Suggested oral mental starters (ongoing, throughout the term):

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- Count forwards and backwards in twos, fives and tens to the 12th multiple
- Recall multiplication and division facts for the 2 and 10 times table
  (See Multiplication Tables Guidance, 2020)
- Given a number identify the number that is 1 more or less within 100; identify the number that comes between two numbers within 100
- Given a number identify the number that is 10 more or 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)
- Recall number bonds to ten and number bonds within 10; give addition and subtraction facts for the pair of numbers
- Recall/derive all pairs of numbers with a total of 20; give addition and subtraction facts for the pair of numbers
- Recall the doubles of all numbers to double ten (10 + 10); derive halves of even numbers within 20
- Make estimates of quantities within 20 (and beyond)
- Recognise odd and even numbers to 20
- Use ordinal numbers (1st, 2nd, 3rd ....)
- Consolidate days of the week, months of the year (use daily routines to reinforce)
- Read the time to the hour, the half hour and the quarter hour (past and then 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	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number -consider as mental/oral starters Read and write numbers to 100 in **numerals** and begin to write them in **words** Given a number, identify the number that is one more or one less within 100 Identify the number that comes between two numbers within 100 Identify the number that is ten more/ ten less than a given number within 100 (use the 100 square to support) **Reason** about numbers e.g. What is wrong with this sequence of numbers? 51, 50, 49, 47, 46. How do you know?	Number, numerals Zero, one, two………to one hundred One more, one less Ten more, ten less Between, before, after

Number Number and place value **Week 2**	5	Count on and back in 10s from any one or two digit number-consider as mental/oral starters (use the counting stick and 100 square to support)	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 (grouped in tens), arrow/ place value cards, Numicon Partition two-digit numbers into tens and ones/units e.g. 34 = 30 + 4 Solve missing number problems using knowledge of place value e.g. ☐ + 6 = 36	
		Use knowledge of place value to order and compare two-digit numbers and position them on a number line and/or a hundred square	Order
		Reason about numbers e.g. If you wrote these numbers in order, starting with the smallest, which one would come third: 42, 21, 40, 12, 14 Explain how you ordered the numbers	
Number Addition **Week 3**	5	Consolidate the vocabulary and symbols (+ and =) related to addition	Addition + add, plus, more, put together, altogether, total
		Add numbers mentally and by using concrete objects, number tracks, marked number lines and /or 100 square – a two-digit number add a one- digit number within 50 (and then beyond), by counting on e.g. 22 + 5 = 27; 38 + 4 = 42	Count on
		Begin to use an **empty number line** to add a one -digit number to a two-digit number within 50 (and then beyond 50), initially where no regrouping/ bridging is required e.g. 34 + 5 = 39	=, equals, is the same as Number sentence, calculation
		Extend by bridging the tens boundary e.g. 37 + 5 = 42 **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)**	Empty number line
		Solve one-step word problems, which involve addition, using any of the following: concrete objects and pictorial representations; number tracks/ marked number lines; hundred square; empty number lines e.g. Amy has 28 marbles. Her brother gives her five more. How many marbles does Amy have now?	Problem, answer/solution, Calculate
		Solve missing number problems e.g. 24 + ☐ = 29; 28 + ☐ = 32	Missing number

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant

Number Subtraction **Week 4**	5	Consolidate the vocabulary and symbols (– and =) related to subtraction	Subtraction - Take away, subtract, minus How many are left? Count back
		Subtract numbers mentally and by using concrete objects, number tracks, marked number lines and/or 100 square - two-digit number subtract a one- digit number within 50 (and then beyond) by counting back	
		Begin to use an **empty number line** to subtract a one digit number from a two-digit number within 50 (and beyond), initially where no regrouping/ bridging is required e.g. 28 – 5 = 23 Extend by bridging the tens boundary e.g. 45 – 6 = 39 **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)**	=, equals, is the same as Number sentence, calculation Empty number line
		Solve simple one -step word problems, which involve subtraction, using any of the following: concrete objects and pictorial representations; number tracks/marked number lines; hundred square; empty number lines Solve missing number problems e.g. 48 - ☐ = 42; 32 - ☐ = 28	Problem, answer/solution, Calculate Missing number
Number Addition and subtraction (facts) & **Geometry** Properties of shape (2D) **Week 5**	2	Recognise and use the **inverse** relationships between addition and subtraction; Recall number bonds to 10 and reason about associated facts e.g. 6 + 4 =10, therefore 4 + 6 = 10; 10 – 6 = 4; 10 – 4 = 6	Inverse Number bonds
		Derive number bonds to 20 using knowledge of number bonds to ten Solve missing number problems using addition and subtraction facts to 20 e.g. ☐ + 18 = 20; 20 - ☐ = 18	Missing number
		Add three one-digit numbers e.g. 4 + 2 + 6 = ☐ Solve problems related to addition e.g. 'Bean-bag buckets' **(See Mathematical Challenges for all pupils booklet, 2016)**	
	3	Identify and describe the properties of 2D shapes (see vocabulary), including the number of sides and corners; recognise 2D shapes in different orientations	Rectangle, square, circle and triangle, side, corner Extend with: pentagon, hexagon
		Sort common 2D shapes, for example using simple Venn diagrams or sorting circles	
		Compare and reason about common 2D shapes e.g. respond to questions, 'What's the same about these two shapes?' 'What's different about these two shapes?'	Venn diagram, sort
		Identify line symmetry (in a vertical line) in common 2D shapes **in practical contexts** e.g. by folding shapes	Symmetry, line of symmetry
		Create or complete repeating patterns using known 2D shapes	Repeating pattern

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Number Multiplication **Week 6**	4 1	Count forwards and backwards in twos, fives and tens initially to the 10th multiple and the to the 12th multiple - consider as mental/oral starters (use a counting stick to support)	Double Lots of, groups of, repeated addition, times, multiply, multiplied by, multiplication
		Represent multiplication as repeated addition and as arrays using known multiples of 2s, 5s and 10s; introduce the **multiplication (x) sign**	
		Recall and use multiplication facts for the 2 and 10 multiplication tables; record using the multiplication sign	x, array, row, column Count forwards Multiple
		Double numbers to double 10 (then to double 12), using practical resources to support	
		(See Written Calculation Policy 2017, Mental Calculation Strategies 2017 and Multiplication Tables Guidance 2020)	
		Solve simple word problems, which involve multiplication, using practical resources, arrays, informal written methods (including pictures) and related vocabulary and signs e.g. There are ten pencils in each pot. There are five pots. How many pencils are there altogether?	Problem, answer, solution
		Recognise **odd and even** numbers to 20 and relate to multiples/groups of two (use practical resources such as Numicon to support); sort odd and even numbers using simple Venn diagrams/sorting circles	Odd/even numbers
Number Division **Week 7**	5	Count forwards and backwards in twos, fives and tens to the 12th multiple -consider as mental/oral starters	Double, half
		Represent division as sharing, grouping and arrays; introduce **the division (÷) sign**	Share, groups of, divide, divided by, shared equally
		Recall and use division facts for the 2 and 10 multiplication tables	÷, = Array
		Double numbers to double 12 and find the corresponding halves, using practical resources to support	
		(See Written Calculation Policy 2017, Mental Calculation Strategies 2017 and Multiplication Tables Guidance 2020)	Problem, answer, solution
		Solve simple word problems, which involve division, using practical resources, informal written methods (including pictures) and related vocabulary and signs e.g. Ben has 30 pencils. He shares them equally between three pots. How many pencils are in each pot?	

Number Fractions **Week 8**	5	Consolidate recognising, naming and finding half of familiar shapes; know that a half is one of two equal parts; introduce **fraction notation (½)** Consolidate recognising, naming and finding a quarter of familiar shapes; know that a quarter is one of four equal parts; introduce **fraction notation (¼)** Find ½ and ¼ of a set of objects using practical resources, diagrams and pictures e.g. ½ of 12 = 6, ¼ of 8 = 2 (link unit fractions to equal sharing and grouping) Solve word problems, which involve fractions (½, ¼), using concrete objects, diagrams and pictorial representations to support e.g. I have 16 cherries and I give half of them to my friend Sita. How many cherries do I give to Sita? How many do I have left? There are 12 biscuits in a packet. I eat ¼ of them. How many biscuits do I eat? Reason about fractions e.g. would you rather have ½ of 8 cherries or ¼ of 12 cherries? How did you work it out?	Fraction Equal parts Half, quarter, whole ½, ¼ Problem, answer/solution
Measurement Time **Week 9**	5	Consolidate reading time to the hour and the half hour using an analogue clock face Read the time to the quarter hour (quarter past the hour) using an analogue clock face Draw hands on a clock face to show these times e.g. 4 o'clock; half past ten; quarter past five Extend with quarter to the hour NB use daily routines to support telling the time and make the link with fractions Use units of time (minutes & hours) and know the relationships between them; know that there are 60 minutes in an hour (one hour = 60 minutes) Understand units of time e.g. What takes about one minute to do? How many times can you write your name in one minute? What takes about one hour to do? Consolidate days of the week and months of the year; order days of the week and months of the year (use daily routines to support this)	O'clock, half past, quarter past, (quarter to) Analogue clock Minutes/hours Days of week (Monday, Tuesday…) Months of year (January, February…)

Measurement Length & **Statistics** Data handling **Week 10**	3	Use metre (m) and centimetre (cm) as standard units of length and height e.g. find objects that are longer/ shorter than a metre, that are about 10 centimetres Know that there are 100cm in a metre (100cm = 1m)	Estimate, compare, measure metre (m), centimetre (cm) Metre stick, ruler
		Choose and use appropriate standard units (m or cm) to estimate and then measure length/ height (m/cm) of everyday objects to the nearest appropriate unit, using rulers and metre sticks; compare and order lengths using comparative language	Longer than, shorter than, taller than Longest, tallest, shortest
		Follow a simple line of enquiry relating to length e.g. Is this true or false? All Year 2 children's feet measure more than 18 cm. How will you find out?	
	2	Interpret a simple pictogram; answer simple questions about a pictogram by counting the number of objects in each category e.g. How many children have a birthday in April?	
		Collect data using a simple table and use the results to construct simple pictograms e.g. What is the favourite pet of children in our class?	Pictogram Table, list Data Collect (data)
		Answer simple questions about their own pictogram by counting the number of objects in each category e.g. How many children chose cat as their favourite pet? Which pet was chosen by the most children? Extend with 'How many more….?' Questions e.g. How many more children chose dogs than cats?	
Number Addition and subtraction &	2	Use an empty number line to add a one -digit number to a two-digit number within 100, including bridging the tens boundary, by counting on e.g. 48 + 6 = 54; 67 + 5 = 72 Use an empty number line to add ten(s) to a two-digit number within 100 e.g. 32 + 10 = 42; 56 + 20 = 76	Empty number line Count on, count back
		Use an empty number line to subtract a one - digit number from a two-digit number within 100, including bridging the tens boundary, by counting back e.g. 30 – 7 = 23; 55 – 6 = 49 Use an empty number line to subtract ten(s) from a two-digit number within 100 e.g. 52- 10 = 42; 45 – 20 = 25 **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)**	

Measurement Money **Week 11**	3	Recognise different coins (including £1), and understand their value Recognise notes (£5, £10, £20) Use the symbols (£) and pence (p); know the relationship between pounds and pence (£1 = 100p) Solve problems involving combinations of coins e.g. How much money is in my purse? How many different ways can you make 8p using combinations of coins? Which silver coins could you use to pay for a banana that costs 30p? Solve simple word problems involving addition and subtraction in contexts of money (within 20p or 50p) including giving change e.g. An apple costs 12p and a satsuma costs 8p. How much do I pay altogether? I buy a note book for 25p and a pencil for 20p. How much do I pay altogether? How much change will I get if I pay with 50p? Solve simple word problems involving addition and subtraction in contexts of money using whole pounds only including giving change e.g. Sam buys a game for £18 and a comic for £4. How much does he spend? Kemi buys a pen that costs £10 and a book that costs £8. How much does it cost for the pen and the book? How much change will Kemi get if she pays with a £20 note?	Coin, note Pence (p), penny Pound (£) Buy, spend, change, pay, costs How much? Calculate, calculation Problem, answer/solution How did you work it out?
Geometry Properties of shapes (2D and 3D) **Week 12**	5	Consolidate names of common **2-D shapes** Identify line symmetry in known 2D shapes and simple pictures; recognise if a shape or picture is symmetrical Consolidate names of common **3-D shapes** (see vocabulary); describe the properties of 3D shapes including using the words edges, faces and vertices Relate 3D shapes to everyday objects Identify 2D shapes on the surface of 3D shapes Sort common 3D shapes e.g. by the number of faces or by the shape of faces, using simple Venn diagrams or sorting circles (Possible link to a Christmas theme)	Rectangle, square, circle, triangle, pentagon, hexagon Symmetry, symmetrical, line of symmetry Cylinder, cone, cube, cuboid, pyramid Extend with prism Edges, faces, vertices

Additional weeks

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