

Medium Term Plans for Mathematics (aligned with the 2014 National Curriculum) -Year Two (Summer Term)

Oral mental starters (ongoing, throughout the term):

- Count forwards from 0, and backwards in twos, fives and tens to the 10th multiple and recall multiplication and division facts
- Recall multiplication and division facts for the 2, 5 and 10 times table
- Count forwards from 0, and backwards in threes to the 10th multiple
- Say the number that is 10 more/less than any number within 100, beginning to bridge 100 (refer to the 100 square/200 grid)
- Count on and back in 10s from any one or two digit number (refer to the 100 square) beginning to bridge 100 (refer to 200 grid)
- Recall and use all pairs of numbers with a total of 20 and all pairs of numbers within 20; give addition and subtraction facts for the pair of numbers
- Derive pairs of multiples of 10 with totals up to 100 and give related addition and subtraction facts (e.g. $60+40=100$, $100-40=60$)
- Add three one-digit numbers, using knowledge of number pairs e.g. $7 + 3 + 5 = 10 + 5 = 15$
- Make estimates of quantities within 100 by grouping objects into 2s, 5s or 10s
- Recall the doubles of multiples of 10 to 100 (e.g. double 20 is 40) and recall the related halves (e.g. half of 40 is 20)
- Read the time to the nearest five minutes including to the hour, the half hour and the quarter hour (past and to) using an analogue clock

NB Also see the **Mental Maths Policy** for further guidance

| Areas of Study | No of days | Statutory requirements and non-statutory guidance | Suggested Key Vocabulary |
|--------------------------------------|------------|---|---|
| Number Number and place value | 5 | <p>Read and write numbers to at least 100 in numerals and words</p> <p>Given a number, say/ identify the number that is 10 more or less within 100 (begin to bridge 100)</p> <p>Say the number that comes between two numbers within 100</p> <p>Recognise the place value of each digit in a two-digit number to 100 and partition into tens and units/ones using practical apparatus e.g. straws, cubes, ten sticks and units, Dienes, Unifix, arrow/ place value cards</p> <p>Partition two-digit numbers in different ways (e.g. $56 = 50 + 6$; $56 = 40 + 16$)</p> <p>Order numbers from 0 up to 100 (and beyond) and position them on a number line and/or a 100 square/ 200 grid; compare numbers from 0 up to 100 (and beyond); use $<$, $>$ and $=$ signs</p> <p>Begin to partition three-digit numbers into hundreds, tens and units/ones; begin to recognise the place value of each digit in a three-digit number using practical apparatus e.g. hundred blocks/ ten sticks and units, Dienes, arrow/ place value cards (from Y3 programme of study)</p> | <p>Number, numerals</p> <p>Zero, one, two.....to one hundred</p> <p>Ten more, ten less</p> <p>Between, before, after</p> <p>Place value</p> <p>Digit, hundred, tens, ones/units</p> <p>Order, compare</p> <p>Greater than ($>$)</p> <p>Less than ($<$)</p> <p>Partition</p> |

Medium Term Plans for Mathematics (aligned with the 2014 National Curriculum) -Year Two (Summer Term)

| | | | |
|---|----------|---|--|
| <p>Number</p> <p>Addition</p> | <p>5</p> | <p>Continue to use the vocabulary and symbols (+, =) related to addition Derive pairs of multiples of 10 with totals up to 100, using place value and knowledge of number pairs that total ten; give addition facts (e.g. $60 + 40 = 100$) (See Mental Maths Policy) Show that addition of two numbers can be done in any order</p> <p>Use the partitioning method to add two two-digit numbers (beginning to bridge the tens) with numbers within 100 e.g. $48 + 25$ (See Calculation Policy) Begin to bridge 100 when adding two two-digit numbers (in preparation for Y3)</p> <p>Solve one- step word problems, which involve addition</p> | <p>Addition,+ , add, plus, more, put together, altogether, total Count on =, equals, is the same as Partition, tens, ones/units</p> <p>Problem, answer/solution Calculate</p> |
| <p>Number</p> <p>Subtraction</p> | <p>5</p> | <p>Continue to use the vocabulary and symbols (-, =) related to subtraction Derive pairs of multiples of 10 with totals up to 100, using place value and knowledge of number pairs that total ten, and give subtraction facts (e.g. $100 - 30 = 70$) (See Mental Maths Policy) Show that subtraction of one number from another cannot be done in any order</p> <p>Use complementary addition to find small differences using concrete objects and by counting up on a number line, e.g. the difference between 29 and 32 is 3 (See Calculation Policy)</p> <p>Solve one- step word problems, which involve subtraction</p> | <p>Subtraction,- , take away, subtract, minus How many are left? Difference between count on (to find small difference)</p> <p>Tens, ones/units</p> <p>Problem, answer/solution, calculate</p> |
| <p>Number</p> <p>Multiplication and Division</p> | <p>5</p> | <p>Continue to use the vocabulary and symbols related to multiplication and division Count forwards and backwards to and from 0 in twos, fives and tens to the 10th multiple Count forwards and backwards to and from 0 in threes to the 10th multiple</p> <p>Represent multiplication using an empty number line and using known multiples e.g. 2, 3, 5 and 10 (See Calculation Policy) Recall and use multiplication facts for the 2, 5 and 10 multiplication tables</p> <p>Show that multiplication of two numbers can be done in any order (e.g. $3 \times 5 = 15$ and $5 \times 3 = 15$) (See Mental Maths Policy)</p> | <p>Lots of, groups of, repeated addition, times, multiply, multiplied by, multiplication x, array, row, column Empty number line Count forwards Multiple</p> |

Medium Term Plans for Mathematics (aligned with the 2014 National Curriculum) -Year Two (Summer Term)

| | | | |
|--|---|---|---|
| | | <p>Represent division using an empty number line and using known multiples (See Calculation Policy)</p> <p>Recall and use division facts for the 2, 5 and 10 multiplication tables</p> <p>Use the inverse relationship between multiplication and division to solve missing number problems (e.g. $12 \div \square = 6$; $\square \times 2 = 12$)</p> | <p>Share, groups of, divide, divided by, shared equally, repeated subtraction \div, = array, row, column Empty number line Count backwards Problem, solution Inverse</p> |
| <p>Measurement</p> <p>Length</p> | 5 | <p>Choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm) of everyday objects to the nearest appropriate unit, using rulers and metre sticks</p> <p>Know that there are 100cm in a metre (100cm = 1m)</p> <p>Compare and order lengths and record results using < and > signs</p> <p>Follow a line of enquiry relating to length e.g. Is this true or false? All 6/7 year olds can jump more than one metre; our classroom is more than 10 metres in length</p> <p>(Link to the Science curriculum)</p> | <p>Estimate, compare, measure metre(m), centimetre (cm) metre stick, ruler. Longer than, shorter than, taller than Longest, tallest, shortest < and > signs</p> |
| <p>Number</p> <p>Addition and subtraction</p> | 5 | <p>Continue to use the vocabulary and symbols (+, -, =) related to addition and subtraction</p> <p>Add numbers mentally and by using empty number lines and/or a hundred square – a two-digit number and ones; a two-digit number and tens and two two-digit numbers (numbers within 100 and beginning to bridge 100) (See Calculation Policy)</p> <p>Subtract numbers mentally and by using empty number lines and/or a hundred square – a two-digit number and ones; a two-digit number and ten and two two-digit numbers (numbers within 100 and beginning to bridge 100) (See Calculation Policy)</p> <p>Use knowledge of place value and number facts to solve one -step word problems involving addition and subtraction, including problems set in the context of money or measures</p> | <p>Addition +, add, plus, more, put together, altogether, total, sum of, count on =, equals, is the same as Empty number line Partition, tens, ones/units</p> <p>Subtraction,- , take away, subtract, minus, count back How many are left?</p> <p>Problem, solution Calculate</p> |

Medium Term Plans for Mathematics (aligned with the 2014 National Curriculum) -Year Two (Summer Term)

| | | | |
|---|----------|---|---|
| <p>Statistics</p> <p>Data handling</p> | <p>5</p> | <p>Interpret tally charts, simple tables, pictograms and block diagrams</p> <p>Ask and answer simple questions by counting the number of objects in each category</p> <p>Begin to use simple ratios in pictograms for example where one face represents two children</p> <p>Follow a line of enquiry e.g. How do children in our class get to school? Use data to create a simple pictogram where one symbol represents two children.</p> <p>Ask and answer questions e.g. How many children came to school by bus? Did most of the class walk to school today? How do you know?</p> | <p>Block diagram, pictogram</p> <p>Table, list, tally</p> <p>Data</p> <p>Collect (data)</p> |
| <p>Number</p> <p>Fractions</p> | <p>5</p> | <p>Recognise, name and write fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ and introduce $\frac{1}{3}$ using words and fraction notation</p> <p>Consolidate finding $\frac{1}{2}$ and $\frac{1}{4}$ of familiar shapes, lengths, sets of objects or quantity</p> <p>Find $\frac{2}{4}$ and $\frac{3}{4}$ of familiar shapes and a set of objects in practical contexts</p> <p>Find $\frac{1}{3}$ of familiar shapes and a set of objects in practical contexts (connect unit fractions to division and arrays)</p> <p>Solve problems, which involve fractions, using concrete objects and pictorial representations to support e.g. There are 12 bananas in a bunch. I give $\frac{1}{3}$ of them to my friend. How many does he have and how many do I have?</p> | <p>Fraction,</p> <p>Half, quarter, third</p> <p>$\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, $\frac{1}{3}$</p> <p>Array</p> |
| <p>Measurement</p> <p>Time</p> | <p>3</p> | <p>Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock to show these times</p> <p>Use units of time (minutes & hours) and know the relationships between them; know that there are 60 minutes in an hour and 24 hours in a day</p> <p>Compare and sequence intervals of time and solve problems relating to time e.g. I catch a train at 9 o'clock in the in the morning to go on holiday. My journey lasts for two hours. At what time do I arrive? My favourite TV programme starts at 5 o'clock and lasts for half an hour. At what time does it finish? Lunchtime begins at half past twelve and ends at half past one. How long does lunchtime last?</p> <p>Begin to tell the time on a 12 hour digital clock and relate this to time on an analogue clock (taken from Y3 programmes of study)</p> | <p>O'clock, half past, quarter past, quarter to, five past, ten past, etc five to, ten to etc</p> <p>Analogue clock</p> <p>Digital clock</p> <p>Minutes/hours</p> <p>Days/hours</p> |

Medium Term Plans for Mathematics (aligned with the 2014 National Curriculum) -Year Two (Summer Term)

| | | | |
|---|----------|--|--|
| <p>Geometry</p> <p>Position and direction</p> | <p>2</p> | <p>Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line</p> <p>Use the concept and language of angles to describe turns (clockwise and anti-clockwise) Give instructions using the language of position, direction and movement in practical contexts</p> <p>Recognise that a quarter turn is the same as a right angle</p> | <p>Forwards/backwards, left/right</p> <p>Turn, whole turn, half turn, quarter turn, three-quarter turn, right angle</p> <p>Clockwise/anti-clockwise</p> |
| <p>Measurement</p> <p>Money</p> | <p>5</p> | <p>Consolidate recognising different coins (including £2) and notes (£5, £10, £20) and understand their value and use the symbols (£) and pence (p)</p> <p>Know relationship between pounds and pence ($£1 = 100p$)</p> <p>Find different combinations of coins that equal the same amount of money e.g. I want to buy this apple for 55p. How can I pay for it just using silver coins? Is there more than one solution? Have you found all of the solutions?</p> <p>Solve word problems involving addition, subtraction, multiplication and division, halving & doubling in contexts of money (to £1) including giving change e.g. in the context of shopping or a café</p> | <p>Coins Pence (p), penny Pound (£)</p> <p>Buy, spend, change, pay, costs How much? Calculate, calculation Problem, answer/solution How did you work it out?</p> |
| <p>Additional weeks</p> <p>To be used for:</p> <ul style="list-style-type: none"> • assessment, consolidation and responding to AfL • additional using and applying activities | | | |