MATHEMATICS Year 2

All children will access age related curriculum objectives.	**All children will:**	**Children, who grasp concepts rapidly, may:**
Number Place Value		
Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.	*I can count forward and backward in steps of 2, 3, and 5 from 0, and make jumps in tens from any number.*	*I can count forward and backward confidently in steps of 2, 3, and 5 from 0, and make jumps in tens from any number.*
Recognise the place value of each digit in a two-digit number (tens, ones).	*I know what each digit means in two-digit numbers such as 24.*	*I know what each digit means in two-digit numbers such as 24 and I can use this to solve calculations.*
Identify, represent and estimate numbers using different representations, including the number line.	*I can find and show numbers on a number line.*	*I can accurately find and show numbers, money and measures on a number line.*
Compare and order numbers from 0 up to 100.	*I can order numbers up to 100 and tell you which numbers are bigger or smaller.*	*I can order numbers, money and different measurements up to 100 and tell you which numbers are bigger or smaller.*
Use greater than, less than and = signs. .	*I use the greater than, less than and equals signs in maths and know what they mean.*	*I use the greater than, less than and equals signs in maths and know what they mean when comparing numbers, measures and money.*
Read and write numbers to at least 100 in numerals and in words.	*I can read and write numbers to 100 in digits and words.*	*I can read and write numbers to 100 in digits and words without help.*
Use place value and number facts to solve problems.	*I solve problems using number facts such as 18+2=20 and what I know about the value of digits in a number.*	*I solve problems using number facts in different contexts such as 18cm+2cm=20cm and what I know about the value of digits in a number.*
Addition Subtraction		
Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures. those involving numbers, quantities and measures.	*I answer addition and subtraction maths problems using objects or pictures to help me work it out.*	*I answer more difficult addition and subtraction maths problems using objects or pictures to help me work it out.*
Solve problems with addition and subtraction applying their increasing knowledge of mental and written methods.	*I can solve addition and subtraction problems and work out how I answer it on paper or show you how I did it in my head by explaining step by step.*	*I can solve addition and subtraction problems using money and measures, and work out how I answer it on paper or show you how I did it in my head by explaining step by step.*
Solve problems with addition and subtraction recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	*I answer problems with addition and subtraction using my number facts to 20 and other number facts up to 100.*	*I answer problems with addition and subtraction quickly, using my number facts to 20 and other number facts up to 100.*

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones.	*I can add and subtract numbers such as 34 - 8 or 52 + 5 using objects or pictures to help.*	*I can solve real-life problems by adding and subtracting numbers such as 31 - 9 or 56 + 5 using objects or pictures to help.*
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens.	*I add and subtract two-digit numbers using objects to help me.*	*I can solve real-life problems by adding and subtracting two-digit numbers using objects to help me.*
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers.	*I can add or subtract numbers such as 42 - 22 or 56 + 29 using objects or pictures to help me.*	*I can add or subtract money and measures such as 42g - 22g or 56p + 29p using objects or pictures to help me.*
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including adding three one-digit numbers.	*I can add or subtract three numbers such as 2 + 5 + 9.*	*I can add or subtract three numbers such as 2 + 7 + 9 quickly.*
Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	*I know that adding two numbers together can be done in any order but subtracting numbers can only be done in one order.*	*I can solve problems that show adding two numbers together can be done in any order but subtracting numbers can only be done in one order.*
Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	*I can check my answers or solve missing number problems by doing an inverse check.*	*I can confidently check my answers accurately or solve missing number problems by doing an inverse check.*
Multiplication Division		
Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	*I know my 2 and 5 and 10 times tables by heart and can tell whether a number is odd or even.*	*I know my 2 and 5 and 10 times tables by heart, can recall the answer quickly and can tell whether a number is odd or even.*
Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.	*I use multiplication (×), division (÷) and equals (=) signs when writing out my times tables.*	*I can solve mathematical problems using multiplication (x), 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.	*I know that the multiplication of two numbers can be done in any order, but that the division of numbers can only be done in one order.*	*I can solve problems to show that multiplication of two numbers can be done in any order, but that the division of numbers can only be done in one order.*
[EXS] [KEY] Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	*I can solve multiplication and division problems using times table facts and objects or pictures to help me.*	*I can solve multiplication and division problems in different subjects, using times table facts and objects or pictures to help me.*

Fractions		
Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. .	*I can find 1/3 or 1/4 or 2/4 or 3/4 of a shape, length or set of objects.*	*I can solve practical problems by finding and writing 1/3 or 1/4 or 2/4 or 3/4 of a shape, length or set of objects.*
Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.	*I can write simple fractions sentences such as 1/2 of 6 = 3 and know that 2/4 equals 1/2.*	*I can solve real-life problems involving writing simple fractions sentences such as 1/4 of 8 = 2 and knowing that 2/4 equals 1/2.*
Measurement		
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.	*I can choose, use and measure the correct unit to measure length or height in any direction (m/cm); weight (kg/g); temperature (°C); or capacity (litres/ml).*	*I can solve a range of problems and investigations by choosing, using and measuring the correct unit to measure length or height in any direction (m,cm); weight (kg,g); temperature (°C); or capacity (litres,ml).*
Compare and order lengths, mass, volume/capacity and record the results using symbols for greater than, less than and =.	*I can compare and order lengths, weight and capacity and then record the results using symbols for greater than, less than and equals.*	*I can compare and order lengths, weight and capacity and then record the results using symbols for greater than, less than and equals across a range of subjects.*
Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.	*I know and use the symbols for pounds (£) and pence (p) and can add together different amounts of money, such as 253p and £2.*	*I can solve practical problems using symbols for pounds (£) and pence (p) and can add together different amounts of money, such as 253p and £2.*
[EXS] [KEY] Find different combinations of coins that equal the same amounts of money.	*I can find different combinations of coins that equal the same amounts of money.*	*I can find all of the different combinations of coins that equal the same amounts of money using a system.*
Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	*I have solved money problems such as how much change do I get from 50p if I buy an apple for 35p?*	*I have solved more difficult money problems such as how much change do I get from £1.00 if I buy an apple for 37p?*
Compare and sequence intervals of time.	*I can put the time of events in order.*	*I can put the time of events in order to solve real-life problems.*
Tell and write the time to fifteen minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	*I can tell and write the time, including quarter past/to the hour and draw the hands on a clock face to show these times.*	*I can 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 confidently*
Know the number of minutes in an hour and the number of hours in a day.	*I know there are 60 minutes in an hour and 24 hours in a day.*	*I can solve real-life problems involving the number of minutes in an hour and hours in a day.*

Shape		
Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.	*I can describe the properties of some 2-D shapes, including the number of sides they have and facts about their symmetry.*	*I investigate and compare the properties of some 2-D shapes, including the number of sides they have and facts about their symmetry.*
Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.	*I can describe the properties of some 3-D shapes, including the number of edges, faces and vertices they have.*	*I can investigate and compare the properties of some 3-D shapes, including the number of edges, faces and vertices they have.*
Identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid].	*I can tell you which 2-D shapes appear as the faces on 3-D shapes, such as triangles on a pyramid.*	*I can tell you which 2-D shapes appear as the faces on 3-D shapes and say how they have been turned to fit*
Compare and sort common 2-D and 3-D shapes and everyday objects.	*I can compare 2-D and 3-D shapes with everyday objects around me.*	*I can compare and classify2-D and 3-D shapes with everyday objects around me based on their properties and can explain my choices.*
Position		
Order and arrange combinations of mathematical objects in patterns and sequences.	*I can order combinations of mathematical objects in patterns and sequences.*	*I can order combinations of mathematical objects in patterns and sequences, and I have begun to spot mathematical rules.*
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).	*I can describe my position, direction and movement, including describing turns as quarter, half and three-quarter turns in clockwise and anti-clockwise directions.*	*I can describe the position, direction and movement of any object, including describing turns as quarter, half and three-quarter turns in clockwise and anti-clockwise directions, without support.*
Statistics		
Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.	*I can read and construct picture graphs, tally charts and tables.*	*I can confidently read and construct picture graphs, tally charts and tables in different subject areas*
Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.	*I can sort objects into categories and tell you how many objects are in each category and show which category has the most.*	*I can solve practical problems by sorting objects into categories and telling you how many objects are in each category and show which category has the most.*
Ask and answer questions about totalling and comparing categorical data.	*I work on sorting objects and can answer questions about the groups of objects I have sorted.*	*I work on sorting objects and can answer questions about the groups of objects I have sorted to solve real-life problems.*