

Maths Curriculum Year 2

Number: Number and Place Value	
1	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.
2	Recognise the place value of each digit in a two-digit number (tens, ones).
3	Identify, represent and estimate numbers using different representations, including the number line.
4	Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.
5	Read and write numbers to at least 100 in numerals and in words.
6	Use place value and number facts to solve problems.
Number: Addition and Subtraction	
	Solve problems with addition and subtraction:
7	using concrete objects and pictorial representations, including those involving numbers, quantities and measures
8	applying their increasing knowledge of mental and written methods
9	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
10	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
11	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
12	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
Number: Multiplication and Division	
13	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
14	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs.
15	Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
16	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Number – Fractions

17 *Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, and $\frac{3}{4}$ of a length, shape, set of objects or quantity.*

18 Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$

Measurement

19 *Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.*

20 Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$

20 Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.

21 *Find different combinations of coins that equal the same amounts of money.*

22 Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

23 Compare and sequence intervals of time.

24 *Tell and write the time to five (to nearest 15 on interim) minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.*

Know the number of minutes in an hour and the number of hours in a day.

Geometry: Properties of Shapes

25 *Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line*

26 *Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.*

27 *Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].*

28 Compare and sort common 2-D and 3-D shapes and everyday objects.

Geometry: Position and Direction

29 Order and arrange combinations of mathematical objects in patterns and sequences.

30 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).

Statistics

31 Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

32 Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.

33 Ask and answer questions about totalling and comparing categorical data.

Working towards the expected standard	Working at the expected standard	Working at greater depth within the expected standard
<p>The pupil can:</p> <ol style="list-style-type: none"> 1. read and write numbers in numerals up to 100 2. 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 3. 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. $23 + 5$; $46 + 20$; $16 - 5$; $88 - 30$) 4. recall at least four of the six² number bonds for 10 and reason about associated facts (e.g. $6 + 4 = 10$, therefore $4 + 6 = 10$ and $10 - 6 = 4$) 5. count in twos, fives and tens from 0 and use this to solve problems 6. know the value of different coins 7. 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). 	<p>The pupil can:</p> <ol style="list-style-type: none"> 1. read scales* in divisions of ones, twos, fives and tens 2. partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus 3. add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. $48 + 35$; $72 - 17$) 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 $17 - 3 = 14$) 5. recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary 6. 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 7. use different coins to make the same amount 8. read the time on a clock to the nearest 15 minutes 9. name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry. 	<p>The pupil can:</p> <ol style="list-style-type: none"> 1. read scales* where not all numbers on the scale are given and estimate points in between 2. recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts 3. use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. $29 + 17 = 15 + 4 + \blacklozenge$; ‘together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?’ etc.) 4. 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?’) 5. read the time on a clock to the nearest 5 minutes 6. 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).