

# Year 6

BIA Mathematics  
Term by Term  
Scheme of Work



الأكاديمية الإسلامية البريطانية  
BRITISH ISLAMIC  
ACADEMY



## Year 6 Overview August to May <sup>(1)</sup>

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number- Place Value		Number- addition, Subtraction, Multiplication and Division				Fractions			Revision and Project presentation		End of Term Exams
Spring	Number- Decimals		Number- Percentages	Measurement			Number- Algebra		Number- Ratio		Geometry and Statistics	End of Term Exams
Summer	Geometry- Properties of Shapes		Geometry- Position and Direction	Post SATs Project Work								

(1) Subject to change. Please visit the website or call-in for regular updates.

# Term by Term Objectives



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## Year 6

<b>Year group</b>	<b>6</b>	<b>Term</b>	<b>Autumn</b>
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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12			
<p><b>Number: Place Value</b> Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.</p> <p>Round any whole number to a required degree of accuracy.</p> <p>Use negative numbers in context, and calculate intervals across zero.</p> <p>Solve number and practical problems that involve all of the above.</p>		<p><b>Number- addition subtraction, multiplication + division</b> Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why.</p> <p>Multiply multi-digit number up to 4 digits by a 2 digit number using the formal written method of long multiplication.</p> <p>Divide numbers up to 4 digits by a 2 digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions or by rounding as appropriate for the context.</p> <p>Divide numbers up to 4 digits by a 2 digit number using the formal written method of short division, interpreting remainders according to context.</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Identify common factors, common multiples and prime numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p> <p>Use estimation to check answers to calculations and determine an appropriate degree of accuracy.</p>				<p><b>Fractions</b> Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</p> <p>Compare and order fractions, including fractions <math>&gt; 1</math></p> <p>Generate &amp; describe number sequences (with fractions)</p> <p>Add and subtract fractions and mixed numbers, equivalent fractions.</p> <p>Multiply simple pairs of proper fractions writing the answer in its simplest form</p> <p>Divide proper fractions by whole numbers</p> <p>Associate a fraction with division</p> <p>Calculate decimal fraction equivalents</p> <p>Recall &amp; use equivalences between simple fractions, decimals &amp; %, including in different contexts.</p>					<p><b>R</b> <b>e</b> <b>v</b> <b>i</b> <b>s</b> <b>i</b> <b>o</b> <b>n</b>  <b>W</b> <b>e</b> <b>e</b> <b>k</b></p>		<p><b>E</b> <b>x</b> <b>a</b> <b>m</b>  <b>W</b> <b>e</b> <b>e</b> <b>k</b></p>	

# Term by Term Objectives



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## Year 6

Year group	6	Term	Spring
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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<p><u>Number: Decimals</u> Identify the value of each digit in numbers given to three decimal places and multiply numbers by 10, 100 and 1000 giving answers up to 3dp.</p> <p>Multiply one digit numbers with up to 2dp by whole numbers.</p> <p>Use written division methods in cases where the answer has up to two decimal places.</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy.</p>	<p><u>Number: Percentages</u> Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison .</p> <p>Recall and use equivalences between simple FDP including in different contexts.</p>	<p><u>Measurement</u> Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p> <p>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, using decimal notation up to 3dp.</p> <p>Convert between miles and kilometres.</p> <p>Recognise that shapes with the same areas can have different perimeters and vice versa.</p> <p>Recognise when it is possible to use formulae for area and volume of shapes.</p> <p>Calculate the area of parallelograms and triangles.</p> <p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including <math>\text{cm}^3</math>, <math>\text{m}^3</math> and extending to other units (<math>\text{mm}^3</math>, <math>\text{km}^3</math>)</p>				<p><u>Number: Algebra</u> Use simple formulae</p> <p>Generate and describe linear number sequences.</p> <p>Express missing number problems algebraically.</p> <p>Find pairs of numbers that satisfy an equation with two unknowns.</p> <p>Enumerate possibilities of combinations of two variables.</p>		<p><u>Number: ratio</u> Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>	<p><u>Geometry and Statistics</u> Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</p> <p>Interpret and construct pie charts and line graphs and use these to solve problems.</p> <p>Calculate the mean as an average.</p>	<p>Time at the beginning or end of the term for consolidation ,gap filling, seasonal activities, assessments , etc.</p>	

# Term by Term Objectives



Year 6

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Year group	6	Term	Summer
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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<p><u>Geometry- Properties of Shapes</u> Draw 2D shapes using given dimensions and angles.</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p>	<p><u>Geometry- Position and Direction</u> Describe positions on the full coordinate grid (all four quadrants).</p> <p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>	<p><b>These are left blank to accomodate any change that might occur towards the end of the year (Ramadaan, Somliland Independance Day, May Day....)</b></p> <p><b>I also beleive that a few days throughout the terms should be allocated so that each student can complete a project given to him by the Subject Teachers (Deen &amp; Core).</b></p> <p><b>The students will not be given days off, rather they complete these projects within the school premises.</b></p>						<p><b>R</b></p> <p><b>e</b></p> <p><b>v</b></p> <p><b>i</b></p> <p><b>s</b></p> <p><b>i</b></p> <p><b>o</b></p> <p><b>n</b></p>	<p><b>R</b></p> <p><b>e</b></p> <p><b>v</b></p> <p><b>i</b></p> <p><b>s</b></p> <p><b>i</b></p> <p><b>o</b></p> <p><b>n</b></p>	<p><b>Seasonal activities, Presentation of Group or Individual Project, etc...</b></p> <p><b>End of Year Assessments</b></p>	