Maths Planning Overview 2019-20

Year: 2   Term: Autumn 1

BLACK CURRICULUM OBJECTIVE, RED WT, GREEN EXPECTED, BLUE GREATER DEPTH

Week 1- 3 days only	Week 2 START LOOPY Place value	Week 3 Place value Less than more than	Week 4 Calculation Number bonds	Week 5-6 approx Calculation Addition	Weeks 7-8 Calculation Subtraction
Assessment opportunities and try to evidence these, e.g. through WT assessment booklet count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward count in twos, fives and tens from 0 and use this to solve problems read and write numbers to at least 100 in numerals and in words read and write numbers in numerals up to 100	recognise the place value of each digit in a two-digit number (tens, ones) including 0 as a place holder partition a two-digit number into tens and ones to demonstrate an understanding of place value, though they may use structured resources1 to support them identify, represent and estimate numbers using different representations, including the number line	compare and order numbers from 0 up to 100; use <, > and = signs	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 recall at least four of the six number bonds for 10 and reason about associated facts (e.g. 6 + 4 = 10 , therefore 4 + 6 = 10 and 10 – 6 = 4) recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If 7 + 3 = 10, then 17 + 3 = 20; if 7 – 3 = 4, then 17 – 3 = 14; leading to if 14 + 3 = 17, then 3 + 14 = 17, 17 – 14 = 3 and 17 – 3 = 14) NB- ensure that you evidence every single part of this objective as per the examples in brackets, this could be picked up at moderation	solve problems with addition and subtraction: o using concrete objects and pictorial representations, including those involving numbers, quantities and measures o applying their increasing knowledge of mental and written methods add and subtract numbers using concrete objects, pictorial representations, and mentally, including: o a two-digit number and ones o a two-digit number and tens o two two-digit numbers STOP AT CROSSING TENS BOUNDARY o adding three one-digit numbers add and subtract two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required, explaining their method verbally, in pictures or using apparatus (e.g. 23 + 5; 46 + 20; 16 – 5; 88 – 30) add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17) use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + □; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.) **Notes and guidance (non-statutory)** Recording addition and subtraction in columns supports place value and prepares for formal written methods with larger numbers	Aim to get subtraction started before half term as this took a lot of time last year See full objectives in Autumn 2

Maths Planning Overview 2019-20

Year: 2   Term: Autumn 2

BLACK CURRICULUM OBJECTIVE, RED WT, GREEN EXPECTED, BLUE GREATER DEPTH

Week 1 approx Calculation Subtraction	Week 2-3 Calculation	Week 4 Place Value	Week 5-6 (approx. 1.5 weeks) Measure- money	Week 6-7 (approx. 1.5 weeks) Statistics
add and subtract numbers using concrete objects, pictorial representations, and mentally, including: o a two-digit number and ones o a two-digit number and tens o two two-digit numbers STOP AT CROSSING TENS BOUNDARY add and subtract two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required, explaining their method verbally, in pictures or using apparatus (e.g. 23 + 5; 46 + 20; 16 – 5; 88 – 30) add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17) use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ☐; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.) **Notes and guidance (non-statutory)** Recording addition and subtraction in columns supports place value and prepares for formal written methods with larger numbers	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ☐; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.)	use place value and number facts to solve problems partition numbers in different ways (for example, 23= 20 + 3 and 23 = 10 + 13) partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus	recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money know the value of different coins use different coins to make the same amount solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change **Notes and guidance (non-statutory)** They read and say amounts of money confidently and use the symbols £ and p accurately, recording pounds and pence separately.	interpret and construct simple pictograms, tally charts, block diagrams and simple tables ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity (venn and carroll diagrams) ask and answer questions about totalling and comparing categorical data. **Notes and guidance (non-statutory)** Pupils record, interpret, collate, organise and compare information (for example, using *many-to-one correspondence* in pictograms with simple ratios 2, 5, 10).

Maths Planning Overview 2019-20

Year: 2   Term: Spring 1

BLACK CURRICULUM OBJECTIVE, RED WT, GREEN EXPECTED, BLUE GREATER DEPTH

Week 1-2 Calculation Multiplication and division	Week 3-4 Number Fractions	Week 5-6 Measures Time
recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts solve unfamiliar word problems that involve more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?') **Notes and guidance (non-statutory)** They connect the 10 multiplication table to place value, and the 5 multiplication table to the divisions on the clock face. relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. They begin to relate these to fractions and measures	recognise, find, name and write fractions 1/3 ¼ 2/4 and ¾ a length, shape, set of objects or quantity identify 1/4, 1/3 , 1/2 , 2/4, 3/4, of a number or shape, and know that all parts must be equal parts of the whole write simple fractions for example $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ **Notes and guidance (non-statutory)** They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, Pupils should count in fractions up to 10, starting from any number and using the and equivalence on the number line (for example, $1\frac{1}{4}$ $1\frac{2}{4}$ This reinforces the concept of fractions as numbers and that they can add up to more than one.	tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times read the time on the clock to the nearest 15 minutes. read the time on the clock to the nearest 5 minutes. know the number of minutes in an hour and the number of hours in a day.

Maths Planning Overview 2019-20

Year: 2   Term: Spring 2

BLACK CURRICULUM OBJECTIVE, RED WT, GREEN EXPECTED, BLUE GREATER DEPTH

Week 1 Calculating Addition recap	Week 2 Calculating Subtraction recap	Week 3 Geometry 2D shape	Week 4 Geometry 3D shape	Week 5-6 Measure- rotate around mass, capacity, length/height and temperature

Quick recap then CROSS BOUNDARY FOCUS
 	
solve problems with addition and subtraction:
  o using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  o applying their increasing knowledge of mental and written methods
 	
add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
  o a two-digit number and ones
  o a two-digit number and tens
  o two two-digit numbers
  o adding three one-digit numbers
 	
add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17)
use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ☐; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.)
	Quick recap then CROSS BOUNDARY FOCUS
	
	solve problems with addition and subtraction:
	  o using concrete objects and pictorial representations, including those involving numbers, quantities and measures
	  o applying their increasing knowledge of mental and written methods
	
	add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
	  o a two-digit number and ones
	  o a two-digit number and tens
	  o two two-digit numbers
	
	add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17)
	use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ☐; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.)
		identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
		
		identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
		name some common 2-D and 3-D shapes from a group of shapes or from pictures of the shapes and describe some of their properties (e.g. triangles, rectangles, squares, circles, cuboids, cubes, pyramids and spheres).
		describe similarities and differences of 2-D and 3-D shapes, using their properties (e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).
		
		identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
		
		compare and sort common 2-D and 3-D shapes and everyday objects.
		
		Notes and guidance (non-statutory)
		Pupils handle and name a wide variety of common 2-D and 3-D shapes including: quadrilaterals and polygons, and cuboids, prisms and cones, and identify the properties of each shape (for example, number of sides, number of faces).
		
		Pupils read and write names for shapes that are appropriate for their word reading and spelling.
		
		Pupils draw lines and shapes using a straight edge.
				choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
				
				read scales* in divisions of ones, twos, fives and tens
				read scales* where not all numbers on the scale are given and estimate points in between
				
				compare and order lengths, mass, volume/capacity and record the results using >, < and =
				
				Notes and guidance (non-statutory)
				Comparing measures includes simple multiples such as 'half as high'; 'twice as wide'.

Maths Planning Overview 2019-20

Year: 2   Term: Summer 1 and 2

BLACK CURRICULUM OBJECTIVE, RED WT, GREEN EXPECTED, BLUE GREATER DEPTH

Week 1 Geometry Position and direction	Week 2	Week 3	Week 4	Week 5
order and arrange combinations of mathematical objects in patterns and sequences use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). **Notes and guidance (non-statutory)** Pupils should work with patterns of shapes, including those in different orientations.	Recapping as needed	TEST	TEST	TEST

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Additional evidence gathering in light of SATs assessments- may vary between classes according to need				Fiver challenge		Leavers performance etc