| **Year Two Maths Long Term Plan** | | | | | | |
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|  | **Number and Place Value/Number Facts (3 weeks)** | **Addition and Subtraction**  **(3 weeks)** | **1 week consolidation / pre teach Multiplication & division** | **Multiplication and Division**  **(3 weeks – greater focus on multiplication)** | **Geometry - Shape**  **(3 weeks)** | |
| Autumn Term (14 weeks) | * Count within 100, forwards and backwards, starting with any number. * Count forwards and backwards in multiples of 5, up to 10 multiples, beginning with any multiple. * Count forwards and backwards through the odd numbers (e.g. 1, 3, 5, 7..) * identify, represent and estimate numbers using different representations, including the number line (up to 100) and consolidate the associated language e.g. equal to, more than, less than (fewer), most and least * Begin to read and write numbers to at least 50 in numerals and 20 in words. * Secure fluency in addition and subtraction facts within 20, through continued practice. * Recognise each digit in a two-digit number up to 50 (tens, ones). * Begin to use number facts to solve simple problems.   Read and write numbers in numerals up to 100.  recall at least four of the six number bonds for 10 and reason about associated facts (e.g. 6 + 4 = 10 , therefore 4 + 6 = 10 and 10 – 6 = 4)  count in twos, fives and tens from 0 and use this to solve problems | * add and subtract numbers using concrete objects, pictorial representations, and mentally, including:   a two-digit number and ones  adding three one-digit numbers   * begin to show that addition of two numbers can be done in any order and subtraction of one number from another cannot (*using concrete objects, pictorial representations, and mentally*) * consolidate 1 step problems with addition and subtraction:   + using concrete objects and pictorial representations, including those involving numbers, quantities and measures   + applying their knowledge of mental and written methods   Begin to recognise and use the inverse relationship between addition and subtraction and use this to solve missing number problems to 50  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)  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) |  | * Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. * begin to recall multiplication and division facts for the 2 and 10 multiplication tables, including recognising odd and even numbers to 50 * begin to calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs (*using concrete objects, pictorial representations and arrays*) * show that multiplication of two numbers can be done in any order (*using concrete objects, pictorial representations and arrays*) * Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication 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 | Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations   * Begin to identify and describe the properties of 2-D shapes, including the number of sides. * Begin to identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces – wide range of shapes * Begin to identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid] use a wider range of shapes * Begin to compare and sort common 2-D and 3-D shapes and everyday objects (on the basis of their geometric properties including vertices, sides, edges, face) * Use precise language to describe the properties of 2-D shapes and compare shapes by reasoning about similarities and differences in properties, including the number of sides and line symmetry in a vertical line.   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).  name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry. | |
| Spring Term   1. eeks) | **Addition and Subtraction (3 weeks)**   * begin to solve 1 and 2 step problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures * Applying their increasing knowledge of mental and written methods recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. * add and subtract numbers within 100 by applying related one-digit addition and subtraction facts 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 * show that addition of two numbers can be done in any order   (commutative) and subtraction of one number from another cannot   * recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. * Secure fluency in addition and subtraction facts within 10, through continued practice. * Add and subtract across 10.   Recognise the subtraction structure of ‘difference’ and answer questionsof the form ‘how many more?’  Show that addition of two numbers can be done in any order and subtraction of one number from another cannot  Begin to recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.  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) | **Measures – (4 weeks - Focus on Time and Money)**  • Recognise and use symbols for pounds (£) and pence (p) and begin to solve simple  problems   Begin to find different combinations of coins that equal the same amounts of money   Solve simple problems in a practical context involving addition and subtraction of  money of the same unit and begin to find change  Sequence intervals of time   tell and write the time to quarter past/to the hour and draw the hands on a clock face to  show these times. Begin to tell the time to 5 minutes.   begin to know the number of minutes in an hour and the number of hours in a day.  Use different coins to make the same amount  read scales\* in divisions of ones, twos, fives and tens  read the time on a clock to the nearest 15 minutes | | **Multiplication and Division (4 weeks – greater focus on division)**  ∙ Begin to solve problems involving multiplication and division, using materials, arrays, repeated addition including problems in contexts.  **R**ecall multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers to at least 100  ∙ With increased fluency calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.  ∙ Show that multiplication of two numbers can be done in any order (commutative) and begin to know that division of one number by another cannot.  ∙ Begin to solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.  Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor and to division equations  recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary | **Fractions (2 weeks.)**  Recognise, find, name and write fractions,  ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.  ∙ Recognise the equivalence of 2/4 and ½ and begin to write simple fractions for example, 1/2 of 6 = 3.  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 | **Assessment** |
| Summer Term  (12 weeks) | **Calculations (3 weeks)**  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) | **ractions (1 week recap)**  Recognise, find, name and write fractions,  1/3 ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.  ∙ Recognise the equivalence of 2/4 and ½ and begin to write simple fractions for example, 1/2 of 6 = 3. | **Measure (3 weeks – greater focus on length/height, weight/mass, volume/capacity)**  choose and use appropriate standard units to estimate and measure length/height in  any direction (m/cm); mass (kg/g); capacity (litres/ml) to the nearest appropriate unit,  using rulers, scales and measuring vessels and continue to use associated vocabulary  e.g. longer/shorter, double/half etc and begin to use thermometers and recognise (°C)   compare and order lengths, mass, volume/capacity and record the results and begin to  use >, < to record results | **Statistics (3 weeks)**  Interpret and construct  simple pictograms (where the  symbols start to show many to one  correspondence), tally charts, block  diagrams and begin to interpret and construct simple tables.  Ask and answer simple questions  by counting the number of objects  in each category and sorting the  categories by quantity (increasing  the categories and quantity)   ask and answer questions about  totalling and begin | **Geometry -Position and direction (3 weeks)**  order and arrange combinations of  mathematical objects in patterns and  sequences.   use mathematical vocabulary to  describe position, direction and  movement, including movement in a  straight line and distinguishing  between rotation as a turn for quarter,  half and three-quarter turns .  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). |  |

Information in red = related TAF statements.