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| **Name: Year group joined/date: SEND/EI PP: Yes/No** | | |
| **MATHS** | | |
|  | Year 2 Expected | Year 2 Greater Depth |
| Number | Read, write and compare and order numbers 0-100 using < > and = confidently |  |
| Count in steps of 2, 3, 5 from zero, and 10 from any number forward and backwards and use counting strategies to solve problems (e.g. count the number of chairs in a diagram when the chairs are organised in 7 rows of 5 by counting in fives) |  |
| Recognise the value of any digit in a 2 digit number |  |
| Accurately use mathematical language – equal, more, less, fewer, most, least within word problems |  |
| Use place value and number facts to solve problems |  |
| Calculations | Use inverse strategies applying + - and =.  Addition can be in any order, subtraction cannot be reversed.  Recognise the inverse relationships between addition and subtraction and use this to check calculations and work out missing number problems (e.g. Δ − 14 = 28). | Solve more complex missing number problems (e.g. 14 + – 3 = 17; 14 + Δ = 15 + 27). |
| Solve addition and subtraction problems using the column method involving 2 digit numbers.  Partition two-digit numbers into different combinations of tens and ones. This may include using apparatus (e.g. 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones).  Add 2 two-digit numbers within 100 (e.g. 48 + 35) and can demonstrate their method using concrete apparatus or pictorial representations.  Subtract mentally a two-digit number from another two-digit number when there is no regrouping required (e.g. 74 − 33). | Reason about addition (e.g. pupil can reason that the sum of 3 odd numbers will always be odd).  Work out mental calculations where regrouping is required (e.g. 52 − 27; 91 – 73). Including several single digit numbers |
| Add and subtract a two-digit number and ones and a two-digit number and tens where no regrouping is required (e.g. 23+5; 46+20), they can demonstrate their method using concrete apparatus or pictorial representations |  |
| Know by heart all bonds of multiples of 10 to 100 |  |
| Know by heart halves of all even numbers to 20 |  |
| Know by heart addition and subtraction facts for each number up to 20  Use number bonds and related subtraction facts within 20 (e.g. 18=9+?; 15 = 6 + ?) |  |
| Estimation to check that their answers to a calculation are reasonable (e.g. knowing that 48 + 35 will be less than 100). |  |
| Times and divide by 2, 5 and 10 using x and ÷ to record  Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables to solve simple problems, demonstrating an understanding of commutativity as necessary (e.g. knowing they can make 7 groups of 5 from 35 blocks and writing 35 ÷ 5 = 7; sharing 40 cherries between 10 people and writing 40 ÷ 10 = 4; stating the total value of six 5p coins). | Use multiplication facts to make deductions outside known multiplication facts (e.g. a pupil knows that multiples of 5 have one digit of 0 or 5 and uses this to reason that 18 × 5 cannot be 92 as it is not a multiple of 5).  Determine remainders given known facts (e.g. given 15 ÷ 5 = 3 and has a remainder of 0, pupil recognises that 16 ÷ 5 will have a remainder of 1; knowing that 2 × 7 = 14 and 2 × 8 = 16, pupil explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left). |
| Solve multiplication problems using objects and mentally understand that multiplication can be in any order | Solve 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?). |
|  | Recognise the relationships between addition and subtraction and can rewrite addition statements as simplified multiplication statements (e.g. 10 + 10 + 10 + 5 + 5 = 3 × 10 + 2 × 5 = 4 × 10). |
| Fractions | Recognise, find and name ½ ¼ 1/3 2/4 and ¾ of a shape or quantity and know that all parts must be equal parts of the whole. | Find and compare fractions of amounts (e.g. 14 of £20 = £5 and 12 of £8 = £4 so 14 of £20 is greater than 12 of £8). |
| Recognise equivalence e.g. 2/4 = ½ |  |
| Measurement | Compare and order length, mass, capacity and volume using standard measures < > and =  Read scales in divisions of ones, twos, fives and tens in a practical situation where all numbers on the scale are given (e.g. pupil reads the temperature on a thermometer or measures capacities using a measuring jug). | Read scales in divisions of ones, twos, fives and tens in a practical situation where not all numbers on the scale are given. |
| Recognise and use £ and p using different combinations to make set amounts (e.g. pupil uses coins to make 50p in different ways; pupil can work out how many £2 coins are needed to exchange for a £20 note).  Solve practical word problems applying addition, subtraction and giving change | Find all possible combination of coins to equal a given amount.  Solve more complex problems such as how to pay a given amount using the fewest possible number of coins. |
| Read the time on the clock to the nearest 15 minutes. | Tell, write and draw the time to the nearest 5 minutes. |
| Compare and sequence intervals of time. Know the number of minutes in an hour and number of hours in a day. | Use these facts to solve problems. |
| Geometry | Identify and describe properties of 2D and 3D shapes. (e.g. the pupil describes a triangle: it has 3 sides, 3 vertices and 1 line of symmetry; the pupil describes a pyramid: it has 8 edges, 5 faces, 4 of which are triangles and one is a square).  Identify 2D shapes on the face of 3D shapes.  Compare and sort common 2D and 3D shapes including everyday objects | Describe similarities and differences of shape properties (e.g. finds 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 but can describe what is different about them). |
| Describe movement using technical vocabulary e.g. clockwise/anticlockwise |  |
| Statistics | Interpret and construct pictograms, tally charts, block diagrams and tables | Use symbols that show many to one correspondence or scales divided into 2s or 5s |
| Ask and answer simple questions about charts totalling and comparing data | Ask and answer more complex questions about charts. |