



Mathematics Curriculum Map: Year 6

Mastery

The first two units need to be taught before any other units as these cover place value and the four operations and ensure firm foundations for the rest of the learning.

The remaining units can be taught in any order with the following caveats:

- The first five lessons of the first Fractions unit should be taught prior to learning on calculating with fractions.
- The Proportion problems unit should only be taught after the units on fractions, decimals and percentages.

<p>1) Integers and decimals (10 lessons)</p> <ul style="list-style-type: none"> • Represent, read, write, order and compare numbers up to ten million • Round numbers, make estimates and use this to solve problems in context • Solve multi-step problems involving addition and subtraction 	<p>2) Multiplication and division (15 lessons)</p> <ul style="list-style-type: none"> • Identify and use properties of number, focusing on primes • Multiply larger integers and decimal numbers using a range of strategies • Divide integers by 1-digit and 2-digit numbers representing remainders appropriately • Illustrate and explain formal multiplication and division strategies 	<p>3) Calculation problems (10 lessons)</p> <ul style="list-style-type: none"> • Understand the use of brackets • Use knowledge of the order of operations to carry out calculations • Generate and describe linear number sequences • Express missing number problems algebraically • Solve equations with unknown values 	<p>4) Fractions (10 lessons)</p> <ul style="list-style-type: none"> • Deepen understanding of equivalence • Order, simplify and compare fractions, including those greater than one • Recall equivalence between common fractions and decimals • Find decimal quotients using short division • Add and subtract fractions 	<p>5) Missing angles and length (5 lessons)</p> <ul style="list-style-type: none"> • Compare and classify a range of geometric shapes • Use angle facts to find unknown angles
<p>6) Coordinates and shapes (10 lessons)</p> <ul style="list-style-type: none"> • Draw a range of geometric shapes using given dimensions and angles • Describe, draw, translate and reflect shapes on a co-ordinate plane • Recognise and construct 3-D shapes • Name and illustrate parts of a circle 	<p>7) Fractions (5 lessons)</p> <ul style="list-style-type: none"> • Represent multiplication involving fractions • Multiply two proper fractions • Divide a fraction by an integer 	<p>8) Decimals and measure (15 lessons)</p> <ul style="list-style-type: none"> • Use, read, write and convert between standard units of measures; length, mass, time, money and volume as well as imperial units • Calculate the area of parallelograms and triangles • Calculate, estimate and compare the volume of cuboids 	<p>9) Percentage and statistics (10 lessons)</p> <ul style="list-style-type: none"> • Calculate and compare percentages of amounts • Connect percentages with fractions • Explore the equivalence of fractions, decimals and percentages • Calculate the mean • Construct and interpret lines graphs and pie charts • Compare pie charts 	<p>10) Proportion problems (10 lessons)</p> <ul style="list-style-type: none"> • Use fractions to express proportion • Identify ratio as a relationship between quantities and as a scale factor • Unequal sharing involving ratio



The Dimensions of Depth - Conceptual Understanding, Language and Communication and Mathematical Thinking - underpin all aspects of the curriculum; problem solving is at the heart and is embedded in all units.