**Year 2**

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| **Number and Place Value** | **Addition and Subtraction** | **Multiplication and Division** | **Fractions** | **Measurements** | **Properties of Shape** |
| Demonstrate an understanding of place value supported by the use of apparatus if required e.g. by stating the difference in the tens and ones between 2 numbers i.e. 77 and 33 has a difference of 40 for the tens and a difference of 4 for the ones; by writing number statements such as 35 < 53 and 42 > 36 | Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole | 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 | 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 |
| Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward | Solve problems with addition and subtraction applying his/her increasing knowledge of written methods and mental methods where regrouping may be required | Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs | Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2 | Compare and order lengths, mass, volume/capacity and record the results using >, < and = |
| |  |  | | --- | --- | |  | Identify, represent and estimate numbers using different representations, including the number line | | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 | Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | **Position and Direction** | Find different combinations of coins that equal the same amounts of money | Identify 2-D shapes on the surface of 3-D shapes e.g. a circle on a cylinder and a triangle on a pyramid |
| Order and arrange combinations of mathematical objects in patterns and sequences |
| Compare and order numbers from 0 up to 100; use <, > and = signs | Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones | Solve problems involving multiplication and division, using concrete materials and mental methods | 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) | Find different combinations of coins that equal the same amounts of money | Compare and sort common 2-D and 3-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them |
| Read and write numbers to at least 100 in numerals | Add and subtract an two 2 two digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus | Solve problems involving multiplication and division, using arrays, repeated addition and multiplication and division facts, including problems in contexts e.g. knowing that 2 × 7 = 14 and 2 × 8 = 16, explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left |  | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change |  |
| Read and write numbers to at least 100 in words | Add and subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers | Use multiplication facts to make deductions outside known multiplication facts e.g. know that multiples of 5 have one digit of 0 or 5 and use this to reason that 18 × 5 cannot be 92 as it is not a multiple of 5 |  | |  |  | | --- | --- | | Compare and sequence intervals of time |  | |  |
| Use place value and number facts to solve problems | Add and subtract numbers using concrete objects, pictorial representations, and mentally, including adding three one-digit numbers | Solve word problems involving multiplication and division with 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 |  | 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 |  |
| Partition two-digit numbers into different combinations of tens and ones using apparatus if needed e.g. 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones | Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot | Recognise the relationships between addition and subtraction and rewrite addition statements as simplified multiplication statements e.g. 10 + 10 + 10 + 5 + 5 = 3 × 10 + 2 × 5 = 4 × 10 |  | Remember the number of minutes in an hour and the number of hours in a day |  |
| Use reasoning within addition e.g. reason that the sum of 3 odd numbers will always be odd | Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems |  |  | Read scales in divisions of ones, twos, fives and tens in a practical situation where all numbers on the scale are given e.g. read the temperature on a thermometer or measure capacities using a measuring jug |  |
| Recall the multiples of 10 below and above any given 2 digit number e.g. say that for 67 the multiples are 60 and 70 | Recall doubles and halves to 20 e.g. knowing that double 2 is 4, double 5 is 10 and half of 18 is 9 |  |  | Read scales in divisions of ones, twos, fives and tens in a practical situation where not all numbers on the scale are given e.g. a number line with missing labels |  |
| 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) | Use estimation to check that his/her answers to a calculation are reasonable e.g. knowing that 48 + 35 will be less than 100 |  |  | Read the time on a clock to the nearest 15 minutes |  |
|  | Solve missing number problems using addition and subtraction |  |  |  |  |