HOLLYMOUNT LONG TERM PLAN

Hollymount School

Inspiring Success

The Black Pear Trust

Hollymount School Long Term Plan

This document shares the long-term overview for each year group and our approach to application of key number concepts, language and methods within the priority areas of the mathematics curriculum.

At Hollymount School the 'priority areas' of the curriculum identified include: Number- number and place value; Number- addition and subtraction; Number- multiplication and division; Number- fractions (including decimals and percentages). The 'wider areas' of the curriculum identified include: Measurement; Geometry- properties of shape; Geometry- position and direction; Statistics; Ratio and Proportion; Algebra.

Teachers should use the guidance in this document, alongside the national curriculum and the NCETM progression maps to support medium term planning.

Hollymount School Long Term Overviews

The purpose of the long-term overviews are to guide teachers in how the mathematics curriculum should be implemented across the academic year. There is flexibility to these overviews with teachers using their expertise to adapt the time spent, and in some instances the order of the units of work, to best meet the needs of the cohort. The consolidation periods included in each overview further support with this flexibility.

Priority is given to number. Having a secure grasp of the different key number concepts, language and methods involved in these 'priority areas' of the curriculum are fundamental in children becoming successful mathematicians and without them can inhibit progress in the 'wider areas' of the curriculum.

Particular knowledge- such as telling the time, knowing the days of the week, and reading Roman numerals- lends itself to being taught through a 'drip-fed' approach across the academic year. Teachers may also include additional discrete short number and calculation sessions into the sequence of learning to further develop children's fluency and accuracy.

The EYFS mathematics curriculum is delivered in line with White Rose Maths. Number, as with the KS1 and KS2 curriculum, is given priority with children's understanding of counting developed and assessed with the '5 Principles of Counting' in mind. 'Number' and 'Measure, Shape and Spatial Thinking' are taught through focussed teaching and activities and child-led learning- all of which utilise the different areas of the EYFS environment. Click **here** to be directed to EYFS White Rose Maths.

Year 1 Long Term Plan													
Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**	**Week 13**	**Week 14**	**Week 15**
Autumn Term														
Number and Place Value					Addition					Subtraction				
Spring Term														
Measurement				Properties of Shapes and Position and Direction				Number and Place Value		Addition				
Summer Term														
Subtraction		Multiplication			Division		Fractions		Consolidation					

Year 2 Long Term Plan													
Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**	**Week 13**	**Week 14**	**Week 15**
Autumn Term														
Number and Place Value				Addition				Subtraction				Multiplication		
Spring Term														
Division			Fractions			Measurement			Statistics					
Summer Term														
Properties of Shapes and Position and Direction			Number and Place Value		Addition and Subtraction		Multiplication and Division		Consolidation					

Year 3 Long Term Plan														
Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**	**Week 13**	**Week 14**	**Week 15**
Autumn Term														
Number and Place Value				Addition			Subtraction			Multiplication			Division	
Spring Term														
Fractions				Number and Place Value		Addition and Subtraction			Multiplication and Division					
Summer Term														
Fractions		Statistics		Measurement		Properties of Shapes			Consolidation					

Year 4 Long Term Plan														
Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**	**Week 13**	**Week 14**	**Week 15**
Autumn Term														
Number and Place Value				Addition			Subtraction			Multiplication			Division	
Spring Term														
Fractions				Number and Place Value		Addition and Subtraction			Multiplication and Division					
Summer Term														
Fractions		Statistics		Measurement		Properties of Shapes and Position and Direction				Consolidation				

Year 5 Long Term Plan														
Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**	**Week 13**	**Week 14**	**Week 15**
Autumn Term														
Number and Place Value			Addition and Subtraction				Multiplication			Division			Fractions	
Spring Term														
Fractions			Number and Place Value		Addition and Subtraction		Multiplication and Division		Fractions					
Summer Term														
Statistics			Measurement			Properties of Shapes and Position and Direction			Consolidation					

Year 6 Long Term Plan														
Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**	**Week 13**	**Week 14**	**Week 15**
Autumn Term														
Number and Place Value			Addition and Subtraction			Multiplication			Division			Fractions		
Spring Term														
Fractions			Number and Place Value		Addition, Subtraction, Multiplication and Division			Statistics		Measurement				
Summer Term														
Properties of Shapes and Position and Direction			Algebra		Ratio and Proportion		Consolidation							

Approaches to application of key number concepts, language and methods

Through carefully considering how best to apply key number concepts, language and methods, we ensure successful coverage of the national curriculum whilst prioritising number for each year group. For each unit of work focussing on a 'priority area', opportunities to apply newly learnt content in meaningful ways should be sought- with these opportunities highlighted in medium term planning. From year 2 upwards, teachers are encouraged to incorporate the 'wider areas' of the curriculum in units of work which have a primary focus on one of the 'priority areas'. This ensures curriculum coverage as well as providing important opportunities for children to apply their understanding of the key number concepts, language and methods. This cyclical approach to teaching where the different areas of the curriculum are regularly revisited across the year, from one year to the next and throughout a child's primary education provide a broad and balanced curriculum which encourages fluency, high-level reasoning and rich problem-solving.

We are mindful and encourage the following 4 approaches to achieve this:

Within 'priority' areas, children will use understanding of key number concepts, language and methods…	
a)	*…in everyday contextual problems (including with units of metric and imperial measurement).*
b)	*…to complete missing number and symbol problems and to prove, falsify and estimate answers.*
c)	*…to order and compare.*
d)	*…across wider areas of the maths curriculum.*

Examples of approaches a, b) and c) can be found in appendix 1 of this document.

Approach d), particularly for KS1 and LKS2, should be reserved for when children demonstrate the appropriate understanding of the different key concepts, language and methods (as outlined in the calculation policies) for their year group. For this reason, teachers in those year groups are more likely to utilise approach d) the second time a priority area is of focus. As children move through the school, increased opportunities to use approach d) become available. To support a cyclical approach to teaching the 'wider areas' of the national curriculum, teachers should utilise children's understanding and skills gained from previous year groups. This will offer further opportunities to apply new learning and to scaffold more complex problem solving. It will sometimes be necessary to teach specific content relating to a 'wider area', within a unit focussing on a 'priority area' to enable successful application.

The table below should be used to support teachers in identifying opportunities to apply key number concepts, language and methods across wider areas of the maths curriculum- including understanding and skills gained from previous year groups.

Application Opportunities to Priority Areas					
	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement (Number and Place Value)			- Convert between different units of measure [for example, kilometre to metre; hour to minute]	- Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate - 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 to up to three decimal places
Measurement (Addition and Subtraction)	- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value - find different combinations of coins that equal	- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) - add and subtract amounts of	- estimate, compare and calculate different measures, including money in pounds and pence	- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres - use all four operations to solve problems	

	- the same amounts of money - solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	money to give change, using both £ and p in practical contexts		involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	
Measurement (Multiplication and Division)				- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes - use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	- calculate the area of parallelograms and triangles - calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].
Geometry- Properties of Shape (Addition and Subtraction)				- use the properties of rectangles to deduce related facts and find missing lengths and angles	- compare and classify geometric shapes based on their properties and sizes and find

					- unknown angles in any triangles, quadrilaterals, and regular polygons - recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
Statistics (Addition and Subtraction)	- ask and answer questions about totalling and comparing categorical data (pictograms, tally charts, block diagrams and simple tables).	- solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	- solve comparison, sum and difference problems using information presented in a line graph	
Statistics (Multiplication and Division)					- calculate and interpret the mean as an average.
Statistics (Fractions)					- interpret and construct pie charts and line graphs and use these to solve problems
Ratio and Proportion (Addition and Subtraction)					- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

					- - solve problems involving similar shapes where the scale factor is known or can be found
Ratio and Proportion (Multiplication and Division)					- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts - solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison - solve problems involving similar shapes where the scale factor is known or can be found - solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Ratio and Proportion (Fractions)					- solve problems involving unequal sharing and grouping using knowledge of

					fractions and multiples.
Algebra (Addition and Subtraction)					- use simple formulae - generate and describe linear number sequences - express missing number problems algebraically - find pairs of numbers that satisfy an equation with two unknowns - enumerate possibilities of combinations of two variables.
Algebra (Multiplication and Division)					- use simple formulae - generate and describe linear number sequences - express missing number problems algebraically - find pairs of numbers that satisfy an equation with two unknowns - enumerate possibilities of combinations of two variables.

Additional Guidance

Number and Place Value

In every year group, number and place value is the primary focus of a unit on 2 occasions.

- The second time number and place value is the primary focus of a unit should be a period used to consolidate learning from the earlier unit and from previous year groups- with the intention to develop children's accuracy and fluency.
- The concept of rounding, in years 4, 5 and 6, should be reserved for the second occasion number and place value is the primary focus of a unit.

Fractions

As the curriculum content on teaching fractions grows, this priority area is the primary focus of a unit on 2 occasions from year 3 upwards.

- In year 3, the second time fractions is the primary focus of a unit- at the start of the summer term- should be a period used to consolidate learning from the previous fractions unit (Spring Term) and from KS1- with the intention to develop children's accuracy and fluency.
- In year 4, the second time fractions is the primary focus of a unit, greater time should be allocated to understanding the relationship between fractions and decimals.
- In years 5 and 6, the second time fractions is the primary focus of a unit, greater time should be allocated to understanding the relationship between fractions, decimals and percentages.

Measurement; Geometry- properties of shape; Geometry- position and direction; Statistics; Ratio and Proportion; Algebra.

Discrete teaching of knowledge and concepts from 'wider areas', which do not fit appropriately in to approach d) should be taught independently within the correlating unit of work and/or through a drip-feed approach. Additionally, content which has been covered through application within a priority area, should also be incorporated into the correlating unit of work to consolidate and deepen children's understanding.