

# Year6MathsCurriculumMediumTermPlan(LearningObjectives)-AutumnTerm2016

Whole School Theme: <b>Stories</b> / Year group Theme: <b>Harry Potter – The Boy Who Lived</b>	
Values	Kindness/integrity
Learning Skills	-Curiosity -Communication -Teamwork -Determination -Confidence -Independence -Focus -Aspiration
Curriculum Drivers	<b>Knowledge of the world-</b> Who am I? What is my locality? How do I fit in with the wider world? <b>Possibilities-</b> How can I 'Be the Best I can Be?' How can I make the most of my opportunities? <b>Community-</b> How can I take responsibility for my school and local community? How does my community compare with others? How can I help others?
Blocked Learning	<p><b><u>NumberandPlaceValue</u></b></p> <p>Read, write, order and compare numbers up to 10,000,000 and up to three decimal places and partition in order to determine the value of each digit.            Use understanding of place value to multiply and divide whole numbers and decimals by 10, 100 and 1000.            Round any number including decimals to a required degree of accuracy (nearest integer tenth, 10 or 100).            Solve problems which require answers to be rounded to a specified degree of accuracy.            Order negative numbers in context, count forwards and backwards with positive and negative whole numbers and calculate intervals across zero.            Solve problems involving the above and numbers with up to three decimal places.</p> <p>(2 weeks)</p> <p><b><u>WrittenMethods</u></b></p> <p>Add and subtract decimals up to two places.            Multiply multi-digit numbers up to 4 digits by a two-digit number using long multiplication.            Multiply one-digit numbers with up to two decimal places by whole numbers.            Divide numbers up to 4 digits by a two-digit number using short division and interpret remainders according to the context.            Solve single step problems in context, deciding which operation to use and why.            Solve multi-step addition and subtraction questions.            Check the reasonableness of an answer using inverse operations.</p> <p>(2 Weeks)</p> <p><b><u>Number</u></b></p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations and understand the use of brackets.            Identify the common factors, common multiples and prime numbers.            Understand and identify square and cube numbers.</p> <p>(1 Week)</p> <p><b><u>HandlingData&amp;Statistics</u></b></p> <p>Interpret and construct line graphs and use these to solve problems.            Complete, read and interpret information in tables, including timetables.            Use Venn and Carroll diagrams to record their sorting and classifying of information. Calculate and interpret the mean as an average and the difference.</p> <p>(2 weeks)</p> <p><b>Plus assessment and review week 8 weeks</b></p>
	<p><b><u>Measure</u></b></p> <p>Read and interpret scales on a range of measuring instruments, explaining what each labelled division represents.            Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit and vice versa.            To solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places.            Convert between miles and kilometers.            Understand and use approximate equivalences between metric and imperial units such as inches, pounds and pints.            Recognise that shapes with the same areas can have different perimeters and vice versa.            Recognise when it is possible to use formula for area and volume of shapes.            Calculate the area of parallelograms and triangles.            Calculate, estimate and compare volumes of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>) and extending to other units (for examples mm<sup>3</sup>, km<sup>3</sup>)</p> <p>(2 weeks)</p> <p><b><u>Geometry-PropertiesofShape</u></b></p> <p>Draw and measure given angles and 2-D shapes accurately using given dimensions and angles.            Recognise 3D shapes from 2D representations, describe and build simple 3D shapes including making nets.            Compare and classify geometric shapes based on their properties and sizes.            Identify acute, obtuse and reflex angles.            Know angles are measured in degrees, recognize angles where they meet at a point, on a straight line or are vertically opposite and find missing angles.            Find unknown angles in any triangles, quadrilaterals and regular polygons.            Illustrate and name parts of a circle including radius, diameter and circumference and know that diameter is twice the radius.            Use the properties of rectangles and triangles to deduce related facts and find missing lengths and angles.            Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.            Know the properties of 2-D shapes including lines of symmetry, angles, number of parallel and perpendicular lines. Describe positions on the full coordinate grid (all four quadrants).            Draw and translate simple shapes on the coordinate plane, reflect them in the axes and reason about a shapes position.</p> <p>(3 weeks)</p> <p><b>Plus assessment week and review 7 weeks</b></p>
Ongoing	<p><b><u>MentalMethodsandStrategies</u></b></p> <p>Know and practice strategies for mental addition and subtraction problems including counting on and partitioning.            Perform mental calculations of mixed operations and large numbers.            Know and practice mental strategies for multiplication and division.            Add, subtract, multiply and divide numbers mentally with increased fluency.            Perform mental calculations, including with mixed operations and large numbers.</p> <p><b><u>TimesTableFluency</u></b></p> <p>Know with increased speed and fluency our times tables up to 12.</p>
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