



YEAR 2 medium term plan

Previous Y1 non-negotiable objectives in pink

Objectives highlighted in yellow are 'Ready to Progress criteria'

Autumn 1

Number-Place Value

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count in multiples of twos, fives and tens

Read and write numbers to 100 in numerals Read and write numbers from 1 to 20 in numerals and words

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- read and write numbers to at least 100 in numerals and in words
- Recognise the place value of each digit in a two-digit number (tens, ones) Compose and decompose 2 digit numbers, using standard and non-standard partitioning (2NPV-1)
- identify, represent and estimate numbers using different representations, including the number line
- Reason about the location of any 2 digit number on the linear system, including identifying the previous and next multiple of 10 (2NPV-2)
- compare and order numbers from 0 up to 100; use and = signs
- use place value and number facts to solve problems

Number-Addition and Subtraction

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

Represent and use number bonds and related subtraction facts within 20

- recall and use addition and subtraction facts to 20 fluently, (2AS-1)
- Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?" (2AS-2)
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
- Derive and use related facts to 100 (2AS-3)
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TU+U, TU+T, TU+TU (2AS-4)
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

Autumn 2

Number - Addition and Subtraction

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

Represent and use number bonds and related subtraction facts within 20

- Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. (2AS-3)

- Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers (2AS-4)
- solve problems with addition and subtraction, using concrete, pictorial and abstract representations including: TU+U, TU+T, TU+TU and U+U+U
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Geometry-Properties of Shape

Recognise and name common 2-D shapes (e.g. rectangles (including squares), circles and triangles) Recognise and name common 3-D shapes, (e.g. cuboids (including cubes), pyramids and spheres)

- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. (2G-1)
- compare and sort common 2-D and 3-D shapes and everyday objects. (2G-1)
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces (2G-1)
- identify 2-D shapes on the surface of 3-D shapes
- compare shapes by reasoning about similarities and differences in properties. (2G-1)
- sort common 2-D and 3-D shapes and everyday objects.

Spring 1

Measurement - Money

- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- 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, including giving change

Number-Multiplication and Division

- Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. (2MD-1)
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). 2MD-2
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals (=) signs
- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

<u>Spring 2</u>	<u>Measurement-Length and Height</u> Compare and describe lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) •choose and use appropriate standard units to estimate and measure length/height (m/cm to the nearest appropriate unit, using rulers, •compare and order lengths and record the results using >, < and = <u>Measurement- Mass, Capacity and Temperature</u> Compare and describe masses / weights (e.g. heavy/light, heavier than, lighter than) Compare and describe capacity / volume (full/empty, more than, less than, quarter) •choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels •compare and order mass, volume/capacity and record the results using >, < and =
<u>Summer 1</u>	<u>Number-Fractions</u> Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. •recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity •write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. <u>Problem Solving</u> Continuous Objectives
<u>Summer 2</u>	<u>Measurement-Time</u> Recognise and use language relating to dates, including days of the week, weeks, months and years Compare and describe time (quicker, slower, earlier, later) Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening Measure and begin to record time (hours, minutes, seconds) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times •compare and sequence intervals of time •tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times •know the number of minutes in an hour and the number of hours in a day <u>Statistics</u> •interpret and construct simple pictograms, tally charts, block diagrams and simple tables •ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity •ask and answer questions about totalling and comparing categorical data

	Geometry-Position and Direction Describe position, directions and movements, including half, quarter and three-quarter turns •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 and in terms of right angles for quarter, half and $\frac{3}{4}$ turns Consolidation and reinforcement
<u>Continuous Objectives</u> The continuous objectives are woven into the teaching continually during the year. Children are given continual and regular opportunities to apply their knowledge to problem solving and reasoning.	•use place value and number facts to solve problems •solve problems with addition and subtraction, using concrete, pictorial and abstract representations •recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. •solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts •recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity •write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
<u>Key Basic skills to be taught continuously through the year</u>	Count across 100, forwards and backwards, in steps of 2, 3, and 5 from 0 and in tens from any number Read and write numbers to at least 100 in numerals and in words Recognise the place value of each digit in a two-digit number (tens, ones) Find 10 more and 1 less than a given number Recognise zero as a place holder Compare and order numbers from 0 up to 100; use <, > and = signs Partition numbers in different ways Round numbers to the nearest 10 and use this for estimation and calculation purposes Recall addition and subtraction facts to 20 and derive and use related facts up to 100 Explore inverse relationship between addition and subtraction and use this to derive new facts and to check answers Double any number between 1 and 30 and find all corresponding halves Add and subtract numbers mentally using the appropriate strategies and jottings Solve missing number addition and subtraction problems Solve missing number problems with multiplication and division Recognise, name and count and state different amounts of fractions eg $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times Find different combinations of coins to make a particular values Know relationships and simple equivalents between given units for length, mass and capacity. Identify and describe the properties of 2-D and 3-D shapes Identify angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)