



Year 4 Autumn 1

Starter suggestions for Number

- Read and write numbers to 10,000.
- Count on and back in 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.
- Order a set of decimal numbers to one decimal place.
- Recall addition and subtraction facts for each number up to 20.
- Recall addition and subtraction facts for 100.
- Recall multiplication facts for 2, 3, 4, 5 and 8x tables.
- Multiply and divide whole numbers by 10 or 100 (whole number answers).

Starter suggestions for Measurement, Geometry and Statistics

- Recognise 2D and 3D 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.
- Identify right angles and angles less than and more than a right angle.
- Estimate and compare lengths, volumes/capacities and masses.
- Read measuring scales to an appropriate degree of accuracy.
- Know the number of mm in 1cm, cm in 1m, m in 1km, g in 1kg, ml in 1l, seconds in 1 minute, minutes in 1 hour, hours in 1 day, days in each month, days in a year and leap year.
- Tell and write the time from an analogue clock and 12 and 24-hour clocks.
- Interpret data in bar charts, pictograms and tables.

| | Main learning | Rationale |
|---|---|--|
| Week 1 Place value | <ul style="list-style-type: none"> Read and write numbers to at least 10 000. Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). Find 0.1, 1, 10, 100 or 1000 more or less than a given number. Order and compare numbers beyond 1000. Identify, represent and estimate numbers using different representations, including the number line. Round any number to the nearest 10, 100 or 1000. Solve number and practical problems that involve all of the above and with increasingly large positive numbers. | <p>Understanding of the number system is necessary pre-requisite knowledge for any number work.</p> <p>Children should understand the Base 10 notion in which there are 10 numerals (0-9) and these can be organised in different ways to form any number. This is based on grouping in tens i.e. ten 1s are the same as one 10; ten 10s are the same as one 100; ten 100s are the same as one 1000 and so on. And vice versa.</p> |
| Week 2 Place value, decimals and fractions | <ul style="list-style-type: none"> Read and write numbers with up to two decimal places. Identify the value of each digit to two decimal places. Count up and down in hundredths. Recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. Recognise that one hundred 1p coins are equivalent to £1 and that each coin is $\frac{1}{100}$ of £1. Write amounts of money using decimal notation. 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. 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. | <p>Children's understanding of the Base 10 number system is extended to include decimals. Children learn that decimals are a way of expressing fractions within the structure of our Base 10 number system. It is important that children see practical and visual models to understand the meaning and size of units, tenths and hundredths. In preparation for calculating with money, children should learn that one hundred 1p coins are equal to £1, so 1p is $\frac{1}{100}$ of £1. This builds on their knowledge that 10p is $\frac{1}{10}$ of £1.</p> <p>When multiplying and dividing by 10 and 100, it is important that children see this as scaling up and down (making amounts 10 times larger or smaller) rather than repeated addition and repeated subtraction.</p> |
| Week 3 Addition and subtraction | <ul style="list-style-type: none"> Partition numbers in different ways (for example, $2.3 = 2 + 0.3$ and $2.3 = 1 + 1.3$). Add and subtract numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate. Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method). Select a mental strategy appropriate for the numbers involved in the calculation. Estimate and use inverse operations to check answers to a calculation. | <p>Children learn when it is appropriate to use mental and written methods of calculation.</p> <p>Children make links with their knowledge of rounding numbers to the nearest 10, 100 and 1000 to estimate the answers to calculations. Calculations should be in contexts including, money, measures, real life problems and number enquiries.</p> <p>When calculating, children should learn which methods suit the numbers involved and why.</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> |



| | Main learning | Rationale |
|--|---|--|
| Week 4 Addition, subtraction and inverse | <ul style="list-style-type: none"> ▪ Partition numbers in different ways (for example, $2.3 = 2 + 0.3$ and $2.3 = 1 + 1.3$). ▪ Add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place. ▪ Add and subtract numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate. ▪ Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method). ▪ Select a mental strategy appropriate for the numbers involved in the calculation. ▪ Estimate and use inverse operations to check answers to a calculation. ▪ Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. | <p>Children continue to work with addition and subtraction and understand the inverse relationship, using this to check calculations. Calculations should be in contexts including money, measures, real life problems and number enquiries. When calculating, children should learn which methods suit the numbers involved and why.</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> |
| Week 5 Properties of 2-D shape | <ul style="list-style-type: none"> ▪ Continue to identify horizontal and vertical lines and pairs of perpendicular and parallel lines. ▪ Identify acute and obtuse angles and compare and order angles up to two right angles by size. ▪ Identify lines of symmetry in 2-D shapes presented in different orientations. ▪ Use a variety of sorting diagrams to compare and classify numbers and geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. | <p>Children's knowledge and understanding of angles and symmetry develops and is applied when classifying shapes, including triangles and quadrilaterals. The terms regular and irregular are introduced to describe shapes that have all equal sides and angles and those that do not.</p> |
| Week 6 Measurement (time) | <ul style="list-style-type: none"> ▪ 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. | <p>Children's understanding of reading time to the nearest minute is developed to include converting between different time systems (analogue and digital) and different units of time.</p> |