Year 3 Summer 2

Starter suggestions for Number

- Count on and back in 1s, 10s or 100s from any two- or three-digit number.
- Partition three-digit numbers in different ways, (e.g. 325 = 300 + 20 + 5 but is also 200 + 125 etc).
- Identify the value of each digit to one decimal place.
- Recall addition and subtraction facts for 100 (e.g. 37+63 = 100, 63+37=100, 100-63=37, 100-37=63).
- Derive and use addition and subtraction facts for multiples of 100 totalling 1000.
- Mentally add groups of small numbers.
- Recall multiplication facts for 2, 3, 4, 5, 8 and 10 times tables and derive associated division facts.
- Describe and extend number sequences involving counting on or back in different steps.
- Double any number up to 100.
- Double any multiple of 50 up to 500.
- Halve any number up to 200.
- Count in fraction steps, e.g. $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$ ...

Starter suggestions for Measurement, Geometry and Statistics

- Identify right angles in different orientations and angles that are less than or greater than a right angle.
- Estimate length in m, cm and mm and volume/capacity in l and ml.
- Calculate perimeter of 2-D shapes.
- Read scales to nearest whole unit.
- Use vocabulary of time including o'clock, a.m./p.m., morning, afternoon, noon and midnight.
- Tell and write time from an analogue clock and 12-hour and 24-hour clocks.
- Identify and describe 2-D shapes, considering sides, corners and symmetry.
- Identify and describe 3-D shapes, considering faces, edges and vertices.
- Compare and sort common 2-D and 3-D shapes and everyday objects.
- Interpret and answer questions based on pictograms, tally charts, block diagrams and tables.

	Main learning	Rationale
Week 1 **Place value in the context of measures**	▪ Count from 0 in multiples of 4, 8, 50 and 100. ▪ Find 1, 10 or 100 more or less than a given number. ▪ Recognise the place value of each digit in a three-digit number (hundreds, tens and ones). ▪ *Identify the value of each digit to one decimal place.* ▪ Compare and order numbers up to 1000. ▪ Identify, represent and estimate numbers using different representations, including the number line. ▪ Read and write numbers to at least 1000 in numerals and in words. ▪ *Solve problems involving measures and simple problems involving passage of time.*	Much of the learning of place value can be put into the context of measures, through looking at number lines on different measuring tools and comparing and ordering measurements. Scales on measuring instruments can be used as the context for counting and sequences with equal step size. Measurement also allows children to experience numbers in different ways.
Week 2 **Mental calculation in a variety of contexts**	▪ Add and subtract mentally a three-digit number and ones, tens and hundreds. ▪ *Derive and use addition and subtraction facts for 100.* ▪ *Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:* *- a 2-digit number and ones* *- a 2-digit number and tens* *- two 2-digit numbers* *- adding three 1-digit numbers. (Year 2 objective)* ▪ *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 and use take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of context.* ▪ *Select a mental strategy appropriate for the numbers involved in the calculation.* ▪ *Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.* ▪ *Solve problems involving money and measures and simple problems involving passage of time.* ▪ Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children should secure their knowledge and understanding of mental calculation skills in a variety of contexts. The learning should include decision making around why it is most appropriate to solve these calculations using a mental method. Children should also mentally calculate with two-digit numbers in which the answer is a three-digit number.

	Main learning	Rationale
Week 3 **Fractions in practical contexts**	▪ Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ▪ Recognise and show, using diagrams, equivalent fractions with small denominators. ▪ Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. ▪ *Show practically or pictorially that a fraction is one whole number divided by another (for example, $\frac{3}{4}$ can be interpreted as 3 ÷ 4).*	Children's understanding of fractions is consolidated in the application in a variety of different contexts. Children should solve a variety of problems involving fractions, and seeing and using them in different ways. Children's understanding of fractions should go beyond the 0-1 interval.
Week 4 **Measures**	▪ Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). ▪ Measure the perimeter of simple 2-D shapes. ▪ *Solve problems involving measures.*	Children estimate and measure lengths (link to jumping and throwing in PE), mass and volume/capacity in real contexts. The learning also includes solving problems by calculating perimeter using mental and written strategies.
Week 5 **Statistics**	▪ Interpret and present data using bar charts, pictograms and tables. ▪ Solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.	Children use the measurements made in the previous week to present and interpret data in different forms. They should discuss the value of presenting information in tables, pictograms and bar charts and evaluate the effectiveness of each type of presentation.
Week 6 **Assess and review**	Assess and review week.	It is useful at regular intervals for teachers to consider the learning that has taken place over a term (or half term), assess and review children's understanding of the learning and use this to inform where the children need to go next.