (1) Comparing numbers (2) Ordering numbers One more, one less



					Yearly	Overview:	Year 2					
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number Addition	and Subtract	lion	Number: Addition and S	Subtraction	Measurement: Money		Statistic	S	Number: Place value (revisit and new content)
Spring	Ni, wale a w				Geometry: Properties of S	Shapes	Measurement: Mass, Capacity and Temperature		Number: Fractions		Measur Length	ement: and Height
Summer	Measurement: Time	Number operation revisit		Geometry: Position and Direction	Assessment: SATS	Number: Fractions	Number: Four Operations (revisit)	Measurement:	Time		ement rev ng money	



	Number: Place Value	Number: Addition and Subtraction	Number: Addition and Subtraction	Measurement: Money	Statistics
NC: Year 2 Autumn	Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two-digit number (tens and ones). Identify, represent and estimate numbers using different representations including the number line. Compare and order numbers from 0 up to 100 using <, > and = symbols. Use place value and number facts to solve problems. Count in steps of 2, 3 and 5 from 0, and in tens from any number, backwards and forwards.	 Solve problems with addition and subtraction using concrete objects, pictorial representations, (including those involving numbers, quantities and measures) and applying their increasing knowledge of mental and written methods. Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers adding three one-digit numbers. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	 Solve problems with addition and subtraction using concrete objects, pictorial representations, (including those involving numbers, quantities and measures) and applying their increasing knowledge of mental and written methods. Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers adding three one-digit numbers. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	 Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 	 Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.
WRM: Small Steps	Count object to 100 and read and write numbers in numerals and words Represent numbers to 100 Tens and ones with a part-whole model Tens and ones using addition Use a place value chart Compare objects Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s	 Fact families – addition and subtraction bonds to 20 Check calculations Compare number sentences Related facts Bonds to 100 (tens) Add and subtract 1s 10 more and 10 less Add and subtract 10s Bonds to 100 (tens and ones) Add three 1-digit numbers 	 Add a 2-digit and 1-digit number – crossing ten. Subtract a 1-digit number from a 2-digit number – crossing ten. Add two 2-digit numbers – not crossing ten – add ones and add tens. Add two 2-digit numbers – crossing ten – add ones and add tens. Subtract a 2-digit number from a 2-digit number – not crossing ten Subtract a 2-digit number from a 2-digit number – not crossing ten – subtract ones and subtract tens 	 Count money – pence Count money – pounds (notes and coins) Count money – notes and coins Select money Make the same amount Compare money Find the total Find the difference Find change Two-step problems 	 Make tally charts Draw pictograms (1-1) Interpret pictograms (1-1) Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10) Block diagrams



	Number: Multiplication and Division	Geometry: Properties of Shapes	Measurement: Mass, Capacity	Number: Fractions	Measurement: Length and Height
			and Temperature		
NC: Year 2 Spring	 Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. 	 Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. Compare and sort common 2-D and 3-D shapes and everyday objects. 	 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 compare and order lengths, mass, volume/capacity and record the results using >, < and = 	 Recognise, find, name and write fractions 1/2, 1/3 ,1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and ½. 	 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. compare and order lengths, mass, volume/capacity and record the results using >, < and =.
WRM: Small Steps	 Recognise equal groups Make equal groups Add equal groups Add equal groups Multiplication sentences using X symbol Multiplication sentences from pictures Use arrays 2 times-table 5 times-table 10 times-table Make equal groups – sharing Make equal groups – grouping Divide by 2 Odd & even numbers Divide by 5 Divide by 10 	 Recognise 2-D and 3-D shapes Count sides on 2-D shapes Count vertices on 2-D shapes Draw 2-D shapes Lines of symmetry Sort 2-D shapes Make patterns with 2-D shapes Count faces on 3-D shapes Count edges on 3-D shapes Count vertices on 3-D shapes Sort 3-D shapes Make patterns with 3-D shapes Make patterns with 3-D shapes 	 Compare mass Measure mass in grams Measure mass in kilograms Compare volume Millilitres Litres Temperature 	 Make equal parts Recognise a half Find a half Recognise a quarter Find a quarter Recognise a third Find a third Unit fractions 	 Measure length (cm) Measure length (m) Compare lengths Order lengths Four operations with lengths



	Measurement: Time	Geometry: Position and Direction	Number: Fractions	Measurement: Time
NC: Year 2 Summer	hours in a day.	 Order and arrange combinations of mathematical objects in patterns and sequences 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). 	 Recognise, find, name and write fractions 1/2, 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and ½. 	 Compare and sequence intervals of time 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. Know the number of minutes in an hour and the number of hours in a day.
WRM: Small Steps	 O'clock and half past Quarter past and quarter to Telling time to 5 minutes Hours and days 	 Describing movement Describing turns Describing movement and turns Making patterns and shapes 	 Non-unit fractions Equivalence of 1/2 and 2/4 Find three quarters Count in fractions 	 Find durations of time Compare durations of time



	Yearly Overview: Year 3 Week Week													
	Week Week Week 4 Week V						Week	Week	Week 9	Week	Week 1	12		
	1	2	3		5	6	7	8		10	11			
	Number: Place Value			Number: Addition and			Measur	ement:	Number: Multip	lication a	and	Place		
_				Subtraction			Length	and	Division (x2, x4	l, x8)		Value		
Autumn							Perimet	ter				includin	g	
utu												χ/÷		
Ā											(Revisit))		
		: Multipli		Measurement: Statistics			Numbe	r:	Number: Fracti	ons		Four		
<u>p</u>		ision. (Ar		Money			Additior					Operation		
Spring	-	to colum	n				Subtrac	ction				(Revisit))	
S	addition)				1								
5	Geometry: Number		Numbe	r: Fractions		Measurement: Time		Number:	Measur		Fraction			
me	Properties of								Multiplication	Mass a	nd	(Revisit))	
Summer	Shapes								and Division	Capacit	у			
S									(x3, x6, x9)					



	Number: Place Value	Number: Addition and Subtraction	Measurement: Length and Perimeter	Number: Multiplication and Division
				<u>(x2, x4, x8)</u>
NC: Year 3 Autumn	 Count from 0 in multiples of 4, 8, 50 and 100; Find 10 or 100 more or less than a given number Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Compare and order numbers up to 1000 Identify, represent and estimate numbers using different representations Read and write numbers up to 1000 in numerals and in words Solve number problems and practical problems involving these ideas. 	 Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	 Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Measure the perimeter of simple 2-D shapes 	 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 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 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.
WRM: Small Steps	 Hundreds Represent numbers to 1,000 100s, 10s, 1s (1) 100s, 10s, 1s (2) Number line to 1,000 Find 1, 10, 100 more than a given number Compare objects to 1,000 Compare numbers to 1,000 Order numbers Count in 50s 	 Add and subtract multiples of 100 Add and subtract 3-digit and 1-digit numbers – not crossing 10 Add and subtract 3-digit and 1-digit numbers – crossing 10 Subtract a 1-digit number from a 3-digit number – crossing 10 Add and subtract 3-digit and 2-digit numbers – not crossing 100 Add 3-digit and 2-digit numbers – crossing 100 Subtract a 2-digit number from a 3-digit number – crossing 100 Add and subtract 100s Spot the pattern – making it explicit Add and subtract a 2-digit and 3-digit numbers – not crossing 10 or 100 Add a 2-digit and 3-digit numbers – crossing 10 Subtract a 2-digit from a 3-digit numbers – crossing 10 or 100 	 Measure length Equivalent lengths – m & cm Equivalent lengths – mm & cm Compare lengths Add lengths Subtract lengths Measure perimeter Calculate perimeter 	 Multiplication – equal groups Revisit two times table Multiply by 4 Divide by 4 The 4 times table Multiply by 8 Divide by 8 The 8 times table



	<u>Number: Multiplication and</u> Division	Measurement: Money	<u>Statistics</u>	<u>Number: Addition and</u> Subtraction	Number: Fractions
NC: Year 3 Spring	 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 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 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. 	Add and subtract amounts of money to give change, using both £ and p in practical contexts	 Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. 	 Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	 Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators recognise and show, using diagrams, equivalent fractions with the same denominator within one whole [for example, 57 + 17 = 67] Compare and order unit fractions with the same denominator Solve problems that involve all of the above.
WRM: Small Steps	 Comparing statements Related calculations Multiply 2-digits by 1-digit (1) Multiply 2-digits by 1-digit (2) Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 2-digits by 1-digit (3) Scaling How many ways? 	 Pounds and pence Convert pounds and pence Add money Subtract money Give change 	 Pictograms Bar Charts Tables 	 Add two 3-digit numbers – not crossing 10 or 100 Add two 3-digit numbers – crossing 10 or 100 Subtract a 3-digit number from a 3- digit number – no exchange Subtract a 3-digit number from a 3- digit number – exchange Estimate answers to calculations Check answers 	 Unit and non-unit fractions Making the whole Tenths Count in tenths Tenths as decimals Fractions on a number line Fractions of a set of objects (1) Fractions of a set of objects (2) Fractions of a set of objects (3)



	<u>Geometry: Properties of</u> <u>Shapes</u>	Number: Fractions	Measurement: Time	Number: Multiplication and Division (x3, x6, x9)	Measurement: Mass and Capacity
NC: Year 3 Summer	 Recognise angles as a property of shape or a description of a turn. 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. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. Draw 2-D shapes and make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them. 	 Recognise and show, using diagrams, equivalent fractions with small denominators. Compare and order unit fractions, and fractions with the same denominators. Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7] Solve problems that involve all of the above. 	 Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute. Record and compare time in terms of seconds, minutes and hours. Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year. Compare durations of events [for example to calculate the time taken by particular events or tasks]. 	 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 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 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. 	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
WRM: Small Steps	 Turns and angles Right angles in shapes Compare angles Draw accurately Horizontal and vertical Parallel and perpendicular Recognise and describe 2D shapes Recognise and describe 3-D shapes Make 3-D shapes 	 Equivalent fractions (1) Equivalent fractions (2) Equivalent fractions (3) Compare fractions Order fractions Add fractions Subtract fractions 	 Months and years Hours in a day Telling the time to 5 minutes Telling the time to the minute Using a.m. and p.m. 24-hour clock Finding the duration Comparing durations Start and end times Measuring time in seconds 	 Multiply by 3 Divide by 3 The 3 times table Multiply by 6 Divide by 6 The 6 times table Multiply by 9 Divide by 9 The 9 times table 	 Measure mass (1) Measure mass (2) Compare mass Add and subtract mass Measure capacity (1) Measure capacity (2) Compare capacity Add and subtract capacity



					Yearly	v Overvi	iew: Ye	ar 4				
	Week	Week	Week	Week 4	Week 5	Week	Week	Week 8	Week	Week	Week	Week 12
	1	2	3			6	7		9	10	11	
<u>Autumn</u>	Number: Value	Place		umber: Addition and ubtraction			Measurement: Length, Perimeter and Area			Number: Multiplication and Division		
<u>Spring</u>				Multiplicatic	on and	Geometry: Properties of Shapes			Number: Fractions			Fractions (Revisit)
Summ	Number: Decimals		;	Number: Decimals	Measurement	: Time	Geometry and Direc		Statistics	Measur Money	ement:	Consolidation: Decimals



	1	Number: Place Value	N	Jumber: Addition and Subtraction	Me	easurement: Length, Perimeter and	N	lumber: Multiplication and Division
			-			Area		
NC: Year 4 Autumn	• • • •	Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number Count backwards through zero to include negative numbers Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Order and compare numbers beyond 1000 Identify, represent and estimate numbers using different representations Round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above and with increasingly large positive numbers 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.	•	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	•	Convert between different units of measure [for example, kilometre to metre; hour to minute] Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares	•	Recall multiplication and division facts for multiplication tables up to 12 × 12 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 recognise and use factor pairs and commutativity in mental calculations multiply two-digit and three-digit numbers by a one-digit number using formal written layout 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.
WRM: Small Steps	• • • •	Count in 1,000s 1,000s, 100s, 10s and 1s Partitioning Number line to 10,000 1,000 more or less Count in 25s Compare numbers Order numbers	• • • • •	Add and subtract 1s, 10s, 100s and 1,000s Add two 4-digit numbers – no exchange Add two 4-digit numbers – one exchange Add two 4-digit numbers – more than one exchange Subtract two 4-digit numbers – no exchange Subtract two 4-digit numbers – one exchange Subtract two 4-digit numbers – more than one exchange Efficient subtraction Estimate answers Checking strategies	•	Kilometres Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes What is area? Counting squares Making shapes Comparing area	• • • • • •	Multiply by 10 Multiply by 100 Divide by 100 Divide by 100 Multiply by 1 and 0 Divide by 1 and itself Multiply and divide by 6 6 times table and division facts Multiply and divide by 9 9 times table and division facts Multiply and divide by 7 7 times table and division facts



	Number: Place Value	Number: Multiplication and Division	Geometry: Properties of Shapes	Number: Fractions
NC: Year 4 Spring	 Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number Count backwards through zero to include negative numbers Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Order and compare numbers beyond 1000 Identify, represent and estimate numbers using different representations Round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above and with increasingly large positive numbers 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. 	 Recall multiplication and division facts for multiplication tables up to 12 × 12 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 Recognise and use factor pairs and commutativity in mental calculations Multiply two-digit and three-digit numbers by a one-digit number using formal written layout 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. 	 Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identify acute and obtuse angles and compare and order angles up to two right angles by size Identify lines of symmetry in 2-D shapes presented in different orientations Complete a simple symmetric figure with respect to a specific line of symmetry. 	 Recognise and show, using diagrams, families of common equivalent fractions Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. 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 Add and subtract fractions with the same denominator
WRM: Small Steps	 Round to the nearest 10 Round to the nearest 100 Round to the nearest 1,000 Roman Numerals to 100 Negative Numbers 	 11 and 12 times-table Multiply 3 numbers Factor pairs Efficient multiplication Written methods Multiply 2-digits by 1-digit Multiply 3-digits by 1-digit Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 3-digits by 1-digit Correspondence problems 	 Identify angles Compare and order angles Triangles Quadrilaterals Lines of symmetry Complete a symmetrical figure 	 What is a fraction? Equivalent fractions (1) Equivalent fractions (2) Fractions greater than 1 Count in fractions Add 2 or more fractions Subtract 2 fractions Subtract from whole amounts Calculate fractions of a quantity Problem solving – calculate quantities



		Number: Decimals		Number: Decimals		Measurement: Time	G	eometry: Position		<u>Statistics</u>		Measurement:
NC: Year 4 Summer	• • • •	recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to ¼, ½, ¾ 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 round decimals with one decimal place to the nearest whole number compare numbers with the same number of decimal places up to two decimal places solve simple measure and money problems involving fractions and decimals to two decimal places.	•	recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to ¼, ½, ¾ 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 round decimals with one decimal place to the nearest whole number compare numbers with the same number of decimal places up to two decimal places solve simple measure and money problems involving fractions and decimals to two decimal places.	•	Read, write and convert time between analogue and digital 12- and 24hour clocks Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	•	and Direction Describe positions on a 2-D grid as coordinates in the first quadrant Describe movements between positions as translations of a given unit to the left/right and up/down Plot specified points and draw sides to complete a given polygon.	•	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	•	Money Estimate, compare and calculate different measures, including money in pounds and pence
WRM: Small Steps	• • • • •	Recognise tenths and hundredths Tenths as decimals Tenths on a place value grid Tenths on a number line Divide 1-digit by 10 Divide 2-digits by 10 Hundredths Hundredths as decimals Hundredths on a place value grid Divide 1 or 2-digits by 100	• • • • •	Make a whole Write decimals Compare decimals Order decimals Round decimals Halves and quarters	• • • •	Hours, minutes and seconds Years, months, weeks and days Analogue to digital – 12-hour Analogue to digital – 24-hour	•	Describe position Draw on a grid Move on a grid Describe movement on a grid	•	Interpret charts Comparison, sum & difference Introducing line graphs Line graphs	•	Pounds and pence Ordering money Estimating money Four operations



	Yearly Overview: Year 5												
	Week 1	Week	Week	Week	Week	Week	Week	Week 8	Week	Week	Week	Week 12	
		2	3	4	5	6	7		9	10	11		
Autumn				: Decima s been m 8,9.	Addition and			Number: Multiplication and Division Area				Consolidation: Place value and addition and subtraction	
<u>Spring</u>	Number: Fra	ctions		Number and Div	: Multiplio ision	ation Statistics		s Numbe		ber: Fractions		Consolidation: Fractions and Multiplication	
Summer	Geometry: Position and Direction				ement: ing Units			nent: Geometry: Properties of Shapes			Consolidation: Fractions, decimals and percentages		



		т		т	
	<u>Number: Place Value</u>	Number: Decimals	Number: Addition and	Number: Multiplication and	<u>Measurement:</u>
			Subtraction	Division	Perimeter and Area
NC: Year 5 Autumn	 Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Round any number up to 1 000000 to the nearest 10, 100, 1000, 10 000 and 100 000 Solve number problems and practical problems that involve all of the above Read Roman numerals to 1000 (M) and recognise years written in Roman numerals 	 Recognise and write decimal equivalents of any number of tenths or hundredths. Find the effect of dividing a one- or two-digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths Solve simple measure and money problems involving fractions and decimals to two decimal places. Convert between different units of measure [for example, kilometre to metre] 	 Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Add and subtract numbers mentally with increasingly large numbers Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	 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 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 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates 	 Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes
WRM: Small Steps	 Numbers to 10,000 Numbers to 100,000 Numbers to a million Counting in 10s, 100s, 1,000s, 10,000s and 100,000s Compare and order numbers to 100,000 Compare and order numbers to 1 million Round to the nearest 10, 100 and 1,000 Round numbers within 100,000 Round numbers to one million Roman Numerals to 1,000 Negative numbers 	 Adding decimals within 1 Subtracting decimals within 1 Complements to 1 Adding decimals – crossing the whole Adding decimals with the same number of decimal places Subtracting decimals with the same number of decimal places Adding decimals with a different number of decimal places Subtracting decimals with a different number of decimal places Adding and subtracting wholes and decimals Decimal sequences Multiplying decimals by 10, 100 and 1,000 Dividing decimals by 10, 100 and 1,000 	 Add whole numbers with more than 4 digits (column method) Subtract whole numbers with more than 4 digits (column method) Round to estimate and approximate Inverse operations (addition and subtraction) Multi-step addition and subtraction problems 	 Multiply 4-digits by 1-digit Multiply 2-digits (area model) Multiply 2-digits by 2-digits Multiply 3-digits by 2-digits Multiply 4-digits by 2-digits Divide 4-digits by 1-digit Divide with remainders 	 Measure perimeter Calculate perimeter Area of rectangles Area of compound shapes Area of irregular shapes



	Number: Fractions	Number: Multiplication and Division	Statistics	Number: Fractions
NC: Year 5 Spring	 Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example,2/5+4/5=6/5=11/5] Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams 	 Multiply and divide numbers mentally, drawing upon known facts Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19 Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes 	 Solve comparison, sum and difference problems using information presented in a line graph Complete, read and interpret information in tables, including timetables 	 Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams Read and write decimal numbers as fractions [for example 0.71 = 71/100] Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.
WRM: Small Steps	 Equivalent fractions Improper fractions to mixed numbers Mixed numbers to improper fractions Number sequences Compare and order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions Add fractions within 1 	 Multiply by 10, 100 and 1,000 Divide by 10, 100 and 1,000 Multiples of 10, 100 and 1,000 Multiples Factors Common factors Prime numbers Square numbers Cube numbers 	 Read and interpret line graphs Draw line graphs Use line graphs to solve problems Read and interpret tables Two-way tables Timetables 	 Add and subtract fractions Add fractions within 1 Add 3 or more fractions Add fractions Add mixed numbers Subtract fractions Subtract mixed numbers Subtract – breaking the whole Subtract 2 mixed numbers Multiply unit fractions by an integer Multiply non-unit fractions by an integer Multiply mixed numbers by integers Fraction of an amount Using fractions as operators Fraction to decimal



	<u>Geometry: Position and</u> <u>Direction</u>	Number: Decimals and Percentages	<u>Measurement: Converting</u> <u>Units</u>	<u>Measurement: Volume</u>	<u>Geometry: Properties of</u> <u>Shapes</u>
NC: Year 5 Summer	 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 	 Read, write, order and compare numbers with up to three decimal places. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Solve problems involving number up to three decimal places. Recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25 	 Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints Solve problems involving converting between units of time 	 Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] Use all four operations to solve problems involving measure 	 Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles and measure them in degrees. 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°
WRM: Small Steps	 Position in the first quadrant Reflection Reflection with coordinates Translation Translation with coordinates 	 Decimals up to 2 d.p. Decimals as fractions (1) Decimals as fractions (2) Understand thousandths Thousandths as decimals Rounding decimals Order and compare decimals Understand percentages Percentages as fractions and decimals Equivalent F.D.P. 	 Kilograms and kilometres Milligrams and millilitres Metric units Imperial units Converting units of time Timetables 	 What is volume? Compare volume Estimate volume Estimate capacity 	 Measuring angles in degrees Measuring with a protractor (1) Measuring with a protractor (2) Drawing lines and angles accurately Calculating angles on a straight line Calculating angles around a point Calculating lengths and angles in shapes Regular and irregular polygons Reasoning about 3-D shapes



Yearly Overview	w: Year 6
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	Week 1	Week	Week	Week	Week	Week	Week	Week	Week 9	Week	Week 11	Week 12
		2	3	4	5	6	7	8		10		
<u>Autumn</u>	Number: Place Value	Number: Four Operations Measurement: N Area, Perimeter and Volume		Number: Decimals Number: Fractions		Fractions	Consolidation: Four Operations					
Spring	Measuren Convertine	surement: Number: Number: Number: Number: Number:		Algebra	Number: F	Ratio	Geometry: Position and Direction	Consolidation: Fractions, decimals, and percentages				
Summer	Geometry: Properties of Shapes		Consolid Four Ope and FDF	erations	SATS	Statistics			KS3 Pre	eparations		



	Nu	mber: Place Value	Number: Four Operations		Measurement: Area,		Number: Decimals	Number: Fractions
				P	Perimeter and Volume			
NC: Year 6 Autumn	•	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit Round any whole number to a required degree of accuracy Use negative numbers in context, and calculate intervals across zero Solve number problems and practical problems that involve all of the above.	 multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 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 divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context perform mental calculations, including with mixed operations and large numbers identify common factors, common multiples and prime numbers use their knowledge of the order of operations to carry out calculations involving the four operations 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 use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. 	•	Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms and triangles. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm3, m3 and extending to other units (mm3, km3)	•	Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places Multiply 1-digit numbers with up to 2 decimal places by whole numbers Use written division methods in cases where the answer has up to 2 decimal places Solve problems which require answers to be rounded to specified degrees of accuracy	 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions >1 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
	•	Numbers to ten	Add and subtract integers	•	Shapes – same area	•	Three decimal places	Simplify fractions
		million Compare and order	 Multiply up to a 4-digit number by 2-digit number Short division 	•	Area and perimeter Area of a triangle (1)	•	Multiply by 10, 100 and	 Fractions on a number line
		any number	Division using factors	•	Area of a triangle (2)	•	1,000 Divide by 10, 100 and	Compare and order
	•	Round any number	Long division (1)	•	Area of a triangle (3)	•	1,000	(denominator)
	•	Negative numbers	Long division (2)	•	Area of parallelogram	•	Multiply decimals by	 Compare and order (numerator)
			 Long division (3) Long division (4) 	•	Volume – counting cubes Volume of a cuboid		integers	 Add and subtract
Steps			Common factors			•	Divide decimals by integers Division to solve problems	fractions (1)
l St			Common multiples Primes to 100			•	Decimals as fractions	 Add and subtract fractions (2)
Small			 Primes to 100 Squares and cubes 			•	Fractions to decimals (1)	Add fractions
S			Order of operations			•	Fractions to decimals (2)	Subtract fractions
ž			Mental calculations and estimation					 Mixed addition and subtraction
WRM:			Reason from known facts					subtraction
			The mean					



	Measurement: Converting Units	Number: Fractions	Number: Percentages	Number: Algebra	<u>Number: Ratio</u>	Geometry: Position and Direction
<u>NC: Year 6 Spring</u>	 Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate 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 3 dp. Convert between miles and kilometres 	 Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ × ½ = 1/8] Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6] Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8] recall and use equivalences between simple fractions, decimals and percentages including in different contexts 	 Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison. Recall and use equivalences between simple fractions, decimals and percentages including in different contexts. 	 Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables 	 Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples 	 Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane and reflect them in the axes.
WRM: Small Steps	 Metric measures Convert metric measures Calculate with metric measures Miles and kilometres Imperial measures 	 Multiply fractions by integers Multiply fractions by fractions Divide fractions by integers (1) Divide fractions by integers (2) Four rules with fractions Fraction of an amount Fraction of an amount – find the whole 	 Fractions to percentages Equivalent FDP Order FDP Percentage of an amount (1) Percentage of an amount (2) Percentages – missing values 	 Find a rule – one step Find a rule – two steps Forming expressions Substitution Formulae Forming equations Solve simple one-step equations Solve two-step equations Find pairs of values Enumerate possibilities 	 Using ratio language Ratio and fractions Introducing the ratio symbol Calculating ratio Using scale factors Calculating scale factors Ratio and proportion problems 	 The first quadrant Four quadrants Translations Reflections



	Geometry: Properties of	Statistics	KS3 Preparations:							
	<u>Shapes</u>		<u>Sequences</u>	Geometry: Shapes and Angles	Probability	Calculator Skills				
NC: Year 6 Summer	 Draw 2-D shapes using given dimensions and angles. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. 	Interpret and construct pie charts and line graphs and use these to solve problems.	Filling in missing numbers in a sequence and identifying the rule	Geometry projects and key words to explore.	Probability	Using a calculator				
WRM: Small Steps	 Measure with a protractor Introduce angles Calculate angles Vertically opposite angles Angles in a triangle – special cases Angles in a triangle – missing angles Angles in special quadrilaterals Angles in regular polygons Draw shapes accurately Draw nets of 3-D shapes Circles 	 Read and interpret line graphs Draw line graphs Use line graphs to solve problems Read and interpret pie charts Pie charts with percentages Draw pie charts 	 Linear eg 1, 4, 7, 10 (add 3) Geometric eg: 1, 2, 4, 8, 16 (multiply by 2) 	 What actually is an angle? What is a polygon? Design a garden or a town using parallel and perpendicular lines, right angles and other angles Classify shapes, quadrilateral, not quadrilateral, concave, convex, trapezium (isosceles, right or neither) 	 Complete an experiment and use it to calculate the probability of getting each card without knowing how many of each card is there Use experiments to predict the future and see if they are right, if not right, why did it not work etc Change between fractions, decimals and percentages to state probabilities 	 How to turn it on and off, How to clear the screen, How to use the previous answer with the ANS key, Using the square and root buttons 				