



Year 3 Autumn 2

Starter suggestions for Number

- Read and write numbers to 1000 in figures and words.
- Count on and back in 1s, 10s or 100s from any two- or three-digit number.
- Count on and back in multiples of 4 or 8 from 0.
- Describe and extend number sequences involving counting on or back in different steps.
- 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 (multiples of 5 and 10).
- Recall pairs of multiples of 100 that make 1000.
- Recall multiplication facts for 2, 3, 4, 5 and 10 times tables and derive associated division facts.
- Double any number up to 50.
- Halve any even two-digit number up to 100.

Starter suggestions for Measurement, Geometry and Statistics

- Choose and use appropriate standard units to estimate length and height, mass and volume/capacity.
- Read scales to nearest whole unit.
- Order lengths, masses and volumes/capacities and use $<$ $>$ signs.
- Know the number of minutes in an hour and the number of hours in a day.
- Tell and write the time to the nearest five minutes, including quarter past/to the hour.
- Combine amounts of money to make a given value.
- Find different combinations of coins that equal the same amounts of money.

	Main learning	Rationale
Week 1 Counting, sequences, multiplication facts	<ul style="list-style-type: none"> ▪ Count from 0 in multiples of 4. ▪ Recall and use multiplication and division facts for the 3 and 4 times tables. ▪ <i>Describe and extend number sequences involving counting on or back in different steps.</i> ▪ <i>Use sorting diagrams to compare and sort numbers.</i> 	<p>Children need time to experience counting in equal steps, and multiplication and division facts and relationships so that they understand and can use this knowledge in a variety of situations.</p> <p>Children should be using Venn and Carroll diagrams to sort numbers according to their properties.</p> <p>The learning in this week is in preparation for the next week.</p>
Week 2 Written and mental multiplication	<ul style="list-style-type: none"> ▪ Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ▪ <i>Select a mental strategy appropriate for the numbers involved in the calculation.</i> ▪ <i>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</i> ▪ <i>Solve problems involving money and measures.</i> ▪ Solve problems, including missing number problems involving multiplication, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. 	<p>Children build on their understanding of place value and multiplication facts to develop mental strategies for multiplication and begin developing a written method. Children should learn when to use mental methods and when to use written methods.</p> <p>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.</p> <p>Integer scaling problems support children in understanding multiplication as making amounts a number of times larger, which is different to understanding as repeated addition. Correspondence problems, such as, 3 different coloured hats and 3 different coloured coats would give how many different possible combinations, allow children to spot patterns and generalise using their knowledge of multiplication facts.</p>
Week 3 Written and mental division	<ul style="list-style-type: none"> ▪ Write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers divided by one-digit numbers, using mental and progressing to formal written methods. ▪ <i>Select a mental strategy appropriate for the numbers involved in the calculation.</i> ▪ <i>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</i> ▪ <i>Solve problems involving money and measures.</i> ▪ Solve problems, including missing number problems, involving division (and interpreting remainders) and correspondence problems in which n objects are connected to m objects. 	<p>Children build on their understanding of place value and multiplication facts to develop mental strategies for division and begin developing a written method. Children should learn when to use mental methods and when to use written methods.</p> <p>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.</p> <p>Correspondence problems, such as, 12 sweets shared equally between 4 children.</p>
Week 4 Measurement (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. ▪ 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>



	Main learning	Rationale
Week 5 Geometry (3-D shape)	<ul style="list-style-type: none">▪ Make 3-D shapes using modelling materials.▪ Recognise 3-D shapes in different orientations and describe them.▪ Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.▪ <i>Compare and sort common 3-D shapes and everyday objects. (Year 2 objective)</i>	Children further develop their knowledge of 3-D shapes. When making shapes, children are experiencing what faces, edges and vertices 'feel' like and should be encouraged to use this vocabulary as they work. The vocabulary develops to include parallel and perpendicular, relating their knowledge of right angles to describing the position of lines or edges relative to each other. The development of new vocabulary should be applied when sorting and comparing shapes.
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.