



Year 3 Spring 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)
- Order a set of random numbers to 1000.
- Recall addition and subtraction facts for each number up to 20.
- Recall addition and subtraction facts for 100 (e.g. $37+63 = 100$, $63+37=100$, $100-63=37$, $100-37=63$).
- State the addition fact that links to a subtraction fact and vice versa.
- Recall multiplication facts for 2, 3, 4, 5 and 10 times tables and derive associated division facts.
- Describe and extend number sequences involving counting on or back in different steps.
- State the multiplication fact that links to a division fact and vice versa.
- Double any number up to 100.
- Double any multiple of 50 up to 500.
- Halve any number up to 100.
- Count in fraction steps, e.g. $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$ etc.

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.
- 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, vertices 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 2-D and 3-D shape including angles	<ul style="list-style-type: none"> Draw 2-D shapes and describe them. Make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them. Recognise that angles are a property of a shape or a description of a turn. Identify whether angles are greater than or less than a right angle. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. Compare and sort common 2-D and 3-D shapes and everyday objects. (Year 2 objective) 	Children revisit their learning of the properties of 2-D and 3-D shape, drawing and making shapes in different ways e.g. drawing 2-D shapes on dotted paper; using set squares; creating 2-D shapes by combining other shapes; creating 3-D shapes using straws and plasticine; Clix, Polydron or other construction materials. The emphasis of the learning should be on children's accurate use of language when making, identifying, describing, comparing and sorting shapes.
Week 2 Written addition and subtraction in the context of bar charts, pictograms and tables	<ul style="list-style-type: none"> Add numbers with up to three digits, using formal written method of columnar addition. Subtract numbers with up to three digits, using formal written method of columnar subtraction. 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. Estimate the answer to a calculation and use inverse operations to check the answers. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 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 further develop their understanding of addition and subtraction. Rehearsing the processes involved in written methods and exploring their relationship when solving missing number problems. The calculation problems are within the context of handling data. 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.
Week 3 Fractions	<ul style="list-style-type: none"> Recognise and show, using diagrams, equivalent fractions with small denominators. Add and subtract fractions with the same denominator within one whole (using diagram) (for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$). Show practically or pictorially that a fraction is one whole number divided by another (for example, $\frac{3}{4}$ can be interpreted as $3 \div 4$). Compare and order unit fractions and fractions with the same denominators (including on a number line). Solve problems involving fractions. 	Children build on their knowledge of fractions of shapes when moving into dealing with fractions as abstract numbers. When calculating and ordering fractions, children relate the fraction number to fraction shapes. Children's understanding of fractions should go beyond the 0-1 interval.



	Main learning	Rationale
Week 4 Position and direction	<ul style="list-style-type: none"> Use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line. (Year 2 objective) Describe positions on a square grid labelled with letters and numbers. 	There is no additional learning for Geometry: position and direction in Year 3 so it is important that the learning from Year 2 is consolidated and the precursor learning for coordinates is in place.
Week 5 Time	<ul style="list-style-type: none"> Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute. Record and compare time in terms of seconds, minutes and hours; use vocabulary such as, o'clock, a.m./p.m., morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year. Compare durations of events, for example to calculate the time taken by particular events or tasks. Solve simple problems involving passage of time. 	<p>Children learn the relationships between the units of time, and other key vocabulary involving time.</p> <p>Children learn to tell the time (including on clocks where the numbers are Roman numerals) and on digital clocks, using 12 and 24 hour clock notation.</p> <p>The learning in this week requires regular revisiting through natural daily activities and routines.</p>
Week 6	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.