Year: 2   Term: Autumn 1

Week 1 First 3 days Practical week alongside assessments	Week 2 START LOOPY Place value	Week 3 Place value	Week 4 Calculation Number bonds	Week 5-7 Calculation Addition	Week 8 Assess and review
Assessment opportunities and try to evidence these, e.g. through WT assessment booklet Count in steps of 2, 5 and 10 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 resources 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- aim to evidence every single part of this objective as per the examples in brackets. Will also be returned to later in the year.	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 adding three one-digit numbers o a two-digit number and ones o a two-digit number and tens	School produced assessment based on taught content. Complete assessment tracker. If 70% not secure, then re-teach that element.
Ready to Progress Criteria					
	2NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.	2NPV–2 Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice.	2AS–1 Add and subtract across 10. 2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a twodigit number.	

Mastering Number overview: Autumn 1

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
		Training commences for Year Leaders	Year Leaders to train Teachers	Week 1 Composition Focus on the composition of 6, 7,8 and 9 as '5 and abit'	Week 2 Comparison Compare numbers within 10 using language of comparison when comparing sets of objects and numbers Use the inequality and equals symbolsin expressions and equations	Week 3 Composition Focus on odd/ even parts when even numbers are composed of 2 parts, including when 2 parts are equal (doubles)	Week 4 Composition Focus on the composition of 6 Identify missing addends and complete missing symbols expressions and equations using theequals or inequality symbol

Year: 2   Term: Autumn 2

Week 1-3 Calculation <mark>Subtraction</mark>	Week 4-6 Calculation <mark>Multiplication</mark> and division	Week 7 Assess and review

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
 	
 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.)
 	
 <mark>NB- include direct teaching of finding the difference as subtraction</mark>
	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.
		School produced assessment based on taught content.
		
		 Include number bonds to 20 assessment.
		
		 Complete assessment tracker. If 70% not secure, then re-teach that element.

Ready to Progress Criteria	
2AS–1 Add and subtract across 10. 2AS–2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?" 2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a twodigit number.	2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.	

Mastering Number overview: Autumn 2

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Week 5 composition Focus on the composition of 8 Use 2-by-4 grid and the rekenrek to findall the ways that 8 can be composed Apply to expressions andequations	Week 6 composition Focus on the composition of 10 Use 2-by-5 grid (10-frame) and the rekenrek to find all the ways that 10 canbe composed Apply to expressions andequations	Week 7 composition Focus on the composition of odd numbers including being made of 2s and 1 more, or 1 odd part and 1 evenpart	Week 8 composition Focus on the composition of 7 Use the Hungarian number pattern and the rekenrek to find all the ways that 7 can be composed Apply knowledge to expressions and equations	Week 9 composition Focus on the composition of 9 Focus on 3-by-3 grid and the rekenrek to find all the ways that9 can be composed Apply knowledge to expressions and equations	Week 10 composition Focus on the composition of the numbers 11 to 19 as '10 and a bit' Apply to missing addend equations	Week 11 counting, ordinality and cardinality Compare numbers within 20 Use proportional reasoning to identifythe position of numbers within 20 inthe linear number system, using midpoints of 5, 10 and 15

Year: 2   Term: Spring 1

Week 1-3 Calculation Multiplication and <mark>division and inverse operations</mark>	Week 4-5 Calculation Addition	Week 6 Assess and review
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)** relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. They begin to relate these to fractions and measures	<mark>NB- revisiting of previous addition objectives (2 digit and 1's, 2 digit and tens) should be happening through fluency practise</mark> **New Learning:** o two two-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.) <mark>NB- include use of number lines as per progression guides</mark> <mark>Include some very simple money problems for context- will be revisited</mark> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value know the value of different coins **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.	School produced assessment based on taught content. Complete assessment tracker. If 70% not secure, then re-teach that element.
2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).	2AS–4 Add <mark style="background:grey">and subtract</mark> within 100 by applying related one-digit addition <mark style="background:grey">and subtraction</mark> facts: add and subtract any 2 twodigit numbers. 2NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.	

Mastering Number overview: Spring 1

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Week 12 Number facts and arithmetic Focus on doubling numbers to 10, using the '5 and a bit' structure to double 6, 7, 8 and 9	Week 13 Composition Focus on the composition of 20 Use known facts within 10to find missing parts of 20when the known part is greater than 10	Week 14 Number facts and arithmetic Apply knowledge of facts within 10 to addition and subtraction within 20 WITHIN the 10s boundary	Week 15 Number facts and arithmetic Use knowledge of doubles to calculate near doubles See that near doubles are adjacent numbers See that the sum in a near double is odd	Week 16 Number facts and arithmetic Develop understanding of near doubles Identify different strategies for near doubles, doublingthe smaller addend and adding 1 or the larger addend and subtracting 1	Review week- use AfL from half term to revisit any areas pupils have been less secure with (may differ class by class)

Year: 2   Term: Spring 2

Week 1-2 Place Value inc money	Week 3-4 Calculation Subtraction NB- begin to make links to turns	Week 5 and part of 6 Fractions NB- begin to make links to turns	Week 6 Assess and review
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

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 | NB- revisiting of previous subtraction objectives (2 digit and 1's, 2 digit and tens) should be happening through fluency practise

New Learning:
- two two-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.)

NB- include use of number lines as per progression guides

Inlcude some money problems for context | 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
$$\frac{1}{2} \text{ of } 6 = 3$$
and recognise the equivalence of
$$\frac{2}{4} \text{ and } \frac{1}{2}$$

Notes and guidance (non-statutory)
They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, | School produced assessment based on taught content.

Include number bonds to 20 assessment.

Complete assessment tracker. If 70% not secure, then re-teach that element. |
| Ready to Progress Criteria | | | |
| | | | |

Mastering Number overview: Spring 2

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Week 17 Number facts and arithmetic Add 3 numbers using known facts - identifying bonds of 10 and knowledge of the composition of 11 to 19 as '10 and a bit'	Week 18 Number facts and arithmetic Add 2 numbers by 'bridging through 10'	Week 19 Number facts and arithmetic Consolidate understanding of adding 2 numbers by 'bridging through 10' Solve missing addend problems	Week 20 Number facts and arithmetic Subtract by 'bridgingthrough 10'	Week 21 Number facts and arithmetic Consolidate understanding of subtracting by 'bridging through 10'	Review week- use AfL from half term to revisit any areas pupils have been less secure with (may differ class by class)

Week 1 few days Statistics Include scale of 2,5,10 and opportunities to apply measures, addition and subtraction,e.g. finding the difference	Week 1-2 Calculation Inverse + biggest number first inc NB- include some opportunities to apply statistics	Week 3-4 Time Geometry-position/turns NB- include application of 4 operations	Week 5 Measure- rotate around mass, capacity, length/height and temperature NB- focus on scale reading and application of all 4 operations	Assess and review
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 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).	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.)	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. 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).	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'.	School produced assessment based on taught content. Inlcude number bonds to 20 assessment. Complete assessment tracker. If 70% not secure, then re-teach that element.
Ready to Progress Criteria				
	2AS–2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?"			

Mastering Number overview: Summer 1

Week 1	Week 2	Week 3	Week 4	Week 5
Week 22 counting, ordinality and cardinality Connect the order of multiples of 10 to the order of numbers within10 Use proportional reasoning to identify the position of numbers within 100 in the linear number system	Week 23 number facts and arithmetic Connect missing addendproblems to subtraction problems	Week 24 number facts and arithmetic Subtract across the 10 boundary, by subtractingFROM 10 rather than bridging THROUGH 10	Week 25 number facts and arithmetic Practise subtracting within 20, selecting from arange of strategies See that all subtractions can be solved by thinkingof how a number is composed and identifyingthe missing part	Week 26 composition Focus on the compositionof 20 Use known facts within 10to find missing part of 20 when the known part is less than 10

Year: 2   Term: Summer 2

Week 1-2 Geometry- 2D and 3D shape	Week 3	Week 4	Week 5	Week 6	Week 7
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.	Revisit any areas of weakness ahead of tests	SATs Test week	Revisit week based on all 4 operations and gap analysis of papers	Fiver challenge- inclusive of all 4 operations applied through context of money	Revisit week based on gap analysis
Ready to Progress Criteria					
2G–1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.					

Mastering Number overview: Summer 2

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6-7
Week 27 comparison Use knowledge of composition to reason about expressions andequations and use the equals and inequality symbols in expressionsand equations	Week 28 number facts and arithmetic Consolidate doubles and near doubles Introduce strategy of adding two adjacent oddnumbers or two adjacenteven numbers into a double	Week 29 number facts and arithmetic Consolidate understanding and develop fluency in transforming addition calculations involving two adjacent odd or two adjacent even numbers into a double	Week 30 number facts and arithmetic Develop fluency in bonds within 10 and apply this to calculations within and across the 10-boundary using a range of optional activities	Week 31 number facts and arithmetic A range of 6 sessions providing optional activities to provide practice and opportunities for assessment	Review week- use AfL from half term to revisit any areas pupils have been less secure with (may differ class by class)

Implications for school leaders

- Be aware of and agree the criteria for assessing whether children are ARE for end of KS1. Recommend using framework or RtP for y2
- Curriculum changes for y2? Difference between what to 'light touch cover' (including fractions) as part of statutory curriculum, what to give less focus on and ensure is only covered within the number fact knowledge for KS1 (measure, time and statistics) and what to prioritise for in-depth, secure understanding (RtP criteria – within the context of money, measure and statistics)
- How do assessment materials match to updated guidance? If using Pixel, WR, PUMA – are these reflective of ARE from RtP? Do assessments need adapting?
- Implications for internal maths data and tracking across whole school. The RtP criteria and prioritisation materials have been produced for y1 up to y6. **This should be considered across whole school not specific to y2.**