

Maths Medium term plans year 3.

These are only a rough guide. Depending on the progress the children make it may be slightly faster or slower.

Autumn 1 -Number: Place Value

- Count from 0 in multiples of 4, 8, 50 and 100
- Count up and down in tenths
- Read and write numbers up to 1000 in numerals and in words
- *Read and write numbers with one decimal place*
- Identify, represent and estimate numbers using different representations (*including the number line*)
- Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- *Identify the value of each digit to one decimal place*
- *Partition numbers in different ways (e.g. $146 = 100 + 40 + 6$ and $146 = 130 + 16$)*
- Compare and order numbers up to 1000
- *Compare and order numbers with one decimal place*
- Find 1, 10 or 100 more or less than a given number
- *Round numbers to at least 1000 to the nearest 10 or 100*
- *Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer*
- *Describe and extend number sequences involving counting on or back in different steps*
- *Read Roman numerals from I to XII*

Solve number problems and practical problems involving these ideas

Autumn 2- Number: Addition and Subtraction

Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)

- *Select a mental strategy appropriate for the numbers involved in the calculation*
- *Understand and use take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of context*
- *Recall/use addition/subtraction facts for 100 (multiples of 5 and 10)*
- *Derive and use addition and subtraction facts for 100*
- *Derive and use addition and subtraction facts for multiples of 100 totalling 1000*
- Add and subtract numbers mentally, including:
 - a three-digit number and ones
 - a three-digit number and tens
 - a three-digit number and hundreds
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- Estimate the answer to a calculation and use inverse operations to check answers
- *Continue to recognise and use the symbols for pounds (£) and pence (p) and understand that the decimal point separates pounds/pence*
- *Recognise that ten 10p coins equal £1 and that each coin is $\frac{1}{10}$ of £1*
- Add and subtract amounts of money to give change, using both £ and p in practical contexts

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Spring 1-Number: Multiplication and Division

- *Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)*
- *Understand that division is the inverse of multiplication and vice versa*
- *Understand how multiplication and division statements can be represented using arrays*
- *Understand division as sharing and grouping and use each appropriately*
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

- Derive and use doubles of all numbers to 100 and corresponding halves
- Derive and use doubles of all multiples of 50 to 500
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Solve problems, including missing number problems, involving multiplication and division (*and interpreting remainders*), including positive integer scaling problems and correspondence problems in which an objects are connected to m objects

Spring 2- Number: Fractions

- Show practically or pictorially that a fraction is one whole number divided by another (e.g. $\frac{3}{4}$ can be interpreted as $3 \div 4$)
- Understand that finding a fraction of an amount relates to division
- Recognise that tenths arise from dividing objects into 10 equal parts and in dividing one-digit numbers or quantities by 10
- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- Count on and back in steps of $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{3}$

Solve problems that involve all of the above

Summer 1-Number: Fractions

- Recognise and show, using diagrams, equivalent fractions with small denominators
- Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
- Compare and order unit fractions, and fractions with the same denominators (*including on a number line*)

Time

- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
 - Estimate/read time with increasing accuracy to the nearest minute
 - Record/compare time in terms of seconds, minutes, hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon, midnight
 - Know the number of seconds in a minute and the number of days in each month, year and leap year
- Compare durations of events [for example to

Summer 2-Angles

- Recognise angles as a property of shape or a description of a turn
- Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines

Measure: Length, height, temperature, weigh and Measure,

- compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Continue to estimate and measure temperature to the nearest degree ($^{\circ}\text{C}$) using thermometers
- Understand perimeter is a measure of distance around the boundary of a shape
- Measure the perimeter of simple 2-D shapes
- calculate the time taken by particular events or tasks]

Solve problems involving money and measures and simple problems involving passage of time