

## Year 2 Math Assessment

Number – Number and Place Value	Below	Working Towards	Working at Expected Standard	Working at Greater Depth
Count in steps of 2, 3, 5 and 10 forwards and backwards	Count forwards in steps of 2, 5 and 10 from 0, may use equipment to support.	Count in twos, fives and tens from 0	Count forwards and backwards in steps of 2, 3, 5 and 10 from any number.	Fill in the missing numbers in a sequence counting in increments of 2, 5 and 10
Recognise the value of each digit in a 2 digit number (tens and ones)	Create representations of a 2 digit number using practical resources e.g. dienes	Recognise the value of each digit in a two digit number	Explain the value of each digit in a two digit number and understand zero as a place holder.	
Identify, represent and estimate numbers using different representations, including number lines	Identify numbers shown using different representations e.g. number line, numicon etc	Show numbers using different representations e.g. number line, numicon etc	Estimate where a number where the tens are shown	Estimate where a number might be on a nearly empty number line
Partition any two-digit number into different combinations of tens & ones, explaining their thinking verbally, in pictures or using apparatus	Begin to partition numbers into 10s and 1s using structured resources such as base 10 apparatus to support them	Partition a two-digit number into tens and ones, using structured resources such as base 10 apparatus to support them	Partition numbers into different combinations of 10s and 1s and explain their thinking	
Compare and order numbers from 0 up to 100; use <, > and = signs	Order sets of numbers from 0 to 100	Use the language of greater than, less than and equal to, to compare two numbers	Use the <, > and = signs to compare numbers	
Read and write numbers to at least 100 in numerals and in words	Read numbers to 100	Read and write numbers in numerals up to 100	Read and write numbers to 100 in numbers and words	
Use place value and number facts to solve problems.	Use knowledge of place value and number facts to solve simple problems with support	Use their knowledge of place value and number facts to solve simple 1 step problems	Use place value and number facts to solve problems with more than one step	
Number - Addition & Subtraction				
Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100	Recall number bonds for 10	Recall at least four of the six number bonds for 10 and reason about associated facts	Derive and use related facts to numbers to 100 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.	
Add & subtract numbers using concrete objects, pictorial representations, & mentally, including: - a two-digit number and ones . a two-digit number and tens . two two-digit numbers . adding three one-digit numbers	Add and subtract two digit numbers and ones using concrete objects (not crossing tens) Add three one-digit numbers	Add and subtract two digit numbers and ones and two digit numbers and tens where no regrouping is required in pictures or using concrete apparatus	Add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus	
Solve problems with addition and subtraction . using concrete objects & pictorial representations, including those involving numbers, quantities and measures . applying their increasing knowledge of mental and written methods	Solve simple addition and subtraction problems, with some support, using concrete object	Solve simple addition and subtraction problems using pictorial representations	Independently solve a range of simple addition and subtraction problems using mental and written methods	Solve unfamiliar word problems that involve more than one step
Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	Show that if you add numbers in a different order you will reach the same total	Show that if you add numbers in a different order you will reach the same total but if you subtract in a different order you will not	Use their knowledge of commutivity support addition calculations.	
Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Begin to understand that addition and subtraction are inverse operations e.g. $7 + 3 = 10$ so $10 - 7 = 3$	Recognise the inverse relationship between addition and subtraction and make related number statements e.g. $7 + 3 = 10$ , $3 + 7 = 10$ $10 - 7 = 3$ , $10 - 3 = 7$	Use inverse to check calculations and solve missing number problems	Use reasoning about numbers and relationships to solve more complex problems and explain their thinking
Number - Multiplication & Division				
Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	Recognise odd and even numbers Count in steps of 2, 5 and 10	Begin to recall multiplication facts for the 2, 5 and 10 times tables Begin to recall division facts for the 2, 5 and 10 times tables	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
Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	Show that multiplication of two numbers can be done in any order	Show that division of two numbers cannot be done in any order	Use commutativity and inverse relations to develop multiplicative reasoning (for example, $4 \times 5 = 20$ and $20 \div 5 = 4$ ).	
Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Solve simple problems involving multiplication and division using concrete apparatus Record solutions using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs	Solve simple problems involving multiplication & division using objects, arrays, repeated addition	Solve simple problems involving multiplication and division using multiplication and division facts, including problems in contexts mentally	
Fractions				

## Year 2 Math Assessment

Recognise, find, name and write fractions $\frac{1}{2}$ , $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	Recognise that $\frac{1}{2}$ stands for half and find $\frac{1}{2}$ of a number or shape	Recognise that $\frac{1}{3}$ stands for third and find $\frac{1}{3}$ of a number or shape. Recognise that $\frac{1}{4}$ stands for quarter and find $\frac{1}{4}$ of a number or shape	Identify $\frac{1}{4}$ , $\frac{1}{3}$ , $\frac{1}{2}$ , $\frac{2}{4}$ , $\frac{3}{4}$ 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 is 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ .	Recognise the written fractions e.g. $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{3}{4}$	Calculate simple fractions e.g. $\frac{1}{2}$ of 6 is 3	Recognise that $\frac{1}{2}$ is the same as $\frac{2}{4}$	
<b>Measure</b>				
Compare and sequence intervals of time	Sequence events using appropriate time language e.g. morning, afternoon, evening, night, earlier and later	Know there are 12 hours in the morning and 12 hours in the afternoon meaning there are 24 hours in a day.	Compare the amount of time that has passed between two times	
Tell and write the time to the nearest 15 minutes, including quarter past/to the hour and draw the hands on a clock face to show these times	Read the clock to o'clock and half past Draw hands on the clock to show o'clock and half past times	Read the clock to quarter to and quarter past Draw hands on the clock to show o'clock, half past, quarter to and quarter past times	Draw hands on the clock to show o'clock, half past, quarter to and quarter past times <b>Read time on a clock to the nearest 15 minutes</b>	<b>Read the time on a clock to the nearest 5 minutes</b>
Recognise & use symbols for pounds (£) & pence (p); combine amounts to make a particular value	Use the vocabulary pounds (£) and pence (p)	<b>Know the value of different coins</b> and notes Recognise the symbols for pounds and pence	Choose coins from a set to make a given amount Use the symbols for pounds and pence correctly	
Find different combinations of coins that equal the same amounts of money		Use a combination of coins to make a given amount up to £1	<b>Use different coins to make the same amount</b>	Know how many 50p; 20p; 10p; 5p; 2p and 1p coins needed to make up to £1
Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	Solve simple one step problems involving addition and subtraction of money with support	Solve simple one step problems involving addition and subtraction of money	Find the difference between two amounts including giving change from any amount up to £1	
Choose and use appropriate standard units to estimate and measure length/height, mass, temperature, capacity to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	Know that capacity is measured in l/ml, length and height in m/cm, mass in kg/g and temperature in degrees Celsius	Read scales where all numbers are shown to determine the length, height, mass or volume. Show amounts on a scale where all numbers are shown Know 1000ml = 1 litre and 100cm = 1 metre.	<b>Read scales in divisions of ones, twos, fives and tens</b> to determine length/height, mass etc Show amounts on a scale in divisions of ones, twos, fives and tens Choose appropriate standard units	<b>Read scales where not all numbers on the scale are given, and estimate points in between</b>
Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Order sets of 3 or more objects by lengths, mass, volume/capacity etc	Use the language of greater than, less than and equal to, to compare by length, mass, volume	Use the >, < and = symbols to compare and order	
<b>Geometry - Shape</b>				
Identify & describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line	Name common 2d shapes from pictures	<b>Name some common 2D and 3D shapes from a group of shapes or from pictures of the shapes and describe some of their properties – for example: triangles, rectangles, squares, circles, cuboids, cubes, pyramids and spheres</b>	<b>Name and describe properties of 2D and 3D shapes, including number of sides, vertices, edges, faces and lines of symmetry</b>	<b>Describe similarities and differences of 2D and 3D shapes, using their properties</b> Appreciate that a square is a rectangle because it has 4 right angles and opposite sides are of equal length
Identify & describe the properties of 3D shapes, including the number of edges, vertices and faces	Name common 3d shapes using physical shapes			
Identify 2D shapes on the surface of 3D shapes e.g. circle on a cylinder & a triangle on a pyramid	Know that 3D shapes have faces or surfaces	Identify the 2d shapes on the faces of 3d shapes using physical objects to support	Identify the 2d shapes on the faces of 3d shapes using physical objects and from pictures	
Compare and sort common 2D and 3D shapes and everyday objects.	Compare 2D and 3D shapes saying what is the same or different	Compare and sort common 2d and 3d shapes using given criteria	Compare and sort common 2d and 3d shapes using own criteria	
<b>Geometry – Position and Direction</b>				
Order and arrange combinations of mathematical objects in patterns and sequences	Continue a simple repeating pattern	Create repeating patterns Describe a pattern	Create repeating patterns including by rotating a shape or object.	Fill in the missing shape to complete the pattern, explaining reasoning
Use vocabulary to describe position, direction & movement, including movement in a straight line & distinguishing between rotation as a turn & in terms of right angles for quarter, half and three-quarter turns (clockwise and anti clockwise).	Show whole, half and quarter turns clockwise	Use the language turns as whole, half, quarter and three-quarter turns clockwise & anti-clockwise. Explain that a full turn is equal to four quarter turns & a half turn is equal to two quarter turns	Use left, right, forwards, backwards, top, bottom, above, below & in between to describe position & direction. Describe & record directions	Know that fractions of a turn and direction of a turn can be used to describe the rule of a pattern
<b>Statistics</b>				
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.	Answer simple questions by counting	Draw and interpret pictograms and block diagrams (1:1) Draw and interpret tally charts and tables Answer simple questions by counting Collect data to put in a table or tally chart	Draw and interpret pictograms and block diagrams (2s, 5s, 10s) Understand and use part symbols Answer simple questions by totalling and comparing, identify key information Ask own questions about data	

Highlighting Code

Baseline

Autumn

Spring

Summer