Key Stage 2 Maths - The Aims of Our Curriculum

1. Enable children to retain and apply this essential knowledge. 2. Inspire children to become life-long learners. 3. Create a culture of high aspiration through challenging content and therefore pride in achievement. 4. Promote the spiritual, moral, social and cultural development of children, including fundamental British values of democracy, the rule of law, individual liberty, mutual respect and tolerance for those with different faiths and beliefs and for those without faith. 5. Provide opportunities for developing self-confidence, self-awareness, independence, creativity, respect and resilience in children. 6. Promote knowledge and understanding of how children can keep themselves safe and healthy. 7. Develop children's numeracy, literacy and oracy, including the sustained expansion of their vocabulary. 8. Promote reading as a life skill and enable our children to become life-long readers.

Year 5	Areas	Term 1	Term 2	Term 3
	Content	Number - place value Number - addition and subtraction Statistics Number - multiplication and division Perimeter and area	Number - multiplication and division Number – fractions Number - decimals and percentages	Number – decimals Geometry - properties of shape Geometry - position and direction Measurement - converting units Measures - volume
	Literacy link	Key vocabulary highlighted to pupils with an emphasis on using the correct terminology		
	Assessment	Y5 Autumn assessment	Y5 Spring assessment	Y5 Summer assessment
	Cross curricular links	Links made to other subject areas and real-life wherever possible		

Key skills

Place value

1)   read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.

2)   interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.

Calculations

3)   add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).

4)   add and subtract numbers mentally with increasingly large numbers (e.g. 12,462 - 2,300 = 10,162).

Key skills continued

Multiplication and division

5)   identify multiples and factors including finding all factor pairs of a number and common factors of two numbers.

6)   solve problems involving multiplication and division including using a knowledge of factors and multiples, squares and cubes.

7)   solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Fractions, decimals and percentages

8)   compare and order fractions whose denominators are all multiples of the same number.

9)   read and write decimal numbers as fractions e.g. 0.71 = 71/100.

10)   read, write, order and compare numbers with up to three decimal places.

11)   solve problems which require knowing the percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

Measures

12) convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).

13) measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.

14) calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm2) and square metres (m2).

Geometry – properties of shape

15) draw given angles and measure them in degrees.

16) distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Statistics

17) complete, read and interpret information in tables, including timetables.

Year 6	Areas	Term 1	Term 2	Term 3
	Content	Number - place value Number - addition and subtraction, multiplication and division Fractions Geometry - position and direction	Number – decimals Number – percentages Number – algebra Measurement - converting units Measurement - perimeter, area and volume Number – ratio	Statistics Geometry - properties of shape
	Literacy link	Key vocabulary highlighted to pupils with an emphasis on using the correct terminology		
	Assessment	2 x Y6 assessments	2 x Y6 assessments	Y6 assessment
	Cross curricular links	Links made to other subject areas and real-life wherever possible		

Key skills

Place value

1) round any whole number to a required degree of accuracy.

2) use negative numbers in context and calculate intervals across zero.

Calculations

3)   multiply multi-digit numbers up to four digits by a two-digit whole number, using the formal written method of long multiplication.

4)   divide numbers up to four digits by a two-digit number using the formal written method of short division. Where appropriate, interpret remainders according to the context.

5)   solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

6)   use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Fractions, decimals and percentages

7)   use written division methods where the answer has up to two decimal places.

8)   solve problems which require answers to be rounded to specified degrees of accuracy.

9)   recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio and proportion

10)   solve problems involving the calculation of percentages e.g. measures and calculations, such as 15 per cent of 360 and the use of percentages for comparison.

11)   solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra

12)   use simple formulae.

Measures

13)   use, read, write and convert between standard units.   Convert measurements of length, mass, volume and time from a smaller unit of measure to a larger unit and vice versa.   Use decimal notation to up to three decimal places.

Geometry

14) compare and classify geometric shapes based on their properties and sizes. Find unknown angles in any triangles, quadrilaterals and regular polygons.

15) draw and translate simple shapes on the coordinate plane and reflect them in the axes.

16) interpret pie charts and line graphs and use these to solve problems.

Statistics

17) calculate and interpret the mean as an average.