FINAL	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Autumn 1		**The Colour Monster**	**My Cat Likes to Hide in Boxes**	**Book: We're Going on a Bear Hunt**	**Book: In Every House on Every Street**	**Book: Mr Gumpy's Outing**	**Book: The Three Little Pigs**	
				Phase: Just Like Me	*Phase: Just Like Me*	*Phase: Just Like Me*	*Phase: Just Like Me*	
				EWPS: Height	EWPS: Matching	EWPS: Comparing amounts in 5's frames (language more less)	EWPS: Pattern	
Autumn 2	*Diwali*	*Halloween Bonfire Night*					*Christmas*	*Christmas*
	Book: Dipal's Diwali	**Book: Pumpkin Soup**	**Book: What do Machines Do All Day**	**Book: Machine Poems**	**Book: No Bot the Robot with No Bottom**	**Book: The Christmas Story**	**Book: Rosie Revere, Engineer**	**Book:**
	Phase: It's Me 1 2 3	*Phase: It's Me 1 2 3*	*Phase: It's Me 1 2 3*	*Phase: Light and Dark*	*Phase: Light and Dark*	*Phase: Light and Dark*	*Phase: Light and Dark*	*Phase: Light and Dark*
	EWPS: Introduce 1,2,3 Representing, counting by touching objects	EWPS: Comparing 1 2 3 More/ fewer/ equal/ unequal	EWPS: Composition of 1 2 3 Different ways to make 1 2 3	EWPS: Introduce 4,5 Representing, counting by touching objects	EWPS: One More	EWPS: One less	EWPS: Shapes with up to 4 sides.	EWPS: Night and day.
Spring 1	**Book: Rosie's Hat**	**Book: Peepo**	**Book: Coming to England**	**Book: Smartest Giant**	**Book: The Gingerbread Man**	**Book: Stick Man**	**Book: The Bog Baby**	
	Phase: Alive in 5	*Phase: Alive in 5*	*Phase: Alive in 5*	*Phase: Alive in 5*	*Phase: Growing 6 7 8*	*Phase: Growing 6 7 8*	*Phase: Growing 6 7 8*	
	EWPS: Comparing numbers to 5	EWPS: Composition of 4 and 5	EWPS: Compare mass	EWPS: Compare capacity	EWPS: Composition of 6 7 8	EWPS: Combining 2 groups	EWPS: Time	

Spring 2	**Book: The Gigantic Turnip**	**Book: Jack and the Beanstalk**	**Book: Handa's Surprise**	**Book: Rosie's Walk**	**Book: Oliver's Vegetables**			
	Phase: 9 and 10	*Phase: 9 and 10*	*Phase: To 20 and Beyond*	*Phase: To 20 and Beyond*	*Phase: First , Then, Now*			
	EWPS: Comparing 9 and 10	EWPS: Number bonds to 10	EWPS: Building numbers beyond 10	EWPS: Counting numbers beyond 10	EWPS: Adding more			
Summer 1	**Book: Rumble in the Jungle**	**Book: A First Book of Animals**	**Book: Little Red and the Very Hungry Lion**	**Book: Hello, Hello**	**Book: Superworm**			
	Phase: First , Then, Now	*Phase: Phase: First , Then, Now*	*Phase: Find My Pattern*	*Phase: Find My Pattern*	*Phase: Find My Pattern*			
	EWPS: Taking away	EWPS: How many did I add?	EWPS: Doubling	EWPS: Halving	EWPS: Sharing and grouping			
Summer 2	**Book: Lucy and Tom at the Seaside**	**Book: Who's Hiding at the Seaside**	**Book: Somebody Swallowed Stanley**	**Book: Pirates Love Underpants**	**Book: Paper Dolls**			
	Phase: Growing 6 7 8	*Phase: Growing 6 7 8*	*Phase: 9 and 10*	*Phase: 9 and 10*	*Phase: Find My Pattern*			
	EWPS: Length	EWPS: Height	EWPS: 3d shape	EWPS: Pattern	EWPS: Even and odd			

Year 1	1	2	3	4	5	6	7	8	9	10	11	1
Autumn	**<u>Number: Place Value (within 10)</u>** **NPV-1 Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number** **NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =** ● count numbers to 100 in numerals; ● count in multiples of twos, fives and tens ● identify and represent numbers using objects and pictorial representations ● read and write numbers to 100 in numerals ● read and write numbers from 1 to 20 in numerals and words ● given a number, identify one more and one less					**<u>Number: Addition and subtraction (within 10)</u>** **1NF–1 Develop fluency in addition and subtraction facts within 10.** **1AS-1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers** **1AS-2 Read, write and interpret equations containing addition (+), subtraction (−) and equals (=) symbols, and relate additive expressions and equations to real-life contexts** ● 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					**<u>Geometry: Shape</u>** **1G-1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.** **1G-2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.** ● recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] ● recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]	C n o da ic

Year 1	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**<u>Number: Place Value (within 20)</u>** **NPV-1 Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number** **NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =** ● count numbers to 100 in numerals; ● count in multiples of twos, fives and tens ● identify and represent numbers using objects and pictorial representations ● read and write numbers to 100 in numerals ● read and write numbers from 1 to 20 in numerals and words ● given a number, identify one more and one less			**<u>Number: Addition and subtraction (within 10)</u>** **1NF–1 Develop fluency in addition and subtraction facts within 10** **1AS-2 Read, write and interpret equations containing addition (+), subtraction (−) and equals (=) symbols, and relate additive expressions and equations to real-life contexts** **1AS-2 Read, write and interpret equations containing addition (+), subtraction (−) and equals (=) symbols, and relate additive expressions and equations to real-life contexts** ● 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			**<u>Number: Place Value (within 50)</u>** **NPV-1 Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number** **NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =** ● count numbers to 100 in numerals; ● count in multiples of twos, fives and tens ● identify and represent numbers using objects and pictorial representations ● read and write numbers to 100 in numerals ● read and write numbers from 1 to 20 in numerals and words ● given a number, identify one more and one less		**<u>Measurement: Length and Height</u>** Compare, describe and solve practical problems for: ● lengths and heights Measure and begin to record: ● lengths and heights		**<u>Measurement: Mass and Volume</u>** Compare, describe and solve practical problems for: ● mass/weight ● capacity and volume Measure and begin to record: ● mass/weight ● capacity and volume	

Year 1	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**<u>Number: Multiplication and Division</u>** **1NF-2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.** ● 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			**<u>Number: Fractions</u>** ● recognise, find and name a half as one of 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		**<u>Geometry: Shape</u>** **1G-1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.** **1G-2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.** ● describe position, direction and movement, including whole, half, quarter and three-quarter turns	**<u>Number: Place Value (within 100)</u>** **NPV-1 Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number** **NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =** ● count numbers to 100 in numerals; ● count in multiples of twos, fives and tens ● identify and represent numbers using objects and pictorial representations ● read and write numbers to 100 in numerals ● read and write numbers from 1 to 20 in numerals and words ● given a number, identify one more and one less		**<u>Measurement: Money</u>** ● recognise and know the value of different denominations of coins and notes	**<u>Measurement: Time</u>** Compare, describe and solve practical problems for: ● time Measure and begin to record: ● time (hours, minutes, seconds)		Consolidation

Year 2	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	**<u>Number: Place Value</u>** **2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.** **2NPV-2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.** ● count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward ● read and write numbers to at least 100 in numerals and in words ● identify, represent and estimate numbers using different representations, including the number line ● recognise the place value of each digit in a two-digit number (tens, ones) ● compare and order numbers from 0 up to 100; use <, > and = signs ● use place value and number facts to solve problems				**<u>Number: Addition and Subtraction</u>** **2NF-1 Secure fluency in addition and subtraction facts within 10, through continued practice** **2AS-1 Add and subtract across 10** **2AS-3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.** **2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers** ● 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 ● solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods				**<u>Geometry: Shape</u>** **2G-1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.** ● identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line ● 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 shapes and everyday objects ● recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] ● compare and sort common 3-D shapes and everyday objects		

Year 2	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**<u>Measure: Money</u>** **2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?"** **2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers** ● 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		**<u>Number: Multiplication and Division</u>** **2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.** **2MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).** ● recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ● show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ● calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (.), division (÷) and equals (=) signs ● solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts					**<u>Measurement: Length and Height</u>** **2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers** ● 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 =		**<u>Measurement: Mass, Capacity, Temperature</u>** ● 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 =		

Year 2	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**<u>Number: Fractions</u>** ● recognise, find, name and write fractions 1/3,1/4,2/4and 3/4of a length, shape, set of objects or quantity ● Recognise the equivalence of 2/4 and 1/2 ● write simple fractions for example, 1/2 of 6 = 3			**<u>Measurement: Time</u>** ● 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			**<u>Statistics</u>** ● 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		**<u>Geometry: Position and Direction</u>** ● 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)		Consolidation	

Year 3	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	**<u>Number: Place Value</u>** **3NPV-1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10** **3NPV-2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning** **3NPV-3 Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10** **3NPV-4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts** ● count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number ● identify, represent and estimate numbers using different representations ● read and write numbers up to 1000 in numerals and in words ● recognise the place value of each digit in a three-digit number (hundreds, tens, ones) ● compare and order numbers up to 1000 ● solve number problems and practical problems involving these ideas			**<u>Number: Addition and Subtraction</u>** **3NF-1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice** **3AS-1 Calculate complements to 100** **3AS-2 Add and subtract up to three-digit numbers using columnar methods** **3AS-3 Manipulate the additive relationship:** **Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure.** **Understand and use the commutative property of addition, and understand the related property for subtraction** ● 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 ● solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction				**<u>Number: Multiplication and Division (a)</u>** **3NF-2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number** **3MD-1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division** ● 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		

Year 3	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**<u>Number: Multiplication and Division (b)</u>** **3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)** **3MD-1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division** ● 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			**<u>Measurement: Length and Perimeter</u>** ● measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) ● measure the perimeter of simple 2-D shapes			**<u>Number: Fractions (a)</u>** **3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)** **3F-1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts** **3F-3 Reason about the location of any fraction within 1 in the linear number system** ● 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 small denominators ● compare and order unit fractions, and fractions with the same denominators ● solve problems that involve all of the above			**<u>Measurement: Mass and Capacity</u>** ● measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)		

Year 3	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**<u>Number: Fractions (b)</u>** **3F-2 Find unit fractions of quantities using known division facts (multiplication tables fluency)** **3F-4 Add and subtract fractions with the same denominator, within 1** ● add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]] ● solve problems that involve the above		**<u>Measurement: Money</u>** **3AS-1 Calculate complements to 100** **3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure.** **Understand and use the commutative property of addition, and understand the related property for subtraction** ● add and subtract amounts of money to give change, using both £ and p in practical contexts		**<u>Measurement: Time</u>** ● 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]			**<u>Geometry: Shape</u>** **3G-1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations** **3G-2 Draw polygons by joining marked points, and identify parallel and perpendicular sides** ● draw 2-D shapes ● make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them ● 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		**<u>Statistics</u>** ● 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		Consolidation

Year 4	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	**<u>Number: Place Value</u>** **4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100** **4NPV-2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning** **4NPV-3 Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each** **4NPV-4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts** ● count in multiples of 6, 7, 9, 25 and 1000 ● count backwards through zero to include negative numbers ● identify, represent and estimate numbers using different representations ● 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 ● find 1000 more or less than a given number ● recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) ● order and compare numbers beyond 1000 ● ● 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				**<u>Number: Addition and Subtraction</u>** ● add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate ● solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why			**<u>Measurement: Area</u>** ● measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ● find the area of rectilinear shapes by counting squares	**<u>Number: Multiplication and Division (a)</u>** **4NF-1 Recall multiplication and division facts up to 12 x 12 and recognise products in multiplication tables as multiples of the corresponding number** **4NF-2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context** **4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)** **4MD-2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication** ● count in multiples of 6, 7, 9, 25 and 1000 ● recall multiplication and division facts for multiplication tables up to 12 x 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			consolidation

Year 4	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**<u>Number: Multiplication and Division (b)</u>** **4NF-1 Recall multiplication and division facts up to 12 x 12 and recognise products in multiplication tables as multiples of the corresponding number** **4NF-2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context** **4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)** **4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100** **4MD-1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size** **4MD-3 Understand and apply the distributive property of multiplication** ● recall multiplication and division facts for multiplication tables up to 12 x 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			**<u>Measurement: Length and Perimeter</u>** **4G-2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons** ● Convert between different units of measure [for example, kilometre to metre; hour to minute] ● estimate, compare and calculate different measures ● measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ● find the area of rectilinear shapes by counting squares		**<u>Number: Fractions</u>** **4F-1 Reason about the location of mixed numbers in the linear number system** **4F-2 Convert mixed numbers to improper fractions and vice versa** **4F-3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers** ● recognise and show, using diagrams, families of common equivalent fractions ● add and subtract fractions with the same denominator ● 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 ● solve simple measure and money problems involving fractions and decimals to two decimal places			**<u>Number: Decimals (a)</u>** **4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)** ● count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten ● recognise and write decimal equivalents of any number of tenths or hundredths ● •recognise and write decimal equivalents to 14,12,34 ● •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		

Year 4	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**<u>Number: Decimals (b)</u>** ● count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten ● recognise and write decimal equivalents of any number of tenths or hundredths ● recognise and write decimal equivalents to 14,12,34 ● 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		**<u>Measurement: Money</u>** ● estimate, compare and calculate different measures, including money in pounds and pence		**<u>Measurement: Time</u>** ● Convert between different units of measure [for example, kilometre to metre; hour to minute] ● estimate, compare and calculate different measures ● read, write and convert time between analogue and digital 12-and 24-hour clocks ● solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days		c o n s o l i d a t i o n	**<u>Geometry: Shape</u>** **4G-1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant** **4G-2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons** **4G-3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry** ● compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ● identify lines of symmetry in 2-D shapes presented in different orientations ● 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		**<u>Statistics</u>** ● 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	**<u>Geometry: Position and Direction</u>** ● 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	

Year 5	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	**Number: Place Value** ● interpret negative numbers in context ● round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 ● solve number problems and practical problems that involve all of the above ● count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ● count forwards and backwards with positive and negative whole numbers, including through zero ● read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit ● read Roman numerals to 1000 (M) and recognise years written in Roman numerals			**Number: Addition and Subtraction** ● 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 ● 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 and a combination of these, including understanding the meaning of the equals sign		**Number: Multiplication and Division (a)** **5NF-1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice** **5NF-2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth)** **5MD-1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size** **5MD-2 Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors** ● identify multiples and factors, including finding all factor pairs of a number, and common factors of two 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) ● 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 ● multiply and divide numbers mentally drawing upon known facts ● 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 ● multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 ● solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes ● solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates			**Number: Fractions (a)** **5F-2 Find equivalent fractions and understand that they have the same val and the same position in the linear num system** ● identify, name and write equivalent fractions of a given fraction, represented visually, including tenth and hundredths ● recognise mixed numbers and impro fractions and convert from one form the other and write mathematical statements > 1 as a mixed number [f example, 2/5+4/5=6/5=11/5] ● compare and order fractions whose denominators are all multiples of the same number ● add and subtract fractions with the same denominator and denominato that are multiples of the same numb ● multiply proper fractions and mixed numbers by whole numbers, suppor by materials and diagrams	

Year 5	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**Number: Multiplication and Division (b)** **5NF-1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice** **5MD-3 Multiply any whole number with up to 4 digits by any one-digit number using a formal written method** **5MD-4 Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context** ● 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 ● multiply and divide numbers mentally drawing upon known facts ● 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 ● •multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 ● solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes ● solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates ● solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign			**Number: Fractions (b)** **5NF-1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice** **5F-1 Find non-unit fractions of quantities** ● 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		**Number: Decimals and Percentages** **5NPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01** **5NPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.** **5NPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.** **5NPV-4 Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts** **5NF-2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth)** **5F-3 Recall decimal fraction equivalents for 1/4, 1/2 , 1/5 and 1/10 and for multiples of these proper fractions** ● read and write decimal numbers as fractions [for example, 0.71 = 71/100] ● 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 ● read, write, order and compare numbers with up to three decimal places ● recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, 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		**Measure: Perimeter and Area** **5G-2 Compare areas and calculate the area of rectangles (including squares) using standard units** ● convert between different units of metric measure ● understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints ● use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling ● 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 ● estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]		**Statistics** ● complet read an interpre informa in table includin timetab ● solve compari sum an differen problem using informa presente a line gr	

Year 5	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**Geometry: Shape** **5G-1 Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size** ● distinguish between regular and irregular polygons based on reasoning about equal sides and angles. ● use the properties of rectangles to deduce related facts and find missing lengths and angles ● identify 3-D shapes, including cubes and other cuboids, from 2-D representations			**Geometry: Position and Direction** ● 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° ● 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		**Number: Decimals** **5MD-1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size** ● read and write decimal numbers as fractions [for example, 0.71 = 71/100] ● 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 ● read, write, order and compare numbers with up to three decimal places ● use all four operations to solve problems involving measure [for example, money]		**Negative Numbers** ● count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • count forwards and backwards with positive and negative whole numbers, including through zero		**Measure: Converting Measures** **5NPV-5 Convert between units of measure, including using common decimals and fractions.** ● convert between different units of metric measure ● understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints ● use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling ● solve problems involving converting between units of time		**Measure: Volume** ● convert between different units of metric measure ● understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints ● use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling ● 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 ● estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]

Year 6	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	**<u>Number: Place Value</u>** **6NPV-1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000)** **6NPV-2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning** **6NPV-3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts** **6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts** ● read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit ● (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 and practical problems that involve all of the above		**<u>Number: Addition, Subtraction, Multiplication and Division</u>** **6AS/MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding** ● perform mental calculations, including with mixed operations and large 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 ● identify common factors, common multiples and prime numbers ● use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy ● 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 ● solve problems involving addition, subtraction, multiplication and division ● use their knowledge of the order of operations to carry out calculations involving the four operations			**<u>Number: Fractions (a)</u>** **6F-1 Recognise when fractions can be simplified, and use common factors to simplify fractions** **6F-2 Express fractions in a common denomination and use this to compare fractions that are similar in value** **6F-3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy** ● 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 ● multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,1/4×1/2=1/8] ● divide proper fractions by whole numbers [for example 1/3÷2=1/6]		**<u>Number: Fractions (b)</u>** **6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts** ● add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions ● multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,1/4×1/2=1/8] ● divide proper fractions by whole numbers [for example 1/3÷2=1/6]		**<u>Measure: Converting Units</u>** ● solve problems involving the calculation and conversion of unit of measure, using decimal notation to 3 d.p. where appropriate ● use, read, write a convert between standard units, converting measurements of length, mass, volume and time from a smaller un of measure to a larger unit, and vi versa, using decim notation to up to d.p. ● convert between miles and kilomet ● use, read, write a convert between standard units, converting measurements of time from a small unit of measure t larger unit, and vi versa

Year 6	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**Number: Ratio** **6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number)** **6AS/MD-3 Solve problems involving ratio relationships** ● 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 the calculation/use of percentages for comparison ● 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		**Number: Algebra** **6AS/MD-4 Solve problems with 2 unknowns** ● 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		**Number: Decimals** **6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts** ● identify the value of each digit in numbers given to three decimal places ● associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 38] ● recall and use equivalences between simple fractions, decimals and percentages, including in different contexts		**Number: Fractions, Decimals and Percentages** ● associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 38] ● recall and use equivalences between simple fractions, decimals and percentages, including in different contexts		**Measure: Area, Perimeter and Volume** **6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems** ● 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 cubic centimetres (cm3) and cubic metres (m3), and extending to other units		**Statistics** ● interpret and construct pie charts and line graphs and use these to solve problems ● calculate and interpret the mean as an average	

Year 6	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**<u>Geometry: Shape</u>** **6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems** ● draw 2-D shapes using given dimensions and angles ● compare and classify geometric shapes based on their properties and sizes ● illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius ● recognise, describe and build simple 3-D shapes, including making nets ● 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			**<u>Geometry: Position and Direction</u>** ● 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	**<u>Themed projects, Consolidation and Problem Solving</u>**							