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

- Count forwards **and** backwards in ones **to at least 20** beginning from 0 or 1 or any given number
- Read and write numbers from 1-20 in numerals
- Given a number identify the number that is 1 more or less to at least 20
- Say the number that comes between two numbers to at least 20
- Derive number bonds to ten and related addition and subtraction facts
- Double numbers and quantities/sets of objects to at least 5 + 5; find the corresponding halves
- Count in multiples of two from 0 to 20 forwards **and** backwards
- Recognise and use language relating to dates including days of the week and months of the year (use daily routines to support this)
- Opportunities for problem solving and reasoning related to all of the above

Area of Study	No of days	Statutory Requirements and non-statutory guidance	Suggested Key Vocabulary
Number Number **Week 1**	3- 5	**Year R conceptual prerequisite** ❖ Begin to develop a sense of the number system by verbally counting forward to and beyond 20, pausing at each multiple of 10. ❖ Play games that involve moving along a numbered track, and understand that larger numbers are further along the track. ❖ Begin to experience partitioning and combining numbers within 10. Count to at least 20, forwards **and** backwards from 0 or 1 or any given number Read and write numbers **in numerals** to 20 ~ 1, 2, 3 …. Begin to write numbers **in words** and match them to corresponding numerals (numbers to ten) ~ one, two, three …. Identify and represent numbers using objects and pictorial representations including the number track, within 20 Given a number, identify the number that is one more or less within 20 Say the number that comes between two numbers within 20 Use ordinal numbers in different practical contexts (first, second, third… tenth)	Number, numeral Zero, one, two……to twenty Count One more, one less Between Before After First, second…. tenth

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant. Updated (September 2020) by Robert Hamilton, maths lead Townsend Primary school.

Number Number and place value **Week 2**	5	Begin to identify, read and write numbers **beyond** 20 **in numerals** Given a number, identify the number that is 1 more or less to **at least** 20 Identify the number that comes between two numbers to **at least** 20 Compare numbers to **at least** 20 Order numbers to **at least** 20 Begin to reason about numbers e.g. Sam counts on in ones from eight- 8, 9, 10, 12, 13. What mistake did Sam make? How do you know? **Begin** to recognise place value in teen numbers using practical resources Identify and represent teen numbers using practical apparatus e.g. straws, cubes, ten sticks and units, base ten materials, Unifix, Numicon Solve simple empty box questions using knowledge of place value e.g. 12 = 10 + ☐	One more, one less, before, after, between Biggest/largest, smallest, bigger/larger, smaller Ten, ones /units Number, teen number Empty box
Number Addition **Week 3**		**Year R conceptual prerequisite** ❖ Understand the cardinal value of number words, for example understanding that 'four' relates to 4 objects. ❖ Subitise for up to 5 items. ❖ Automatically show a given number using fingers. ❖ Devise and record number stories, using pictures, numbers and symbols (such as arrows). Read, write and interpret mathematical statements involving addition (+) and equals (=) signs; use the vocabulary related to addition Add to 10 (and then beyond 10, crossing the tens boundary), including adding zero, by combining two groups of objects, using practical methods and record using number sentences **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)** Solve **simple** word problems, which involve addition to at least ten, using concrete objects and pictorial representations to support Solve simple empty box problems e.g. 4 + 3 = ☐; 6 + ☐= 10, using practical resources to support	+, add, plus, more, put together, altogether, total One more, two more … =, equals, is the same as Number sentence Empty box Problem, answer

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant. Updated (September 2020) by Robert Hamilton, maths lead Townsend Primary school.

Number Subtraction **Week 4**	5	Read, write and interpret mathematical statements involving subtraction (-) and equals (=) signs; use the vocabulary related to subtraction Subtract numbers from 10 (and then from beyond 10, crossing the tens boundary) including subtracting zero, by taking objects away, using practical methods and record using number sentences **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)** Solve **simple** problems, which involve subtraction, using concrete objects and pictorial representations to support Solve simple empty box problems involving subtraction, using practical resources to support e.g. 10 - 6 = ☐ ; 8 - ☐ = 7	- , take away, subtract, minus One less, two less etc How many are left? =, equals, is the same as Number sentence Empty box Problem, answer
Geometry Properties of shape (2D) & Position and direction **Week 5**	3 2	**Year R conceptual prerequisite** ❖ See, explore and discuss models of common 2D and 3D shapes with varied dimensions and presented in different orientations (for example, triangles not always presented on their base). ❖ Select, rotate and manipulate shapes for a particular purpose, for example: • rotating a cylinder so it can be used to build a tower • rotating a puzzle piece Recognise and name common 2-D shapes and describe their properties (see vocabulary) Recognise 2D shapes in different orientations and sizes Sort shapes, practically, according to their properties e.g. using sorting circles Use known 2D shapes to create pictures; discuss the shapes used to make the picture Recognise simple repeating patterns with known 2-D shapes; use known 2D shapes to create simple repeating patterns Begin to **reason** about 2-D shapes e.g. what is different about these two shapes? Use the language of position such as top, bottom, on top, under, above, below, next to, between, in front of, behind **in practical activities** Use terms first, second, third… to describe position **in practical activities**	Circle, triangle, square, rectangle 2-D shape, flat shape Side, corner, curved, straight Pattern, repeating pattern Bigger/larger, smaller Biggest/largest, smallest Sort, same, different Top, bottom, on top, under, above, below, next to, between, in front of, behind First, second, third…

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant. Updated (September 2020) by Robert Hamilton, maths lead Townsend Primary school.

Number Addition and Subtraction **Week 6**	5	Count to at least 20, forwards **and** backwards, starting at one **or from any number** Using apparatus, such as Unifix or Numicon, represent and use number bonds and related addition and subtraction facts to 10, e.g. 6 + 4 = 10, 4 + 6 = 10, 10 – 4 = 6, 10 – 6 = 4 Begin to add by **counting on** e.g. using a marked number track (to 10 and then beyond10, crossing the tens boundary) Begin to subtract by **counting back** e.g. using a marked number track (from 10 and then beyond 10, crossing the tens boundary) **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)** Solve **simple** one step word problems that involve addition and subtraction, using concrete objects, number tracks and pictorial representations Solve problems related to addition e.g. 'Four-pin bowling' **(See Mathematical Challenges for all pupils booklet, 2016)**	+, add, plus, more, put together, altogether, total, count on - , take away, subtract, minus, count back How many are left? =, equals, is the same as Number sentence, number bonds Number track Problem, answer
Measurement Length and Height **Week 7**	5	Compare **length and height** of two, then three or more objects, using direct comparison and comparative language (see vocabulary) Estimate, measure and begin to record the length and height of objects, choosing and using suitable **uniform non-standard units** e.g. hand spans, cubes, links Solve practical problems involving length and height e.g. Put the teddies in order of height. How tall are the teddies? Which teddy is the tallest/shortest? What will you use to measure teddies?	Compare, measure, estimate Long, short, tall, longest, shortest, tallest, longer, shorter, taller Length, height
Number Multiplication **Week 8**	5	**Year R conceptual prerequisite** ❖ Distribute items fairly, for example, put 3 marbles in each bag. ❖ Recognise when items are distributed unfairly. Count forwards in twos from 0 to 20 Count repeated groups of two in practical contexts and use the vocabulary associated with multiplication (but **not** the multiplication sign) e.g. pairs of socks, hands Solve **practical** problems that involve combining groups of two or more, using concrete objects and pictorial representations Double numbers/sets of objects to 6+ 6 using practical resources such as counters, dice, double dominoes **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)**	Groups of Altogether Pairs, double

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant. Updated (September 2020) by Robert Hamilton, maths lead Townsend Primary school.

Number Division & Fractions **Week 9**	5	Count forwards **and** backwards in twos from 0- 20 Share quantities equally between two groups and use the vocabulary associated with division (but **not** the division sign) Solve **practical** problems involving equal sharing, using objects and pictorial representations Recognise, find and name a **half** as one of two equal parts of an object or shape Find half of a number/set of objects (within 12) **using practical resources;** relate halves to equal sharing e.g. half of 8 = 4 **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)**	Share equally Two groups of Half (**not** notation ½ until Y2), halves, half of… Equal parts
Measurement Time **Week 10**	5	Use vocabulary related to time; know the days of the week and months of the year; order days of the week and months of the year **(also use daily routines to support this)** Consider making a class birthday chart/pictogram Order a simple sequence of events using language such as before, after, next, first, last Tell the time **to the hour** using an analogue clock face; recognise numerals 1-12 on a clock face; recognise the difference between the hour hand and the minute hand Relate times to events during the day e.g. We start school at 9 o'clock; we have lunch at 12 o'clock	Day, month Monday, Tuesday … January, February … Before, after, next, first, last Clock, watch, hour, o'clock, long hand, short hand

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant. Updated (September 2020) by Robert Hamilton, maths lead Townsend Primary school.

Number Addition and subtraction **&** **Measurement** Money **Week 11**	3 2	Use the vocabulary related to addition Add one-digit numbers, crossing the tens boundary, by counting on e.g. 7 + 5 = 12 Use the vocabulary related to subtraction Subtract a one digit number from a teens number by counting back e.g. 13 – 5 = 8 **(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)** Solve **simple** word problems that involve addition/ subtraction using number tracks and pictorial representations to support Recognise and know the value of different coins to 20p Solve **simple** problems in the context of money to 10p (**extend** to beyond 10p), including in practical contexts e.g. If you buy ____ and ____, how much do you spend? Which coins could you use to pay for this apple that costs 5p? How much money is in my purse?	+, add, plus, more, altogether, total, count on - , take away, subtract, minus, count back How many are left? =, equals, is the same as Number sentence Problem, answer Money, coins Penny, pence (p) Cost
Geometry Properties of 2D shapes & Properties of 3D shapes **Week 12**	2 3	Consolidate recognising and naming **common 2-D shapes** and describe their properties; recognise 2D shapes in different orientations and sizes Use 2D shapes to make repeating patterns; use 2-D shapes to make pictures Recognise and name **common 3-D shapes** Recognise 3D shapes of different sizes Relate 3D shapes to everyday objects Sort 3-D shapes according to their properties e.g. shapes that roll/shapes that don't roll Use 3D shapes to make models (possible link to a Christmas theme)	Shape, 2D shape, flat shape Circle, triangle, square, rectangle Side, corner Biggest/largest, smallest, bigger/larger, smaller Curved, straight Pattern 3D shape, solid shape Cube, cuboid, cylinder, cone, sphere

Additional weeks

To be used for:

- Assessment, consolidation and responding to AfL
- additional using and applying activities
- Christmas maths activities

Produced for Southwark Primary Schools by a working party led by Diane Andrews, maths consultant. Updated (September 2020) by Robert Hamilton, maths lead Townsend Primary school.