Suggested oral mental starters (ongoing, throughout the term):
- Count forwards from 0, and backwards, in twos, fives and tens to the 12th multiple; count forwards from 0 in threes to the 12th multiple
- Recall multiplication and division facts for the 2, 5 and 10 times tables
- Recognise odd/even numbers, to at least 20, and relate to multiples/groups of two
- Say the number that is 10 more/less than any number within 100 (refer to the hundred square)
- Count on and back in 10s from any one or two digit number (refer to the hundred square)
- Position numbers on a number line
- Recall and use all pairs of numbers with a total of 20 and all pairs of numbers within 20; give addition and subtraction facts for the pairs of numbers
- Derive pairs of multiples of ten that total 100; give addition and subtraction facts (e.g. 40 + 60 = 100; 100 – 40 = 60)
- Add three one-digit numbers, using knowledge of number pairs e.g. 7 + 3 + 5 = 10 + 5 = 15
- Make estimates of quantities within 50 (and beyond) by grouping objects into 2s, 5s or 10s
- Recall doubles to double 12 and recall the corresponding halves
- Read the time to the hour, the half hour and the quarter hour (past and to) using an analogue clock (use daily routines to reinforce)

Areas of Study	No of days	Statutory requirements and non-statutory guidance	Suggested Key Vocabulary
Number Number **Week 1**	3 - 5	Read and write numbers to 100 in numerals **and** words Given a number, identify the number that is **10 more or less** within 100 Say the number that comes between two numbers within 100; count on and back in tens from any one- or two-digit number (refer to hundred square) Order numbers from 0 up to 100 and position them on a number line and/or a 100 square Compare numbers from 0 up to 100; **introduce** the <, > and = signs and use them when comparing two numbers e.g. 42 > 24 Reason about numbers e.g. If you wrote these numbers in order, starting with the smallest, which one would come third: 62, 18, 6, 26, 80 Explain how you ordered the numbers	Number, numerals Zero, one, two………to one hundred Ten more, ten less Between, before, after Order, compare Greater than (>) Less than (<)

Number Number and place value **Week 2**	5	Count on and back in 10s from any one or two digit number (refer to the hundred square)- consider as mental/oral starters	Place value Digit, tens, ones/units Partition
		Recognise the place value of each digit in a two-digit number using practical apparatus e.g. straws, cubes, ten sticks and units, Dienes, Unifix, arrow/ place value cards	
		Partition two-digit numbers into tens and ones/units e.g. 56 = 50 + 6; 38 = ☐ + 8; 63 = 60 + ☐	
		Partition numbers in different ways (into different combinations of tens and ones) e.g. 56 = 50 + 6; 56 = 40 +16; 56 = 30 + 26… (consider using base ten resources such as Diennes to support understanding)	
		Solve addition/subtraction problems using knowledge of place value e.g. There are 56 children in the playground. 10 more children come and join them. How many children altogether are there on the playground now? How did you work it out?	Greater than/less than, <,> Order
		Reason about numbers e.g. 32 > 23 true or false? How do you know? If you wrote these numbers in order, starting with the smallest, which one would come third: 60, 16, 98, 26, 89 Explain how you ordered the numbers	
Number Addition **Week 3**	5	Add three one-digit numbers using knowledge of number pairs e.g. 7 + 3 + 5 = 10 + 5 = 15	Addition,+, add, plus, more, put together, altogether, total, count on =, equals, is the same as, calculation, number sentence
		Add two two-digit numbers within 100, initially where **no regrouping** is required, with the support of base ten resources (such as Diennes), a 100 square and/ or an empty number line e.g. 56 + 32	
		Add two-two-digit numbers where **regrouping** is required e.g. 38 + 26	Empty number line
		Understand that it is sometimes easier to re-order numbers when adding e.g. 24 + 65 becomes 65 + 24 and show an understanding that addition can be done in any order	Estimate, estimation
		(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)	
		Use estimation to check that the answer is reasonable e.g. know that 34 + 25 = 58 is incorrect because 4 + 5 = 9; 40 + 50 < 100 because 50 + 50 =100	Problem, answer/solution
		Solve one- step word problems, which involve addition, including in the context of money e.g. I buy an apple that costs 42p and a banana that costs 35p. How much do I spend altogether?	
		Extend with two-step word problems for children 'working at greater depth'	

Number Subtraction **Week 4**			Subtract two two-digit numbers within 100, initially where **no regrouping** is required, with the support of base ten resources (such as Diennes), a 100 square and/ or an empty number line e.g. 86 – 43	Subtraction, - , take away, subtract, minus, count back How many are left?
			Subtract two-two-digit numbers where **regrouping** is required, with the support of base ten resources (such as Diennes), a 100 square and/ or an empty number line e.g. 72 - 34 **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)**	=, equals, is the same as, calculation, number sentence Empty number line Estimate, estimation
			Use **estimation** to check that the answer is reasonable e.g. 85 – 32 = 62 is incorrect because 80 – 30 = 50	
			Solve one- step word problems, which involve addition, including in the context of money e.g. I have 85p in my purse and I buy a satsuma that costs 32p. How much money do I have left? **Extend** with two-step word problems for children 'working at greater depth' (consider problems that involve both addition and subtraction)	Problem, answer/solution
Measurement Mass **Week 5**		5	Use kilogram (kg) as a unit of measurement for mass e.g. find everyday objects that weigh more than/ less than/ about a kilogram (relate to everyday objects)	Estimate, compare, measure, weigh, mass
			Introduce gram (g) as a unit of measurement e.g. What weighs about 1g? What weighs about 100g?	Gram (g), kilogram (kg)
			Choose and use appropriate standard units to estimate and measure the mass (kg/g) of everyday objects to the nearest appropriate unit, using weighing scales where scales are in divisions of ones, two, fives or tens (where all the numbers are given) Compare and order mass using comparative language (see vocabulary) and the symbols <, > and =	Heavier than, lighter than Heaviest, lightest <, >
			Follow a line of enquiry relating to mass e.g. Is an apple heavier than a pear? How will you find out? Is this true or false? A pair of trainers is heavier than a kilogram. How will you find out?	Weighing scales, balance, scales
			Solve word problems in the context of mass e.g. My snack bag of fruit and nuts contains 25g of raisins and 35g of peanuts. How much does my snack bag weigh? Alesha weighs 36 kg and her mother weighs 58 kg. How much lighter than her mother is she? (Consider calculation methods taught in week 3 and week 4)	Problem, answer/solution

Number Multiplication **Week 6**	5	Count forwards and backwards to and from 0 in twos, fives and tens to the 12th multiple; begin to count in multiples of three -consider as mental/oral starters	Lots of, groups of, repeated addition, times, multiply, multiplied by, multiplication, x, =, multiple
		Recognise number patterns using known multiples e.g. What are the missing numbers? 35, 30, 25,☐, 15, 10,☐	
		Recall and use multiplication facts for the 2, 5 and 10 multiplication tables (including x 0)	
		Calculate mathematical statements for multiplication and write them using the signs; solve missing number problems using known facts e.g. ☐ x 5 = 20	Array, row, column
		Show that multiplication of two numbers can be done in any order e.g. 2 x 5 = 10 and 5 x 2 = 10 (consider the use of arrays to support understanding)	
		Consolidate multiplication as repeated addition and as arrays using known multiples e.g. twos, fives and tens	
		Extend by using an empty number line to count on using known multiples	Empty number line, count on
		(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)	
		Solve one -step multiplication word problems using practical resources, informal written methods (including pictures and arrays), empty number lines and x and = signs E.g. I have four rabbits and they each eat five carrots. How many carrots do they eat altogether?	Problem, answer/solution
Number Division **Week 7**	5	Count forwards and backwards to and from 0 in twos, fives and tens to the 12th multiple; begin to count in multiples of three -consider as mental/oral activities	Share, groups of, divide, divided by, share equally, repeated subtraction, division, ÷, =
		Recall and use division facts for the 2, 5 and 10 multiplication tables (including dividing by one)	
		Calculate mathematical statements for division and write them using the ÷ and = signs and solve missing number problems using known facts e.g. 30 ÷☐= 3	Array, row, column
		Consolidate division as sharing, grouping, including the use of arrays	Empty number line, count back
		Extend by using an empty number line to count back (repeated subtraction) using known multiples	
		(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)	Problem, answer/solution
		Solve one -step division word problems using practical resources, informal written methods (including pictures and arrays), empty number lines and signs ÷ and = e.g. Four children share 12 apples equally. How many apples do they each have?	

Number Fractions **Week 8**	5	Recall doubles of numbers to double 10 (then double 12) and find the corresponding halves; derive doubles of multiples of ten and the corresponding halves e.g. double 20 is 40, half of 40 is 20- consider as mental oral starters	Double Fraction Half, one quarter, two quarters, three quarters, one third, whole, 1/2, 1/4, 2/4, 3/4, 1/3 equal
		Consolidate finding one half and one quarter of shapes and of a small set of objects, quantities and lengths e.g. ½ of 20cm, ¼ of 12p (link unit fractions to equal sharing, grouping and division)	
		Recognise, name and write fractions two quarters and three quarters using words and fraction notation; find 2/4, 3/4 of familiar shapes	Share, groups of, divide, divided by, shared equally, ÷
		Begin to find 3/4 of a small set of objects, using practical resources and diagrams to support e.g. ¾ of 12 cherries	
		Recognise the equivalence of half and two quarters using diagrams and resources and through practical activities, such as paper folding	
		Extend by introducing one third (1/3) using the word and fraction notation; identify 1/3 of a shape and find 1/3 of a small set of objects (using equal sharing, grouping and with practical resources)	
		Solve problems, which involve fractions e.g. There are 12 apples in a bag. I eat ¼ of the apples. How many do I eat? How many are left in the bag?	Problem, solution
		Reason about fractions e.g. Which would you rather have- one quarter of £20 or one half of £12? Why? How did you work it out?	Reason
Measurement Money & Time **Week 9**	2	Consolidate recognising different coins (including £2) and notes (£5, £10, £20) and understand their value; use the symbols (£) and pence (p); know the relationship between pounds and pence (£1 = 100p)	Coin, note, penny, pence (p), pound (£)
		Find different combinations of coins that equal the same amount of money in practical contexts e.g. Which coins could you use to pay for the book that costs 40p? Consider using the problem 'Monster' **(See Mathematical Challenges for all pupils booklet, 2016)**	Combination, solution
	3	Use units of time (minutes & hours) and know the relationships between them; know that there are 60 minutes in an hour **and** 24 hours in one day	O'clock, half past, quarter past, quarter to
		Read the time to the hour, the half hour and the quarter hour (past and to) using an analogue clock	Analogue clock, minute, hour, day
		Begin to tell the time to the nearest five minutes using an analogue clock (past the hour and then to the hour) for children 'working at greater depth'	

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Geometry Properties of 2D shapes & Properties of 3D shapes & Position and direction **Week 10**	2	Introduce **right angles** and identify them in 2D shapes; relate right angles to quarter turns	All vocabulary related to 2D shape from previous terms including: pentagon, hexagon, symmetry, symmetrical, line of symmetry
		Compare and sort common **2D shapes** according to their properties using simple Venn or Carroll diagrams e.g. shapes with right angles/shapes with no right angles	Extend with: right angle
	2	Identify and describe the properties of **3D shapes**, including the number of edges, vertices and faces	Venn diagram, sort
		Identify 2D shapes on the surface of 3D shapes and use 'circular', 'rectangular', 'triangular' to describe faces	All vocabulary related to 3D shapes from previous terms including: prism, edges, faces, vertices
		Compare and sort 3D shapes (including everyday objects) according to their properties using simple Venn diagrams or sorting circles e.g. shapes that have square faces; shapes that have circular faces; shapes that have triangular faces	Extend with: circular, rectangular, triangular (faces)
		Reason about 2-D and 3-D shapes e.g. What is the same about these two shapes; what is different about these two shapes?	
	1	Use mathematical language to describe movement using half, quarter and three quarter turns, clockwise and anti-clockwise (relate to telling the time/ the clock face)	Turn, whole turn, half turn, quarter turn, three-quarter turn
		Apply rotations **in practical contexts** and relate quarter turns to right angles e.g. giving instructions to other pupils, programming robots	Clockwise, anti-clockwise Right angles
Number Addition/ subtraction (mental calculation strategies) & **Statistics** Data handling **Week 11**	3	Recall and use all pairs of numbers with a total of 20 and all pairs of numbers within 20; give addition **and** subtraction facts e.g. 12 + ☐ = 20; ☐ + 3 = 16; 20 -☐ = 15	Addition, +, add, plus, more, put together, altogether, total, sum of, =, equals, is the same as
		Show that addition of two numbers can be done in any order e.g.15 + 5 = 20, 5 + 15 = 20	Subtraction, -, take away, subtract, minus, difference
		Add three one-digit numbers, using knowledge of number pairs e.g. 6 + 4 + 7 = 10 + 7 = 17	Count on/ count back
		Find a small difference by counting on, including with the use of a marked number line or an empty number line e.g. 32 – 29 = 3; the difference between 29 and 32 is 3 **(See Mental Calculation Strategies, 2017)**	
	2	Interpret simple tally charts Interpret block diagrams and answer questions by counting the number of objects in each category; construct simple block diagrams using given/collected information Interpret simple block diagrams with scales of divisions of two, five or ten	Tally chart Block diagram Data Scale
		Begin to answer simple questions about totalling and comparing the data e.g. how many children altogether chose cats and dogs? How many more children chose dogs than hamsters? (**Possible link to the Science curriculum**)	

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Measurement Capacity & Temperature **Week 12**	3	Use litre (l) as a unit of measurement e.g. find everyday containers that hold more than/less than a litre; find containers that hold about a litre/ half a litre	Estimate, compare, measure Capacity/ volume litre (l), millilitre (ml) More than, less than
		Introduce millilitres (ml) as a unit of measurement in practical contexts and using real life containers	
		Choose and use appropriate standard units to estimate and measure capacity (l/ml) to the nearest appropriate unit, where scales are in divisions of ones, two, fives or tens, using measuring jugs and cylinders	
		Compare and order capacity using comparative language and symbols <, > and = (using everyday containers)	
		Follow a line of enquiry relating to capacity e.g. Is it true that my flask holds more tea than my mug? How could you find out? Using a litre of apple juice, how many cups can you fill?	
	2	Introduce ^{0} C as a unit of measurement for **temperature**; read a thermometer (positive temperatures only) to the nearest appropriate unit	^{0} C, temperature, thermometer Months (January, February…), Seasons (spring, summer, autumn, winter)
		Relate temperature to the months/seasons of the year (possible link to science)	

Additional weeks

To be used for:
- assessment, consolidation and responding to AfL
- additional using and applying activities

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