

# Year 7 Half Term 1

Chapter	Emerging	Developing	Secure	Excelling
1 Whole numbers and decimals (Number)	<ul style="list-style-type: none"> <li>Understand the place value of each digit in whole numbers.</li> <li>Order whole numbers.</li> <li>Calculate temperature rise and fall across 0.</li> <li>Add and subtract money.</li> <li>Use all of the operation keys and the decimal point on the calculator.</li> <li>Round to nearest 10, 100, 1000.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the place value of each digit in numbers up to two decimal places.</li> <li>Use understanding of place value to multiply and divide whole numbers by 10 or 100.</li> <li>Order decimals to one decimal place or two in the context of money and length.</li> <li>Add and subtract positive and negative integers in context.</li> <li>Use efficient written methods of addition and subtraction.</li> <li>Input negative numbers on a calculator.</li> <li>Round to nearest whole number.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the place value of each digit in numbers up to three decimal places.</li> <li>Use understanding of place value to multiply and divide whole numbers and decimals by 10, 100 and 1000.</li> <li>Order decimals to three places.</li> <li>Add and subtract positive and negative numbers.</li> <li>Use the column method to add and subtract whole numbers and decimals.</li> <li>Use brackets on a calculator.</li> <li>Round to 1 or 2 decimal places.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the place value of each digit in any number.</li> <li>Multiply and divide by 0.1 and 0.01.</li> <li>Order any decimal and whole number.</li> <li>Use all four operations with negative numbers.</li> <li>Use efficient strategies to add and subtract a series of decimal numbers.</li> <li>Use a calculator effectively for complex calculations involving memory and brackets.</li> <li>Round to one significant figure.</li> </ul>
2 Measures, perimeter and area (Geometry and measures)	<ul style="list-style-type: none"> <li>Choose and use appropriate units and instruments, interpreting with appropriate accuracy, numbers on a range of measuring instruments.</li> <li>Calculate the perimeter of a rectangle, or find a missing side.</li> <li>Find perimeters of simple shapes and areas by counting squares.</li> </ul>	<ul style="list-style-type: none"> <li>Convert one metric unit to another.</li> <li>Find the perimeter of compound shapes.</li> <li>Understand and use the formula for the area of a rectangle.</li> </ul>	<ul style="list-style-type: none"> <li>Convert metric units of area and volume.</li> <li>Understand and use formulae for the area of triangles and parallelograms.</li> </ul>	<ul style="list-style-type: none"> <li>Convert between metric and imperial units.</li> <li>Understand and use the formula for trapeziums.</li> <li>Calculate the volume and surface area of cuboids.</li> </ul>
3 Expressions and formulae (Algebra)	<ul style="list-style-type: none"> <li>Begin to use simple formulae expressed in words.</li> <li>Collect like terms</li> <li>Substitute integers into simple word formulae.</li> <li>Use brackets appropriately; multiply out brackets.</li> <li>Begin to construct simple formulae expressed in words.</li> </ul>	<ul style="list-style-type: none"> <li>Simplify expressions.</li> <li>Construct expressions.</li> <li>Substitute integers into expressions.</li> <li>Use brackets appropriately; multiply out brackets including those with negatives.</li> <li>Derive formulae.</li> <li>Use index laws for multiplying and dividing numbers in index form.</li> </ul>	<ul style="list-style-type: none"> <li>Simplify expressions using powers.</li> <li>collect like terms, multiply and divide terms.</li> <li>Substitute values into formulae (including negative values and powers).</li> <li>Multiply out brackets including two expressions of the form <math>(x + n)</math>.</li> <li>Formulate and solve linear equations with whole number coefficients.</li> <li>Use index laws for multiplying and dividing numbers in index form.</li> </ul>	<ul style="list-style-type: none"> <li>Manipulate all types of algebraic expression</li> <li>Write the inverse of expressions</li> <li>Substitute with fractions and negative numbers.</li> <li>Multiply two expressions of the form <math>(x + n)</math> and simplify the corresponding quadratic expressions.</li> <li>Factorise and multiply out quadratic expressions.</li> <li>Use index laws for multiplying and dividing numbers and letters in index form.</li> </ul>