## Primary 4 Numeracy Overview

## Term 1

## Number

- Count forwards and backwards in $1 \mathrm{~s}, 2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s within 500
- Recognise spoken numbers within 500
- Read and write numbers within 500
- Know number after, before and between within 500
- Find missing numbers in a sequence (increasing and decreasing) within 500
- Order a set of consecutive and non-consecutive numbers (increasing and decreasing) within 500
- Demonstrate value of any number within 500 in terms of hundreds, tens and ones (units) using Base 10 materials
- Understand 0 as a place holder
- Round numbers within 100 to the nearest 10
- Understand concept of fractions (halves and quarters) through practical activities
- Use knowledge of place value to develop a practical method for vertical addition TU (with carrying)
- Develop a standard written method for vertical addition TU (with carrying), estimating the answer before calculating
- Mentally add 1, 2 or 0 to a number, answers within 100
- Add 10 to any number using the 100 grid, using and explaining number patterns
- Add a multiple of 10 to a multiple of 10 using the 100 grid, using and explaining number patterns
- Add a multiple of 10 to any number using the 100 grid, using and explaining number patterns
- Mentally add 10 to any number, answers within 100, using and explaining number patterns
- Mentally add a multiple of 10 to a multiple of 10 , answers within 100 , using and explaining number patterns
- Mentally add a multiple of 10 to any number, answers within 100 , using and explaining number patterns
- Mentally subtract 1, 2 or 0 from a number, answers within 100
- Subtract 10 from any number using the 100 grid, using and explaining number patterns
- Subtract a multiple of 10 from a multiple of 10 using the 100 grid, using and explaining number patterns
- Subtract a multiple of 10 from any number using the 100 grid, using and explaining number patterns
- Mentally subtract 10 from any number, answers within 100 , using and explaining number patterns
- Mentally subtract a multiple of 10 from a multiple of 10 , answers within 100 , using and explaining number patterns
- Mentally subtract a multiple of 10 from any number, answers within 100 , using and explaining number patterns
- Mentally subtract a single digit from a single digit using both counting back and counting on (difference)
- Know all single digit subtraction facts with quick recall
- Understand that addition and subtraction are inverse operations, use to check answers and use complementary addition to solve a subtraction calculation
- From 3 given numbers within 10 , give 2 addition and 2 subtraction facts
- Mentally subtract a single digit from 20 using both counting back, counting on (difference) and knowledge of equivalent subtraction from 10
- Solve a range of addition and subtraction problems, using both written and mental calculations, selecting the operation required
- Understand the 2 times multiplication facts as repeated addition, and as arrays, and develop quick recall
- Understand that multiplication is commutative
- Understand and use decimal recording of amounts of money up to $£ 10.00$
- Calculate change required when buying items, paying with amounts up to $£ 10$.
- Use efficient methods to find the total of a mixed group of coins totals up to $£ 1.00$ (e.g. by starting with the highest value coins, or by grouping lower value coins into 10p piles)
- Understand relationships between coins up to $£ 1.00$


## Measure

- Develop an appreciation of the length of 1 metre
- Estimate and measure using the metre as a standard unit, using "benchmarks" to help estimation, e.g. the door handle is approximately 1 m above the floor
- Approximate measurements appropriately (e.g. if an object is not exactly 1 m long, choose the most appropriate way of recording the measurement: e.g. less than 1 m , just under 1 m , just over 1 m , almost $1 \mathrm{~m}, 1 \mathrm{~m}$ and a bit, more than 1 m but less than 2 m , between 1 m and 2 m , etc.)
- Develop an appreciation of the weight of 1 kilogram
- Estimate and measure using the kilogram as a standard unit., using "benchmarks" to help estimation, e.g. a bag of sugar or a litre of water weighs 1 kg
- Approximate measurements appropriately (e.g. if an object is not exactly 1 kg in weight, choose the most appropriate way of recording the measurement: e.g. less than 1 kg , just under 1 kg , just over 1 kg , almost $1 \mathrm{~kg}, 1 \mathrm{~kg}$ and a bit, more than 1 kg but less than 2 kg , between 1 kg and 2 kg , etc.)
- Develop an appreciation of the capacity of 1 litre
- Estimate and measure using the litre as a standard unit, using "benchmarks" to help estimation, e.g. a 1 litre milk or juice carton, a 2 litre lemonade bottle
- Approximate measurements appropriately (e.g. if a container does not hold exactly 1 litre, choose the most appropriate way of recording the measurement: e.g. less than 1 litre, just under 1 litre, just over 1 litre, almost 1 litre, 1 litre and a bit, more than 1 litre but less than 2 litres, between 1 litre and 2 litres etc.)
- Work systematically to measure area using different units to cover the same area, same unit to cover different areas
- Understand why it is important that no gaps are left when covering areas
- Understand use of am and pm
- Know there are 24 hours in one day, $\mathrm{am}=12$ hours and $\mathrm{pm}=12$ hours
- Know there are 60 minutes in 1 hour and use to deduce that half hour $=30 \mathrm{mins}$ and quarter hour $=15 \mathrm{mins}$
- Understand and use quarter to: analogue and digital time
- Calculate durations involving hour, half past, quarter past and quarter to, start and finish times, including counting through the hour
- Calculate finish /start times, given the duration (hours, half hours, quarter hours) and start/finish time, including counting through the hour
- Calculate how long it will be until an event starts, and how long since an event finished: hour, half hour and quarter hour answers only


## Shape and Space

- Understand and use concept of symmetry through practical activities. Recognise one line of symmetry in a variety of 2D shapes, designs and pictures
- Fit shapes together to make new shapes (e.g. tangrams)
- Sort 2 D shapes into those with square corners and those without
- Recognise and describe an increasing range of 3D shapes, to include pyramid, prisms.
- Understand and use "quarter turn", $3 / 4$ turn
- Understand and use "left", "right" to describe direction of turn


## Handling data

- Investigate issues which require collecting data
- Use tallying methods (bar-gate convention to represent groups of 5) where it is not possible to collect all data at the same time (e.g. if surveying the frequency of different colours of cars passing along a road)
- Collect data in context of observations, surveys and experiments
- Understand and interpret simple pie charts with up to 4 sectors, by comparing size of sectors

