

## Year 2 – Small step objective coverage

### AUTUMN TERM – YEAR 2

#### **Place value – number to 100**

To count objects to 100 efficiently, using their understanding of counting in tens and ones.

To recognise and represent numbers to 100 in different ways

To partition numbers into tens and ones.

To develop the understanding of partitioning 2-digit numbers, recording this as an addition calculation.

To use a place value grid to show the value of digits within a 1- or 2-digit number.

To be able to compare numbers using place-value

To use the understanding of place value and comparing numbers to order more than two numbers.

To learn to count forwards and backwards in 2s, 5s and 10s.

To count forwards and backwards in 3s.

#### **Number: Addition and Subtraction**

To record known facts in different ways within addition and subtraction calculations.

To understand that you can do a subtraction calculation to check addition and vice versa.

To make links between numbers in sets of number sentences and compare addition and subtraction facts within 20

To use known facts to determine other facts.

To make number bonds to 100 using a 100 square to help.

To add and subtract 1s to or from a 2-digit number without exchanging

To find 10 more and 10 less than a number addition and subtraction of more than one ten to a 2-digit number

To add 2-digit and 1-digit numbers together, with the focus on bridging 10 using different methods for addition and focusing on the column method.

To subtract a 1-digit number from a 2-digit number

To add together two 2-digit numbers

To add two 2-digit numbers and extend to where exchange is required.

To subtract a 2-digit number from another 2-digit number without exchange

To subtract a 2-digit number from another 2-digit number using partitioning of the ones to cross ten.

To subtract a 2-digit number from another 2-digit number with exchange.

To add three numbers presented in a variety of ways, including concrete and pictorial representations

To represent word problems using single bar models

#### **Multiplication & Division**

To understand that objects can be grouped together and that groups containing the same number of objects are equal groups

To write repeated addition and multiplication sentences to match a picture

To use a number line alongside repeated addition and multiplication sentences to work out a total.

To be introduced to two multiplication calculations and two repeated addition calculations.

To learn how to relate arrays to a repeated addition sentence and multiplication sentence

To learn the 2 times-table in a number of contexts

To learn the 5 times-table in a number of contexts.

To learn the 10 times-table in a number of contexts and make explicit links to place value.

To apply knowledge of multiplication to answer scaling questions

To use repeated subtraction to model division calculations

To learn another strategy for dividing by sharing a number equally into groups.

To relate 2 times-table facts to dividing by 2

To understand the difference between odd and even.

To divide numbers by 5 by grouping and on a number line

To divide numbers by 10

To represent division calculations using a bar model and using grouping.

To represent division calculations using a bar model and a sharing method.

To solve a range of division problems using a range of visual representations

**YEAR 2 - SPING TERM**

**Measurement – length & height**

To use rulers to measure simple objects to the nearest centimetre.  
 To estimate and measure a range of objects, using metres as a unit of measurement.  
 To compare lengths measured in centimetres and metres.  
 To order sets of lengths measured in centimetres or metres  
 To use a range of methods to solve word problems involving length and height.

**Fractions**

To make equal parts from a whole in different contexts.  
 To identify which objects have been split into two equal parts.  
 To find one half of different amounts of objects, shapes and numbers.  
 To recognise shapes that have been split into four equal parts as quarters  
 To find one quarter of different amounts by sharing them into four equal groups.  
 To recognise  $1/2$ ,  $1/4$  and  $1/3$  of different shapes and amounts.  
 To be introduced to non-unit fractions (fractions in which the numerator is not 1).  
 To recognise that  $1/2$  and  $2/4$  are equivalent fractions.  
 To work out unit and non-unit fractions of numbers up to 20.  
 To recognise non-unit fractions as one whole.  
 To write numbers that are made of whole and parts  
 To count forwards and backwards in halves with the aid of a number line.  
 To learn how to count in quarters.

**Measures – Weight, Volume & temperature**

To use balance scales to compare the mass of two or more objects  
 To explore the use of standard units of mass (grams)  
 To measure and compare the mass of objects that are over 100 g using scales, giving the mass to the nearest 100 g.  
 To explore measuring and estimating mass using both grams and kilograms.  
 To explore, measure and compare volume and capacity.  
 To explore and use millilitres (ml) as a standard unit of measuring capacity and volume.  
 To estimate and measure capacity and volume in ml.  
 To use litres as a standard unit of measure  
 To read temperatures from a thermometer and use temperature to make simple comparisons and to carry out calculations.  
 To apply knowledge of counting in 2s, 5s and 10s to reading different scales on thermometers.

**Addition & Subtraction – problem solving & efficient methods**

To solve money problems using a variety of addition and subtraction strategies.  
 To make links between calculations to calculate unknown quantities, based on similarities and differences between the parts and the wholes.  
 To use known number facts to determine whether the total calculated is feasible, without completing the whole calculation.  
 To become more familiar with the 100 square and use it to confidently count forward and backwards in steps of ten and one in addition and subtraction problems.  
 To find multiple answers to the same questions  
 To identify what they know from a question and use it to work out unknowns, rearranging number sentences as appropriate.  
 To calculate unknown quantities using mental calculations  
 To add or subtract a multiple of 10 to or from a number and then adjust  
 To use efficient methods for subtracting  
 To solve a variety of different 1- and 2-step problems that will require appropriate calculation strategies.

**SUMMER TERM – YEAR 2**

**Money**

To learn the value of a range of coins and explore ways to find the total of different amounts.  
To learn the value of notes and find total amounts of them.  
To count different amounts of money and record their answers in pounds and pence  
To select the right combination of coins and notes for a given amount.  
To use different combinations of coins and notes to make the same amount of money.  
To compare amounts of money using the correct vocabulary and the signs and =.  
To find the total cost of given items.  
To find the difference between the cost and the amount paid when receiving change  
To use prior knowledge to solve two-step word problems

**Time**

To read and describe times to the hour and the half hour  
To describe times using the vocabulary of 'quarter past' and 'quarter to using an analogue clock  
To tell and write time to 5-minute intervals.  
To recognise how many minutes are in an hour.  
To find durations of time  
To use understanding of durations of time and counting around a clock to find an end time, when given a start time and a duration.  
To use understanding of durations of time and counting around a clock to find a start time, when given a start time and a duration.  
To learn that there are 24 hours in a day.

**Shape**

To recognise and name 2D and 3D shapes and make links between them.  
To apply what has been learnt about the properties of shapes in order to accurately draw 2D shapes.  
To count the number of sides on 2D shapes and will learn to use this knowledge to categorise different shapes.  
To recognise classify shapes by the number of vertices.  
To identify shapes and images that have reflective symmetry and identify where the line of symmetry lies.  
To sort polygons by different criteria.  
To identify patterns involving 2D shapes.  
To count and describe the faces of 3D shapes  
To identify edges of a 3D shape as the line where two faces meet.  
To understand that vertices on a 3D shape are where three or more edges meet.  
To sort 3D shapes based on their properties.  
To make symmetrical patterns with 3D shapes.

**Statistics**

To read and construct tally charts.  
To read pictograms, linking them to tally charts and construct them from given data.  
To read and construct pictograms in which symbols represent more than one item.  
To read and interpret pictograms finding totals and compare amounts.  
To read and interpret pictograms that have symbols representing more than one item.  
To read, construct and interpret block diagrams.  
To solve word problems involving the charts looked at.

**Positional language**

To describe movement and follow instructions using the words 'left', 'right', 'forwards' and 'backwards'.  
To describe quarter, half and three-quarter turns around a point using the terms 'clockwise' and 'anticlockwise'.  
To combine rotation and linear movement in order to follow or describe a designated path.  
To apply knowledge about rotation and position in order to complete and describe patterns.