Intent Year 3/Year 4

Block	Topic	Term	Number of Weeks	Retrieval Focus
1	Number and Place Value			
2	Addition and Subtraction			
3	Multiplication and Division			
4	Fractions			
5	Decimals/Money			
6	Geometry			
7	Statistics			
8	Measure – Time			
9	Measure – Length and Perimeter/Mass and Capacity			

Intent Year 3/Year 4

Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning Year 3 Detailed in Planning Overview	Sequence of learning Year 4 Detailed in Planning Overview
Number and Place Value	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). 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. Compare and order numbers up to 1000. 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. Identify, represent and estimate numbers using different representations.	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). NPV–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 Order and compare numbers beyond 1000. NPV–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. NPV–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 Identify, represent and estimate numbers using different representations. NPV–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	*Introduction to resources *Building 3 digit numbers out of a range of resources * Value of digits in a 3 digit number with a range of representations *Systematic problem solving – making a range of 3-digit numbers with 3-digit cards *Partitioning in non-standard ways *Recognising that there are 10 tens in 100 and applying this to other 3 digit numbers *Count in 100s – Ensure the link to counting in 10s *1, 10, 100 more or less *Counting in 50s *Comparing and ordering 2 numbers *Positioning numbers on blank and scaled number lines *Ordering a range of numbers *Application to substantial problems	*Introduction to resources *Building 4-digit numbers out of a range of concrete resources * Value of digits in a 4 digit number with a range of representations *Composing 4-digit numbers and discussing column value of each digit of these numbers (including the role of 0 in a number *Standard and non-standard partitioning *Recognising that there are 10 hundreds in a thousand, 100 tens in 1000, 1000 ones in 1000 and using this to represent a 4-digit number *Counting in 1000s, *Finding 1000 more or less than a given number *Counting in 50s and 25s *Comparing numbers beyond 1000 * Positioning numbers on a blank and scaled number lines with a variety of starting and ending points and a range of increments. *Ordering numbers *Rounding numbers to the nearest 10, 100 and 1000

	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. Read and write numbers up to 1000 in numerals and in words. Solve number problems and practical problems involving these ideas.	Round any number to the nearest 10, 100 or 1000. NPV–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. 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.		*Reading and representing numbers on a number line to include negative numbers * Reading and writing Roman numerals up to 100

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Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning - Year 3 Detailed in Planning Overview	Sequence of learning - Year 4 Detailed in Planning Overview
Addition and 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. 3NF–1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice. NF–3 Apply place-value knowledge to known additive and multiplicative number facts AS–1 Calculate complements to 100 AS–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 with up to three digits, using formal written methods of columnar addition and subtraction. AS–2 Add and subtract up to three-digit numbers using columnar methods	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. 4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100), 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.	*Consolidate number facts from KS1 (bonds within 10, bonds to 10, bonds to 20, compliments to 100) *Related number facts – scaling *Adding using place value *Fact Families *Missing box and inverses *Addition and Subtraction using Place Value *Addition and subtraction using partitioning. *Add a 3-digit number and ones mentally using bridging *Add a 3-digit number and tens mentally using bridging *Subtract a 3-digit number and ones mentally using bridging *Subtract a 3-digit number and tens mentally using bridging *Estimation *Finding the difference *Adding using partitioning and bridging *Adding using near doubles *Reordering calculations to look for known facts and aid efficiency *Compensating *Written addition *Written subtraction *Deciding on most appropriate method *Problem solving and consolidation.	*Recapping known facts (bonds within 10, to 10, to 20, compliments to 100) *Scaling known facts by 10, 100 and 1000 to create related facts *Understanding the inverse relationship between addition and subtraction and generating fact families *Using inverse operations within addition and subtraction to check calculations *Addition and Subtraction using Place Value *Addition and subtraction using partitioning. *Adding multiples of 1, 10, 100 and 1000 to a number - bridging *Subtracting multiples of 1, 10, 100 and 1,000 to a number - bridging *Estimating *Finding the difference' within subtraction *Adding using partitioning and bridging *Adding using near doubles *Reordering calculations to look for known facts and aid efficiency *Compensating *Standard written method of addition (4 digit add 4 digit)

	Estimate the answer to a calculation and use inverse operations to check answers. AS–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. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.			*Standard written method of subtraction (4 digit subtract 4 digit) *Adjusting *Reflecting on the most efficient strategy *Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.

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Multiplication and Division	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. 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. 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. NF–3 Apply place-value knowledge to known additive and multiplicative number facts 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. MD–1 Apply known multiplication and division facts to solve	Recall multiplication and division facts for multiplication tables up to 12 × 12. NF–1 Recall multiplication and division facts up to 12x12 and recognise products in multiplication tables as multiples of the corresponding number. 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. 4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) MD–3 Understand and apply the distributive property of multiplication Recognise and use factor pairs and commutativity in mental calculations. MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. 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	*Recap 2x, 5x, 10x tables *Commutativity *4x tables *8x tables * Links and the development of multiplication * 3x tables *Problem solving *Arrays and the links to division *x by 10 *Extending related facts *Doubling and Halving *Partitioning to Multiply *Additional Mental Strategies *Consolidation of mental strategies and problem solving *Scaling *Correspondence problems *Written multiplication 2-digit by 1-digit *Division *Consolidation and problem solving	*Recap 2, 5 and 10 times tables including patterns and generalisations *Recap 4, 8 and 3 times tables including patterns and generalisations *Teach 6, 12, 9, 11 and 7 times tables *Arrays and links to division *Solve missing box calculations using known facts *Multiplying by 10 and 100 *Using scaling numbers by 10 and 100 to solve calculations using known facts *Doubling and Halving *Compensating *Additional Mental strategies *Dividing by 1, 10 and 100 *Find factors of numbers using a systematic approach *Multiplying 3 numbers using the most efficient strategy *Solving problems including using scaling and correspondence *Written strategy for multiplication (Check school calculation policy) * Division if stated in school calculation policy *Problem Solving

	contextual problems with different structures, including quotative and partitive division.	numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders		

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Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning - Year 3 Detailed in Planning Overview	Sequence of learning - Year 4 Detailed in Planning Overview
Fractions	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. 3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. 3F–2 Find unit fractions of quantities using known division facts (multiplication tables fluency). 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. Add and subtract fractions with the same denominator	Recognise and show, using diagrams, families of common equivalent fractions. F–1 Reason about the location of mixed numbers in the linear number system F–2 Convert mixed numbers to improper fractions and vice versa. 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. F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers	*Introduction/recap on Fractions using Fraction strips *Unit fractions *Non-unit fractions *Making a whole *Making a half *Placing fractions on a number line (ordering fractions while exploring equivalents) *Equivalent fractions *Ordering and comparing fractions *Fraction of an amount *Addition of Fractions *Subtraction of Fractions	*Recapping children's prior knowledge of fractions * Unit and non-unit fractions *Investigating using pictorial or practical resources how to make a whole and make a half *Placing fractions on a 0-1 number line *Placing mixed numbers and improper fractions on a number line *Converting between improper fractions and mixed number *Equivalent fractions using multiplication *Finding fractions of an amount (unit and non-unit fractions) *Adding fractions with the same denominator (total may exceed one whole) *Subtracting fractions with the same denominator (start number may be more than one whole)

	within one whole [for example, 5/7+ 1/7 = 6/7]. 3F–4 Add and subtract fractions with the same denominator, within 1. Compare and order unit fractions, and fractions with the same denominators. 3F–3 Reason about the location of any fraction within 1 in the linear number system. Solve problems that involve all of the above.			

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Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning - Year 3 Detailed in Planning Overview	Sequence of learning - Year 4 Detailed in Planning Overview
Decimals/ money	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. Add and subtract amounts of money to give change, using both £ and p in practical contexts	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 ¼, ½ and 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 MD–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. 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 Estimate, compare and calculate different measures, including money in pounds and pence Solve simple measure and money problems involving fractions and decimals to two decimal places.	* Using a bead string or fraction wall recap tenths as a fraction *Relate a tenth to being 0.1 as a decimal because 1 is in the tenths column *Recognising coins and making amounts *Relate tenths to money (10p is 1 tenth of pound, 40p is 4 tenths of a pound) *Counting forwards and backwards in tenths *Compare and order amounts of money to 1 dp (an amount to the nearest 10p (£3.40 > £2.50 £5.60 < £5.70 340p > £2.60) *Finding the total of amounts *Finding the difference between amounts * Change * Solving word problems involving money to 1dp including giving change	*Recap year 3 decimals unit and look at counting in tenths *Using money, base 10 or a bead string investigate a hundredth as a fraction and a decimal (1 out of 100 beads is 1/100 or 0.01 because we have 1 in the hundredth column *Connecting tenths and hundredths – how many hundredths are there in a tenth? *Linking to money – how many 10p are in a pound? How many 1p are in a pound *Positioning hundredths on a number line and using this to order and compare decimals to 2 dp *Positioning decimals to 1 dp on a number line and using this to discuss which whole number this decimal would round to *Identifying where 0.5, 0.25 and 0.75 would be on a number line and discussing that these are positioned at ½, ¼ and ¾ points on the number line *Dividing a 1 or 2-digit number by 10 or 100 and reading the answer as ones, tenths and hundredths *Comparing different amounts of money *Recapping calculating strategies from number unit to calculate with money to 2 dp *Solve problems involving money

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Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning Year 3 Detailed in Planning Overview	Sequence of learning Year 4 Detailed in Planning Overview
Geometry Properties of Shape **Position and Direction**	Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3D shapes in different orientations and describe them. G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides. Recognise angles as a property of shape or a description of a turn. G–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. 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. G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. G–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. 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. G–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. Complete a simple symmetric figure with respect to a specific line of symmetry. 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. G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant	*Identify horizontal, vertical, parallel and perpendicular lines *Recognise right angles *Relating right angles to turns *Identify right angles in shapes *Problem solving with right angles *Applying 2D shape understanding to be able to sort 2D shapes *Drawing 2D shapes *Identifying 3D shapes *Building 3D shapes from modelling materials *Recognising 3D shapes in different orientations	*Recap 2D shapes *Recap language of vertical, parallel and perpendicular *Identify acute, obtuse and right angles *Recognise acute, obtuse and right angles in shapes *Order angles *Classify triangles *Identify and classify quadrilaterals *Symmetry *Coordinates *Completing shapes on a quadrant when given the coordinates for vertices of that shape *Describing how a shape has been translated

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Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning Year 3 Detailed in Planning Overview	Sequence of learning Year 4 Detailed in Planning Overview
Statistics	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.	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.	*Tally Charts *Pictograms (interpreting and creating) *Bar Charts (interpreting and creating) *Comparison and sum questions relating to data *Substantial problems	*Recap Tally Charts *Pictograms (interpreting and creating) *Bar Charts (interpreting and creating) *Comparison and sum questions relating to data *Interpretation questions *Line graphs

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Strand	Y3 NC ARE Including Ready to Progress	Y4 NC ARE Including Ready to Progress	Sequence of learning Year 3 Detailed in Planning Overview	Sequence of learning – Year 4 Detailed in Planning Overview
Measures - Time	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].	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.	*Introduction to time *Telling the time to the nearest minute – past the hour *Telling the time to the nearest minute to the hour *Telling the time from a clock with roman numerals *Using the vocabulary of am/pm *Telling the time from a 12 hour and 24 hour clock *Comparing times in minutes and seconds *Comparing durations of events *Knowing the number of days in a month, year and leap year	*Introduction to time *Problem solving – telling the time *Telling the time from a clock with roman numerals *Using the vocabulary of am/pm *Telling the time from a 12 hour and 24 hour clock *Converting time from 12 to 24 hour and 24 hour to 12 hour *Converting between units of time *Comparing durations of events *problem solving

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Measurement	Measure, compare, add and subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2-D shapes	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. Estimate, compare and calculate different measures, including money in pounds and pence.	*Measure and compare lengths (mm, cm, m) *Problem solving with length *Measuring and calculating the perimeter of simple shapes and perimeter of areas (e.g the classroom) *Measure and compare volume (ml and litres) *Measure and compare mass (kg and g) *Compare and estimate measures consolidation *Addition and subtraction measures problems *Multiplication and division word problems * Choose suitable units of measure and estimate accurately	*Measure and compare lengths cm, mm, m – revision *Introduce km *Convert between units of measure cm, mm, m , km *Perimeter of regular shapes *Perimeter of rectilinear shapes *Area by counting internal squares *Convert between units of measure (ml and litres) *Problem solving with volume and capacity *Convert between units of measure (kg and g) *Compare and estimate measures consolidation *Addition and subtraction measures problems *Multiplication and division word problems * Choose suitable units of measure and estimate accurately