Year 4 Summer 1

Starter suggestions for Number

- Read and write numbers with one decimal place.
- Count on and back in 0.1s, 1s, 10s or 100s from any number up to 10,000.
- Count forwards and backwards in equal steps and describe any patterns in the sequence.
- Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals.
- Recall addition and subtraction facts for 100.
- Recall and use addition and subtraction facts for multiples of 100 totalling 1000.
- Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place).
- Use partitioning to double or halve any number, including decimals to one decimal place.
- Recall multiplication facts for all times up to 12 x 12 and derive associated division facts.
- Identify patterns of similar calculations, e.g. if I know 7 x 8, I also know 0.7 x 0.8, 70 x 8, 70 x 80 etc
- Multiply and divide numbers by 10, including those which have answers to one decimal place.
- Count in fraction steps, e.g. $\frac{1}{5}, \frac{2}{5}, \frac{3}{5}$ ...

Starter suggestions for Measurement, Geometry and Statistics

- Recognise 2-D and 3-D shapes in different orientations and describe them.
- Use a variety of sorting diagrams to compare and classify numbers and geometric shapes based on their properties.
- Order and compare angles up to two right angles.
- Estimate and compare lengths, volumes/capacities and masses.
- Read measuring scales to an appropriate degree of accuracy.
- Convert between different units of measure.
- Describe positions on a 2-D grid as coordinates in the first quadrant.
- Tell and write the time from an analogue clock and 12 and 24-hour clocks.
- Calculate time durations in minutes, hours and days.
- Interpret continuous data presented in time graphs.

	Main learning	Rationale
Week 1 **Counting and sequencing using statistics and measures**	▪ Count in multiples of 6, 7, 8, 25 and 1000. ▪ Count backwards through zero to include negative numbers. ▪ Count up and down in hundredths. ▪ *Describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division steps.*	Children use their counting, sequencing and multiplication facts knowledge in the contexts of handling data and measures. When counting and creating sequences, children should be encouraged to spot patterns that emerge and use this to generate hypotheses, test these and then generalise.
Week 2 **Decimals and fractions in the context of measures**	▪ *Identify the value of each digit to two decimal places.* ▪ Recognise and write decimal equivalents of any number of tenths or hundredths. ▪ Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$. ▪ Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. ▪ Convert between different units of measure. ▪ Round decimals with one decimal place to the nearest whole number. ▪ Order and compare numbers with the same number of decimal places up to two decimal places. ▪ Solve simple measure problems involving fractions and decimals to two decimal places.	Children develop their knowledge and understanding of decimals and relate multiplying and dividing by 10 and 100 to decimal notation in our Base 10 number system, and to converting units of measure. Children's knowledge of place value is consolidated through working in the context of measurement.
Week 3 **Fractions and division**	▪ *Continue to understand division as sharing and grouping and use each appropriately.* ▪ *Understand that a fraction is one whole number divided by another (for example, $\frac{3}{4}$ can be interpreted as 3 ÷ 4).* ▪ *Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.* ▪ Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	Written methods should be agreed by the school and shared in the progression in written calculations policy. Efficient written methods are required to be taught by the end of Key Stage 2. Children build on their understanding of fractions of shapes, using these shapes when sharing items into equal groups. The link between finding fractions of amounts and division (by sharing) is made. When children are calculating fractions of amounts, this should be in a context e.g. length, money, time to consolidate previous learning.

	Main learning	Rationale
Week 4 **Measures (perimeter, volume/ capacity and mass)**	▪ Estimate, compare and calculate different measures. ▪ Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	Children apply their knowledge of the number system when measuring lengths (mm, cm, m), capacities / volumes (ml, l) and masses (g, kg). They apply their calculation skills when measuring perimeter, and solving problems in the context of measures.
Week 5 **Shape and area**	▪ Complete a simple symmetric figure with respect to a specific line of symmetry. ▪ Describe movements between positions as translations of a given unit to the left/right and up/down. ▪ Describe positions on a 2-D grid as coordinates in the first quadrant. ▪ Plot specified points and draw sides to complete a given polygon. ▪ Find the area of rectilinear shapes by counting squares.	Children develop their understanding of symmetry and translations, applying their knowledge of shapes and coordinates. The learning of area is away from children's learning of perimeter as the two concepts are not related to each other. Children should relate area to arrays and multiplication.
Week 6 **Multiplication facts and time**	▪ Recall multiplication and division facts for the 12 times table. ▪ Describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division steps. ▪ Read, write and convert time between analogue and digital 12 and 24-hour clocks. ▪ Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days and problems involving money and measures.	The learning of the 12 times table can be applied in the context of converting years to months. When learning multiplication tables, children should experience a blend of practical, visual activities, pattern spotting, generalising as well as rote learning. Children further their knowledge and understanding of units of time and their relationships, giving opportunity to rehearse calculation skills in context.