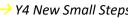


Autumn

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Place Value		Addition and Subtraction		Length and Perimeter	Properties of Shape
Vocabulary	sequence predict continue pattern relationship greater than less than equal to four- digit larger greater fewer smaller size		Formal method column addition/subtraction addition altogether sum total subtraction subtract difference between left less more inverse tens/hundreds boundary operation regroup exchange		Millimetre centimetre kilometre metre mile perimeter standard unit metric length height width depth rectilinear right angle convert	Acute obtuse right angle(d) degrees protractor perpendicular parallel horizontal vertical isosceles scalene equilateral regular irregular
KIRFS		Know	Multiplication and Division fac	ts for the 6 times	tables	
Y3 Consolidation	→ Continue to count in ones, tens and hundreds frepresentations, including those related to measurable of numbers to 1000. → Read and write numbers up to 1000 in numera Compare and order number s up to 1000. → Use the vocabulary of comparing and ordering sign. → Identify, represent and estimate numbers usin Recognise the place value of each digit in a thread Apply partitioning related to place value using the 100 + 40 + 6 and 146 = 130 + 16. → Understand e.g. 146 as 100 + 40 + 6 and as 1 hread Continue to use multiples of 2, 3, 5 and 10. → Count from 0 in multiples of 4, 8, 50 and 100. → Find 10 or 100 more or less than a given number Recognise and extend number sequences forme constant size. → Explore and discuss patterns, properties and reusing appropriate mathematical vocabulary.	ares, to become fluent in the order and place als and words. numbers including use of >, < symbols and = alg different representations. ee-digit number (hundreds, tens and ones). varied and increasingly complex problems e.g. undred, 4 tens and 6 ones. eer and by counting from any number in steps of	→ Continue to practice recall of addition and use these known facts and understanding of derive sums and differences using two-digit → Add and subtract numbers mentally incluathree-digit number and ones a three-digit number and tens a three-digit number and tundeds addition and subtraction of two digit number with answers exceeding 100. → Use and explain a range of mental strateg numbers involved, sometimes supporting exor informal recording. → Add and subtract numbers with up to 3 daddition and subtract numbers with up to 3 daddition and subtraction. → Estimate the answer to a calculation and to check answers. → Understand and use the principles of the acommutative and associative. → Use and explain the equals sign to indicate in missing number problems (e.g. 6 + 8 = 7 +	place value to quickly numbers. Iding place value to quickly numbers. Iding place value to the place value to the place value	to multiplication. → Apply measuring skills to an appropriate degree of accuracy, alongside the skills of thinking mathematically to solve problems. These should include practical problems and might involve construction of shapes or artefacts, often in a cross curricular context. → Apply understanding of number properties to solve routine and non-routine problems and puzzles involving numbers, money or measure → Make and explain connections between number, measures and shape.	and acute and obtuse angles. → Recognise angles as a property of shape or a description of turn. → Identify right angles, recognise that two right angles make a halfturn, three make three quarters of a turn and four a complete turn; identify whether angles are greater or less than a right angle and use the language of acute and obtuse. → Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
NC	Count in multiples of 6, 7, 9. 25 and 1000. Identify, represent and estimate numbers using diff Recognise the place value of each digit in a four dig Find 1000 more or less than a given number. Order and compare numbers beyond 1000. Solve number and practical problems that involve a numbers.	it number (thousands, hundreds, tens and ones).	→Add and subtract numbers with up to 4 digits methods of columnar addition and subtraction →Estimate and use inverse operations to check →Solve addition and subtraction two step prob which operations and methods to use and why.	where appropriate. answers to a calculation.	 → Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. → Convert between different units of measure [for example, kilometre to metre]. 	→ Identify acute and obtuse angles and compare and order angles up to two right angles by size. → Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
Small Steps	4NPV−1 Know that 10 hundreds are equivalent to of 100; apply this to identify and work out how m of 100. → Count in 1,000s. → 1,000s, 100s, 10s are 4NPV−2 Recognise the place value of each digit in decompose four-digit numbers using standard an	any 100s there are in other four-digit multiples and 1s. four-digit numbers, and compose and d nonstandard partitioning. umbers to 10,000 Partition numbers to it number in the linear number system, all of 1,000 and 100, and rounding to the e or less. ts, and read scales/number lines marked in	Add two 3-digit numbers – not crossing 1	nge. 100 · no exchange ge. nge.	⇒ Equivalent lengths – m and cm ⇒ Equivalent lengths – mm and cm → Kilometres. → Add lengths ⇒ Subtract lengths → Measure perimeter → Perimeter on a grid. → Perimeter of a rectangle. → Perimeter of rectilinear shapes.	→ Turns and angles → Right angles in shapes → Compare angles → Identify angles. → Compare and order angles. → Recognise and describe 2D shapes 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. → Triangles.





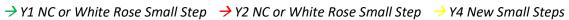
Autumn

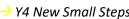
	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Addition and Subti	raction	Properties of Shape	Multiplication	n and Division	Position and Direction
Vocabulary	Formal method addition altogether subtraction subtract difference bet inverse tens/hundreds boundary op column addition regroup exchange check strategy	tween left less more peration columnar efficient estimate	protractor perpendicular parallel	Multiplication division multiply divide fa tables facts place value place holder array inverse multiplication table operation ren	, , ,	Position direction coordinate quadrant plot point axis/axes grid translate
KIRF			Know Multiplication and Di	vision facts for the 9 and 11 times to	ables	
Y3 Consolidation	→ Apply understanding of number operatio and non-routine problems and explain reas → Solve problems, including missing numb facts, place value, and more complex addit	soning. Per problems, using number tion and subtraction.	shapes and their properties. Explain solutions orally or using writing, diagrams, practical materials or dynamic geometry ICT tools. Extend knowledge of the properties of shapes to symmetrical and non-symmetrical polygons and polyhedra. Draw 2-D shapes and make 3-D shapes using modelling materials (connect decimals and rounding to drawing and measuring straight lines in centimetres in a variety of contexts); recognise 3-D shapes in different orientations and describe them.	practice 2, 5 and 10 tables and connect the 2, 4 and ⇒ Develop efficient mental methods for example use 20 x 12 = 240 and multiplication and division fact derive related facts such as 30 x 2 = 60, 60 ÷ 3 = 20 ⇒ Solve problems, including missing number problidivision, including measuring contexts and positive times as long) and correspondence problems in whats and 4 coats, how many different outfits, 4 cake ⇒ Solve calculation problems using information from ⇒ Apply understanding of number operations to soll problems and explain reasoning. ⇒ Use and explain the equals sign to indicate equividence in the sequence of	sing commutativity and associativity e.g. $4 \times 12 \times 5$ s e.g. using $3 \times 2 = 6$, $6 \div 3 = 2$ and $2 = 6 \div 3 = 2$ to and $20 = 60 \div 3$. lems, involving multiplications and einteger scaling problems (e.g. four times as high, 8 nich n objects are connected to m objects (e.g. 3 es shared equally between 8 children). In a range of tables and charts. In the number puzzles, routine and non routine alence, including in missing number problems (e.g.	language to describe position, direction and movement including movement in a straight line and quarter, half, three quarter and full turns both clockwise and anti-
NC	→ Add and subtract numbers with up to 4 digit methods of columnar addition and subtraction → Estimate and use inverse operations to chec → Solve addition and subtraction two step prowhich operations and methods to use and why	n where appropriate. ck answers to a calculation. blems in contexts, deciding	order angles up to two right angles by size. →Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. →Identify lines of symmetry in 2-D shapes presented	 → Recall and use multiplication and division facts for m of 6, 7, 9, 12, 25 and 1000. → Use place value, known and derived facts to multiply dividing by 1; multiplying together three numbers. → Solve problems involving multiplying and adding, inc numbers by one digit, integer scaling problems and har connected to m objects. 	and divide mentally, including: multiplying by 0 and 1; luding using the distributive law to multiply two digit	→ Describe positions on a 2-D grid as coordinates in the first quadrant. → Plot specified points and draw sides to complete a given polygon. → Describe movements between positions as translations of a given unit to the left/right and up/down.
Small Steps	→Add two 4-digit numbers – more than one e: →Subtract two 4-digit numbers – more than or →Efficient subtraction. Revisited →Estimate answers. Revisited →Checking strategies. Revisited		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.	→ Divide by 100. NF—1 Recall multiplication and division facts multiplication tables as multiples of the corre → Multiply by 1 and 0. → Divide by 1. → Multiply and divide by 3. → The 3 times-tal → Multiply and divide by 6.	up to 12x12 and recognise products in esponding number. bles Multiples of 3.	→ Describe position. → Draw on a grid. → Move on a grid. → Describe a movement on a grid. 4G—1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.



Spring

	Week 1	Week 2 Week 3		Week 4	Week 5	Week 6		
	Place Value	Multiplication and Division		Area	Fractions			
Vocabulary	between number line round up/down	Multiplication division multiply divide factor factor pairs multiple product A grouping groups of tables facts place value place holder arrays row column corresponding fact inverse multiplication table operation remainder column multiplication formal method efficient method		Area rectilinear squared ³ unit of measurement	Fraction numerator denominator hundredths mixed number parts	•		
KIRFS	Know Multiplication and Division facts for the 7 times tables							
Y3 Consolidation	→ Round any number to nearest 10 or 100. Apply understanding of the number system to solve number and practical problems and puzzles involving numbers, money or measures. Explain methods and reasoning orally and in writing, including using diagrams and symbol.	→ Write and calculate mathematical statemen multiplication tables that are known, includin numbers, using mental and progressing to for → Use rounding, estimation and inverse operate determine, in the context of a problem, levels of	g for two-digit numbers times one-digit rmal written methods. tions to check answers to calculations and	aUse all four operations to solve problems including scaling problems involving measure (e.g. length, mass, volume, money). Information required to solve a problem is often drawn from tables, including timetables, graphs and charts.	→ Continue to recognise fractions in the numbers, measurements, a shape, and u a quantity. → Recognize, find and write fractions of unit fractions and non-unit fractions wit → Understand the relation between unit (fractions of), and division by integers. → Recognize and use fractions as numbe unit fractions with small denominators. line and deduce relations between them equivalence. Go beyond the 0 − 1 intervameasure. → Compare and order unit fractions, and denominators. → Recognise and show, using diagrams, small denominators. a Count up and down in fractions including the comparent of the country of the co	nit fractions as a division of a discrete set of objects: th small denominators. fractions as operators ers: unit fractions and non- Use them on a number such as size and al, including relating this to d fractions with the same equivalent fractions with		
NC	→ Round any number to the nearest 10, 100 or 1000. → Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones). → Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	→ Recall and use multiplication and division facts to be place value, known and derived facts to multiply 0 and 1; dividing by 1; multiplying together three places and use factor pairs and commutative Multiply two digit and three digit numbers by a Solve problems involving multiplying and adding, two digit numbers by one digit, integer scaling property of the problems involved to mobjects.	ultiply and divide mentally, including: multiplying ee numbers. ity in mental calculations. one digit number using formal written layout. including using the distributive law to multiply	àFind the area of rectilinear shapes bycounting squares.	→ Recognise and show, using diagrams, fam fractions. → Count up and down in hundredths; recog when dividing an object by one hundred ant → Add and subtract fractions with the same → Solve problems involving increasingly har quantities, and fractions to divide quantities where the answer is a whole number.	nise that hundredths arise d dividing tenths by ten. denominator. der fractions to calculate		
Small Steps	4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) Estimate numbers on a number line. Order numbers to 10,000 Roman numerals Nound to the nearest 10. Round to the nearest 100. Round to the nearest 100. Round to the nearest 1,000. Round to the nearest 10,100 or 1,000	→ Multiply and divide by 7. → 7 times-table and division facts. 4NF—2 Solve division problems, with two that involve remainders, and interpret recontext. 11 times tables and division facts → Multiply and divide by 12 → 12 times tables and division facts → 11 and 12 times-table. Multiply by 1 and 0 4MD—2 Manipulate multiplication and diapply the commutative property of mult → Multiply 3 numbers. 4MD—3 Understand and apply the distribt → Factor pairs. → Efficient multiplication.	emainders appropriately according to the vision equations, and understand and iplication.	→ What is area? → Counting squares → Making shapes. → Comparing area.	→ Unit and non-unit fractions → What is a fraction? → Tenths → Count in tenths → Equivalent fractions (1) → Equivalent fractions (2). → Equivalent fractions (2). → Equivalent fractions (2). → Fractions greater than 1. → Count in fractions. 4F—1 Reason about the location of r linear number system.	nixed numbers in the		

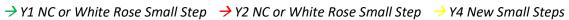


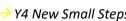




Spring

	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Multiplication and Division		Fractions		Decimals	Time
Vocabulary			· ·		Decimal equivalent equivalence tenths hundredths decimal point decimal fraction decimal places	Analogue digital 12-hour 24-hour convert AM PM
KIRFS			Know Multiplication and	d Division facts for	the 12 times tables	
Y3 Consolidation	→ Write and calculate mathematical statement using the multiplication tables that are known, times one-digit numbers, using mental and pro methods.	including for two-digit numbers gressing to formal written	⇒ Recognise that tenths arise from diequal parts and in dividing one-digit 10, connecting them to place value, division by 10. Add and subtract fractions with the within one whole e.g. 5/7 + 1/7 = 6/7 ⇒ Apply understanding of fractions to routine problems and puzzles involvin or measures. → Explain methods and rwriting, including using diagrams and	numbers or quantities by ecimal measures and e same denominator of solve routine and nongrumbers, shapes, money reasoning orally and in	digit numbers or quantities by 10, connecting them to place value, decimal measures and division by 10.	⇒ Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and the 12-hour and 24-hour clocks. Use the digital 12 hour clock. ⇒ Know the number of seconds in a minute and the number of days in each month, a year and leap year. ⇒ 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. ⇒ Compare duration of events e.g. the time taken by a particular event or task.
NC	→ Recall and use multiplication and division facts for 12. → Use place value, known and derived facts to multimultiplying by 0 and 1; dividing by 1; multiplying togys Recognise and use factor pairs and commutativity → Multiply two digit and three digit numbers by a owritten layout. → Solve problems involving multiplying and adding, to multiply two digit numbers by one digit, integer scorrespondence problems such as n objects are con	iply and divide mentally, including: gether three numbers. v in mental calculations. ne digit number using formal including using the distributive law caling problems and harder	→ Recognise and show, using diagrams, fequivalent fractions. → Count up and down in hundredths; recarise when dividing an object by one hunten. → Add and subtract fractions with the sare solve problems involving increasingly quantities, and fractions to divide quantifractions where the answer is a whole number of the sare solves.	cognise that hundredths idred and dividing tenths by me denominator. harder fractions to calculate ties, including non-unit	→ Recognise and write decimal equivalents of any number of tenths or hundredths.	→ 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.
Small Steps	→Written methods. Multiply 2-digits by 1-digit. Multiply 2-digits by 1-digit. Multiply 3-digits by 1-digit. Divide 2-digits by 1-digit digit. Divide 2-digits by 1-digit (1). Divide 2 digits by 1-digit (2). Correspondence problems.		→ Add fractions → Add 2 or more fractions. → Subtract fractions. → Subtract 2 fractions. → Subtract 2 fractions. → Subtract from whole amounts. → Fractions of a set of objects (1) → Fractions of a set of objects (2) → Calculate fractions of a quantity. → Problem solving — calculate quantities. 4F—2 Convert mixed numbers to improversa. 4F—3 Add and subtract improper and is same denominator, including bridging	oper fractions and vice mixed fractions with the	→ Recognise tenths and hundredths. → Tenths as decimals. → Tenths on a place value grid. → Tenths on a number line.	→ Telling time to 5 minutes → Telling the time to the minute → Using AM and PM → 24 hour clock → Hours, minutes and seconds. → Years, months, weeks and days. → Analogue to digital – 12 hour.

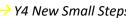






Summer

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Place Value	Decimals		Money		Decimals
Vocabulary	, Θ,	Decimal equivalent equivalence decimal fraction decimal places	tenths hundredths decimal point	Pounds pence amount two decimal places	rounding nearest decimal place	Decimal equivalent equivalence tenths hundredths decimal point decimal fraction decimal places
KIRFS		Know Multipli	cation and Division facts for a	II tables up to 12x12		
Y3 Consolidation	→See previous	→See previous			tin recognising the value of coins; add oney to give change, using both £ and rd £ and p separately.	⇒See previous
Y4 NC	→ 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 the effect of dividing a one or two value of the digits in the answer as ones, t	enths and hundredths. ems involving fractions and decimals to two sure [for example, kilometre to metre]. digit number by 10 or 100, identifying the	in pounds and pence.	late different measures, including money oney problems involving fractions and	→Solve simple measure and money problems involving fractions and decimals to two decimal places. →Compare numbers with the same number of decimal places up to two decimal places.
Small Steps	→ Negative numbers. → Roman numerals to 100.	→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.		→ Pounds and pence. → Ordering amounts ofmoney. → Convert pounds and pence → Add money → Subtract money → Find change → Using rounding to estimate n → Four operations.	noney.	→ Bonds to 10 and 100. → Make a whole. → Write decimals. → Compare decimals.





Summer

	Week 7	Week 8	Week 9	Week 10 Week 11	Week 12
	Decimals	Multiplication and Division	Time	Statistics	Addition and Subtraction
ary	hundredths decimal point decimal fraction decimal places round estimate ¼, ½ and ¾ as decimals		hour convert AM PM	Discrete continuous bar chart line graph interpret data compare comparison line graph relationship represent label title axis axes most/least popular/common	Column addition/subtraction formal method regrouping exchange check inverse
KIRFS			Identify Equivalent Fra	ctions	
Y3 Consolidation	See previous	⇒See previous		→ Interpret and present data using bar charts, pictograms and tables in different contexts. → Understand and use simple scales e.g. 2, 5, 10 units per cm in pictograms and bar charts with increasing accuracy. → Solve one and two-step questions e.g. 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables. → Pose their own questions that can be answered using information presented in different bar charts pictograms and tables. Understand and use Venn and Carroll diagrams to support reasoning about numbers or shapes → Apply the skills of collecting, representing and interpreting statistical data across the curriculum within and beyond mathematics, sometimes in response to an enquiry of interest to and suggested by pupils. → Solve calculation problems using information from a range of tables and charts.	⇒See previous
Y4 NC	whole number. → Recognise and write decimal equivalents to ¼, ½ and ¾.	→ Recall and use multiplication and division facts for multiplication tables up to 12 × 12. → 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.	24-hour clocks. → Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	→ 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.	→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.
Small Steps	→ Order decimals. → Round decimals. → Halves and quarters	→Revisit all times tables →Efficient multiplication. → Written Methods	→ Analogue to digital – 12 hour. Revisited → Analogue to digital – 24 hour.	 →Interpret charts. →Comparison, sum and difference →Introducing line graphs. →Line graphs. 	→ Efficient subtraction. Revisited →Estimate answers. Revisited → Checking strategies. Revisited