

Year 2 Overview

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk15
Autumn	Numbers 10 to 100 Unit 1 – 4 weeks				Calculations within 20 Unit 2 – 3 weeks			Fluently add and subtract within 10 Unit 3 – Week 1	Addition and Subtraction of two-digit numbers (1) Unit 4 – 3 weeks			Introduction to multiplication Unit 5 – 7 weeks			
Spring	Introduction to multiplication Unit 5 – 7 weeks				Introduction to division structures Unit 6 – 2 weeks		Spaced Practice – Addition and Subtraction	Shape – Unit 7 – 2 weeks		Addition and subtraction of two-digit numbers (2) Unit 8 – 3 weeks					
Summer	Addition and Subtraction	Money – Unit 9	Fractions Unit 10 2 weeks		Time – unit 11 1 week	Position and Direction Unit 12 – 1 week	Space Practice – Geometry	Multiplication and Division – doubling, halving, quotative and partitive division Unit 13 – 3 weeks			Sense of measure – capacity, volume, mass Unit 14 – 2 weeks		Consolidation and problem solving		

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Assessment Questions for Y2 from the DFE Guidance: <https://www.ncetm.org.uk/media/jtbdcpsc/cp-rtp-assessment-year-2.zip>

Numbers 10 to 100 (unit 1 – 3 ON)

	National Curriculum Objectives	Lesson Progression Unit 1-3
	Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations, including the number line Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs Read and write numbers to at least 100 in numerals and in words Use place value and number facts to solve problems Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: □ a two-digit number and ones; □ a two-digit number and tens;	1) Explain that one ten is equivalent to ten ones 2) Represent multiples of ten using their numerals 3) Represent multiples of ten using their numerals and names 4) Represent multiples of ten in an expression or an equation 5) Estimate the position of multiples of ten on a 0 - 100 number line 6) Explain what happens when you add and subtract ten to a multiple of ten 7) Use knowledge of facts and unitising to add and subtract multiples of ten 8) Add and subtract multiples of ten 9) Solve problems involving multiples of ten 10) Solve problems involving multiples of ten in a range of contexts 11) Explore the counting sequence for counting to 100 and beyond 12) Count groups of ten and extra ones 13) Count a large group of objects by counting tens and ones 14) Represent a number from 20 to 99 15) Use a number line to position and estimate the numbers 20-99 16) Compare two-digit numbers 17) Partition two-digit numbers into tens and ones using place value resources 18) Partition two-digit numbers into tens and ones 19) Represent addition and subtraction of tens and ones with equations 20) Solve problems by adding and subtracting tens and ones DFE Guidance (ready to progress criteria)

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☐ two two-digit numbers; ☐ adding three one-digit numbers. Show that addition of two numbers can be done in any order (commutative) and subtraction cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods	Know that 10 ones are equivalent to 1 ten. Know that multiples of 10 are made up from a number of tens, for example, 50 is 5 tens. Place the numbers 1 to 9 on a marked, but unlabelled, 0 to 10 number line. Estimate the position of the numbers 1 to 9 on an unmarked 0 to 10 number line. Count forwards and backwards to and from 100.	2NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning 2NPV–2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.
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Calculating within 20		
	National Curriculum Objectives	Lesson Progression
	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and ones; - a two-digit number and tens; - two two-digit numbers; - adding three one-digit numbers. Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask 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	1) Add three addends 2) Use a 'First, then, then, now' story to add three addends 3) Explain that the addends can be added in any order 4) Add three addends efficiently 5) Add three addends efficiently by finding two addends that total 10 6) Add two numbers that bridge through 10 7) Add and subtract two numbers that bridge through 10 8) Compare the number of objects in two sets or difference between two measures. 9) Calculate the difference 10) Calculate the difference in different contexts 11) Explain what the difference is between consecutive numbers 12) Calculate the difference when information is presented in a pictogram 13) Calculate the difference when information is presented in a bar chart 14) Use knowledge of calculating within 20 to solve problems 15) Use knowledge of calculating within 20 to solve problems involving statistics
	DFE Guidance (ready to progress criteria)	
	1AS–1 Learn and use number bonds to 10, for example: $8 + ? = 10$ Partition numbers within 10, for example: $5 = 2 + 3$ 1AS–2 Solve missing addend problems within 10, for example: $4 + ? = 10$ $8 + 5 = 13$ $13 - 5 = 8$ 2AS–2 Recognise the subtraction structure of ‘difference’ and answer questions of the form, “How many more...?”.	

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Fluently add and subtract within 10 (Block 3)		
	National Curriculum Objectives	Lesson Progression
	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.	1) Represent addition and subtraction facts within 10 2) Recall one and two more or less than numbers to ten 3) Recall doubles within 10 4) Use near doubles within 10 5) Use known addition and subtraction facts within 10 to solve problems
		DFE Guidance (ready to progress criteria)
		1NF–1 Develop fluency in addition and subtraction facts within 10. 2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice.

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Addition and Subtraction of two-digit numbers		
	National Curriculum Objectives	Lesson Progression
	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. Show that addition of two numbers can be done in any order (commutative) and subtraction cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods	Part A 1. Add and subtract one to or from a two-digit number within a decade 2. Add and subtract 1 to and from a 2-digit number crossing the tens boundary 3. Use number facts to add or subtract a one-digit number and a two-digit number. 4. Use number facts to solve addition and subtraction problems. 5. Use number facts to solve problems in measures and data contexts 6. Use number bonds to 10 to add/subtract one-digit and two-digit numbers 7. Add by bridging a multiple of ten 8. Subtract by bridging a multiple of ten 9. Use bridging to solve addition and subtraction problems 10. Find 10 more or less than a 2-digit number. 11. Add and subtract 10 to and from a 2-digit number. 12. Add multiples of 10 to 2-digit numbers. 13. Subtract multiples of ten from 2-digit numbers 14. Partition 2-digit numbers in different ways 15. Use efficient strategies to solve problems Part B 1. Use efficient addition strategies to calculate 2. Combine tens and ones within equations 3. Add two-digit numbers without crossing the tens boundary 4. Find the missing addend when adding two-digit numbers 5. Add 2-digit numbers when crossing the tens boundary 6. Solve problems involving the addition of two-digit numbers 7. Explain different strategies used to subtract 8. Solve equations involving the subtraction of two-digit numbers 9. Solve problems involving subtraction of two-digit numbers 10. Subtract two-digit numbers crossing the tens boundary 11. Find the missing part when subtracting two-digit numbers 12. Solve problems involving subtraction when bridging 10 13. Use efficient methods to solve subtraction equations 14. Solve problems involving addition and subtraction 15. Create addition and subtraction problems
		DFE Guidance (ready to progress criteria)

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		Add and subtract within 10, for example: $6 + 3 = 9$ $6 - 2 = 4$ Know that a multiple of 10 is made up from a number of tens, for example, 50 is 5 tens. Add and subtract within 10. Know that a multiple of 10 is made up from a number of tens, for example, 50 is 5 tens.	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 two-digit number. 2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.
	Multiplication and Division		
	National Curriculum Objectives	Lesson Progression	

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Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals (=) sign. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	1. Explain that objects can be grouped in different ways 2. Describe how objects have been grouped 3. Represent equal groups as repeated addition 4. Represent equal groups as repeated addition and multiplication 5. Represent equal groups as multiplication 6. Explain and represent multiplication when a group contains zero or one items 7. Identify and explain each part of a multiplication equation 8. Use knowledge of multiplication to calculate the product 9. Use knowledge of multiplication to solve problems 10. Use knowledge of multiplication to solve problems in a range of contexts 11. Represent the 2 times table in different ways 12. Use knowledge of the 2 times table to solve problems 13. Explain the relationship between adjacent multiples of 2 14. Explain that factor pairs can be written in any order 15. Represent counting in tens as the 10 times table 16. Represent the 10 times table in different ways 17. Explain the relationship between adjacent multiples of 10 18. Represent counting in fives as the 5 times table 19. Represent the 5 times table in different ways 20. Explain the relationship between adjacent multiples of 5 21. Explain how groups of five and ten are related 22. Explain the relationship between multiples of five and ten 23. Use knowledge of the relationships between the 5 and 10 times tables to solve problems 24. Explain how a factor of zero or one affects the product 25. Represent multiplication equations in different ways 26. Use knowledge of the 2, 5 and 10 times tables to solve problems 27. Use knowledge of the 2, 5 and 10 times tables to solve problems in a range of contexts 28. Explain what each factor represents in a multiplication story 29. Explain what each factor represents in a multiplication story when one of the factors is one 30. Explain how a multiplication equation with 2 as a factor is related to doubling 31. Double 2-digit numbers and record as multiplications where one of the factors is 2 32. Explain how doubling and halving are related 33. Halve even 2-digit numbers and multiples of 10 34. Identify missing factors when one factor is 2 35. Use knowledge of doubling, halving and the 2 times table to solve problems
	DFE Guidance (ready to progress criteria)

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		Count in multiples of 2, 5 and 10.	2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.
Division			
	National Curriculum Objectives	Lesson Progression	
	Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	1. Explain that objects can be grouped equally 2. Identify and explain when objects cannot be grouped equally 3. Explain the relationship between division expressions and division stories 4. Calculate the number of equal groups in a division story 5. Use knowledge of skip counting and division to solve problems relating to measure 6. Skip count using the group size to find the number of groups 7. Explain that objects can be shared equally 8. Use skip counting to solve a sharing problem 9. Skip count to find the group size in a sharing problem 10. Solve a variety of division problems, explaining understanding	
		DFE Guidance (ready to progress criteria)	
		Count in multiples of 2, 5 and 10 to find how many groups of 2, 5 or 10 there are in a particular quantity, set in everyday contexts.	2 MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).
Shape			
	National Curriculum Objectives	Lesson Progression	

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	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	1. Recognise and sort polygons 2. Describe and name polygons, including triangles and quadrilaterals 3. Describe, name and sort polygons, including pentagons, hexagons and octagons 4. Lines of symmetry 5. Discuss and compare polygons 6. Investigate how polygons can be joined and folded to form 3D shapes 7. Describe and name 3D shapes 8. Describe and name 3d shapes – prisms and pyramids 9. Find different ways to sort 3D shapes 10. Discuss and compare 3D shapes	
	Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces		
	Identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid	DFE Guidance (ready to progress criteria)	
Compare and sort common 2-D and 3-D shapes and everyday objects	Recognise common 2D and 3D shapes presented in different orientations.	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.	

Money

	National Curriculum Objectives	Lesson Progression
	Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money.	1. Recognise and understand the value of different coins 2. Recognise the value of 20 p, 50 p and £1 coins 3. Explore combinations of coins that total the same amount 4. Find the most efficient way to make a given value 5. Solve problems including those involving giving change

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	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	
Fractions		
	National Curriculum Objectives	Lesson Progression
	Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{1}{2}$ of a length, shape, set of objects or quantity Write simple fractions, for example $\frac{1}{2}$ of 6 = 3 Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	1. Equal or unequal parts 2. Recognise and name the fraction 'one half' 3. Recognise and name the fraction 'one quarter' 4. Recognise and name the fraction 'one-third' 5. Read, write and understand fraction notation 6. Find one-half of a number 7. Relate finding half of a number to halving and doubling 8. Find one-third or one-quarter of a number 9. Find three-quarters of an object, shape, set of objects or quantity 10. Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$
Time		
	National Curriculum Objectives	Lesson Progression

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	To compare and sequence intervals of time. To tell and write the time to five minutes, including quarter past/to the hour and draw hands on a clock face to show these times. To know the number of minutes in an hour and the number of hours in a day.	1) Know the number of minutes in an hour and hours in a day 2) Tell and write the time to five minutes past on a clock face 3) Tell and write the time to five minutes past and to on a clock face 4) Tell and write quarter past and quarter to on a clock face 5) Compare and sequence intervals of time	
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Position and Direction			
	National Curriculum Objectives	Lesson Progression	
	Order and arrange combinations of mathematical objects in patterns and sequences. <u>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).</u>	1. Review of using mathematical language to describe position 2. Use mathematical vocabulary to describe movement 3. Describe turns as a quarter, half, three-quarter or full turn 4. Solve problems involving position, direction and rotation 5. Order and arrange objects in patterns and explain the patterns	

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Multiplication and division – doubling, halving, quotitive and partitive division

	National Curriculum Objectives	Lesson Progression
	<u>Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.</u> Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. <u>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.</u> Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	1. Identify the patterns and relationships between the 5 and 10 times tables 2. Explain patterns and relationships between the 5 and 10 times tables 3. Use knowledge of the 5 and 10 times tables to solve problems 4. Explain how times table facts can help to find the quotient (10 times table) 5. Explain how times table facts can help to find the quotient (5 times table) 6. Explain how times table facts can help to find the quotient (2 times table) 7. Explain how a division equation with 2 as a divisor is related to halving 8. Explain each part of a division equation and know how they can be interchanged 9. Use knowledge of divisibility rules when the divisor is 2 to solve problems 10. Use knowledge of divisibility rules when the divisor is 10 to solve problems 11. Use knowledge of divisibility rules when the divisor is 5 to solve problems 12. Explain how a dividend of zero affects the quotient 13. Explain how the quotient is affected when the divisor is equal to the dividend 14. Explain how a divisor of one affects the quotient 15. Use knowledge of division strategies to solve problems

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Sense of measure – capacity, volume, mass		
	National Curriculum Objectives	Lesson Progression
	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 Compare and order lengths, mass, volume/capacity and record the results using >, < and =	1. Length can be measured in any direction to give height, length and distance 2. Explain why standard units of measure are needed 3. Length can be measured in metres and centimetres 4. Read scales in metres and centimetres 5. Compare and order lengths 6. Mass can be measured in grams and kilograms 7. Compare and order measurements of mass 8. Volume and capacity can be measured in litres and millilitres 9. Compare and order measurements of volume and capacity 10. Temperature