Year 6 Maths Overview

|  | Autumn Term |
| :---: | :---: |
| Week 1 | Number and Place Value: <br> Numbers to 10 million <br> In this first unit of Year 6, pupils are refining their knowledge of place value, working with numbers between 1000000 and 10000000. They begin the unit reading and writing numbers to 10000000 using place-value counters, numerals and words. Pupils are then asked to round and compare numbers to 10000000 , followed by placing them in order from smallest to greatest. The unit ends with pupils rounding numbers to various values and determining when it is appropriate to round numbers. |
| Week 2 | Calculations: <br> Four operations on whole numbers <br> In this unit, pupils will be exploring the four operations in combination and in isolation. The unit begins with lessons on creating and solving expressions involving brackets, exponents, multiplication, division, addition and subtraction. Pupils are then multiplying 3-digit and 4-digit numbers by 2-digit numbers using number bonds and column multiplication as the key methods. After this, they are estimating the product of multiplication sentences before moving on to division. Pupils are dividing 3-digit and 4-digit numbers by 2digit numbers using a variety of methods, including number bonds and long division. Pupils then begin solving more complex word problems involving multiple operations, including multiplication and division, with bar models being a main heuristic in addition to other pictorial methods. Pupils are then challenged by finding common multiples and common factors before ending the unit exploring prime numbers. |
| Week 3 |  |
| Week 4 |  |
| Week 5 | Fractions, Decimals and Percentages: <br> Fractions <br> This is a unit on adding, subtracting, multiplying and dividing fractions. The unit begins with pupils simplifying fractions and moves on to comparing and ordering fractions. Pupils are working with basic fractions and mixed numbers. They then begin to add and subtract fractions with different denominators, including mixed numbers. Bar model diagrams are incorporated to support pupils' understanding before moving on to multiplication and division. Pupils will be required to divide fractions by whole numbers and will explore different methods. |
| Week 6 |  |
| Week 7 | Fractions, Decimals and Percentages: Percentages |


|  | In this unit, pupils will be exploring how to calculate percentage of numbers and quantities. They will be learning about how to solve for percentage change and use percentage to compare amounts. First, pupils will be finding the percentage of a whole number. This will involve both division and multiplication skills. They will then move on to finding the percentage of a quantity, measured in amounts such as litres and millilitres. Pupils will then be looking at difference and percentage change before finally moving on to using percentage as a way to compare numbers and amounts. |
| :---: | :---: |
| Week 8 | Fractions, Decimals and Percentages: Converting and comparing |
| Week 9 | Measurement: <br> Measures - converting and equivalents <br> In this unit, the focus is on converting units of measurement using fractions and decimals. Pupils begin by converting units of length and distance followed by exploring units of mass, volume and time. While most of the unit considers metric conversions, time is challenging as it does not follow multiples of 10,100 or 1000. |
| Week 10 Week 11 | Geometry: <br> Angles - measuring, calculating and drawing |
| Week 12 | Arithmetic and reasoning progress assessments and deliberate practise |

## Year 6 Maths Overview

|  | Spring Term |
| :---: | :---: |
| Week 1 | Measurement: Units of time |
| Week 2 | Ratio and proportion including models <br> In this unit, pupils will be comparing quantities, including numbers, objects, fractions and mass before moving on to solving word problems. First, pupils will use bar models and concrete materials to compare amounts. They will be using both pictorial and abstract multiplication and division to support their learning while simplifying and comparing ratios. Finally, pupils will be solving word problems involving ratio by constructing bar models to support their understanding. |
| Week 3 |  |
| Week 4 | Algebra: Algebra and Using formula <br> In this unit, pupils will learn some of the conventions of algebra in the context of patterns and real-life problems. The unit begins with lessons describing patterns and using a letter to denote a variable. Pupils then move on to write expressions using the four operations and fractions, while continuing to look for patterns and determine rules. Throughout the unit, the expressions become more complex, including more than one variable with multiple steps. Pupils write and evaluate algebraic expressions and use formulae to solve problems in real-life contexts. The unit ends with pupils using word problems to write equations with two unknown values solving a range of equations. |
| Week 5 |  |
| Week 6 | Arithmetic and reasoning progress assessments and deliberate practise |
| Week 7 | Statistics: <br> Mean |
| Week 8 | Statistics: <br> Graphs and Charts |
| Week 9 | Measurement: <br> Area, perimeter and volume |


| Week 10 |  |
| :---: | :---: |
| Week 11 | Geometry: <br> Properties of shapes |
| Week 12 | Arithmetic and reasoning progress assessments and deliberate practise |

Year 6 Maths Overview

|  | Summer Term |
| :---: | :---: |
| Week 1 | Statistics: Interpreting data |
| Week 2 | Geometry: Position and Movement |
| Week 3 | Arithmetic and reasoning deliberate practise |
| Week 4 | SATS |
| Week 5 | Word Problems |
| Week 6 | Residential Trip |
| Week 7 | Number and Place Value: <br> Negative numbers <br> This is a short unit on adding and subtracting negative numbers. The unit involves recognising patterns that arise when adding and subtracting negative numbers on a number line. Pupils then develop number stories for equations involving a negative number. |
| Week 8 | Geometry: Coordinates |
| Week 9 |  |
| Week 10 |  |


| Week 11 |  |
| :---: | :---: |
| Week 12 | Transition |

