Frances Olive Anderson C of E Primary School

'Being Different, Belonging Together.'

Mathematics Long/Medium Term Planning 2018-2019

Year 5

This long and medium term plan provides an overview of coverage for mathematics across the school year. It will be updated each school year in line with the school calendar. The long and medium term plans are a guide and can be used flexibly providing all programmes of study are taught within the school year inline with the National Curriculum aims. Following discussion with the maths subject leader you can and should adapt your teaching sequence in response to ongoing formative and summative assessment to ensure you meet the needs of particular groups and individual children in your class.

	Year 5 Mathematics Long Term Overview					
Autumn Term	Number and Place Value (3 Weeks)	Number Addition and Subtraction (4 Weeks)	Number Multiplication and Division (5 Weeks)			Geometry Shape and Angles (2 Weeks)
Spring Term	Number Fractions (4 Weeks)	Number Decimals (2 Weeks)	Number Decimals (1 Week)	Number Percentages (2 Weeks)	Geometry Position and Direction (1 Week)	Statistics (1 Week)
Summer Term	Measurement (3 Weeks)	Measurement Area and Perimeter (2 Weeks)	Number The Four Operations Arithmetic (3 Weeks)		Consolidation (2 Weeks)	

Mathematics

Y1-Y6 To use squared maths books and pencil throughout.

Date, title (optional) and LO to be written from the left.

Number fluency to be embedded through TT Rock Stars and regular times table practise in KS2.

In KS1 regular counting (at least 2 min daily) to develop number fluency.

Y1-6 to complete arithmetic tests (Rising Stars) at least once a fortnight and used alongside cold maths activities to inform assessment.

Cold Maths Activities 2 weeks after teaching point - X3 each week (Fluency, Reasoning and Problem Solving)

Reasoning and problem solving must also be embedded and developed where possible, in every maths lesson in line with the National Curriculum aims.

Opportunities should also be made to apply mathematics across the curriculum and it is important class teachers find connections with the Cornerstones curriculum and/or science where possible (at least once a term)

Whilst the long term plan indicates the overall domain being covered in that period of time, other domains should easily be linked to ensure mathematical connections are continually made. For example, a unit on measurement could easily allow application of multiplication and division.

Pupils purple polish corrections.

Use stickers to show when concrete resources have been used and scaffolding stickers to show support that has been given.

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Autumn Term			
Wk	Week Beg	Topic	Curriculum Objectives (2014 Curriculum)
1	3.9.18 (4 Days)	Number Place Value	• Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.
2	10.9.18		• Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. • Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.
3	17.9.18		• Solve number problems and practical problems that involve all of the above.
4	24.9.18	Number Addition and Subtraction	• Add and subtract numbers mentally with increasingly large numbers. • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
5	1.10.18		
6	8.10.18	Number Addition and Subtraction	• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
7	15.10.18		
HALF TERM			
1	29.10.18 (4 Days)	Number Multiplication and Division	• Multiply and divide numbers mentally drawing upon known facts. • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
2	5.11.18		• Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
3	12.11.18		• Solve problems involving multiplication and division including using their knowledge of factors and multiples.
4	19.11.18		• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
5	26.11.18	Number Multiplication and Division	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
6	3.12.18	ASSESSMENT WEEK	
7	10.12.18	Geometry Shape and Angles	• Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. • Use the properties of rectangles 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 angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
8	17.12.18 (3 Days)		• Draw given angles, and measure them in degrees (°). • Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°), other multiples of 90°.
Cross Curricular Links:			

Spring Term			
Wk	Week Beg	Topic	Curriculum Objectives (2014 Curriculum)
1	7.1.19	Number Fractions	• Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
2	14.1.19		• Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. 2 ⁄5 + 4 ⁄5 = 6 ⁄5 = 1 1 ⁄5).
3	21.1.19		• Compare and order fractions whose denominators are all multiples of the same number. • Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
4	28.1.19		• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
5	4.2.19	Number Decimals	• Read and write decimal numbers as fractions (e.g. 0.71 = 71⁄100). • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • Read, write, order and compare numbers with up to three decimal places.
6	11.2.19		• Round decimals with two decimal places to the nearest whole number and to one decimal place. • Solve problems involving number up to three decimal places.
HALF TERM			
1	25.2.19	Number Decimals	Objectives Above
2	4.3.19	Number Percentages	• Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal fraction.
3	11.3.19		• Solve problems which require knowing 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.
4	18.3.19	ASSESSMENT WEEK	
5	25.3.19	Geometry Position and Direction	• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.
6	1.4.19	Statistics	• Solve comparison, sum and difference problems using information presented in line graphs. • Complete read and interpret information in tables, including timetables.

Cross Curricular Links:

Wk	Week Beg	Topic	Curriculum Objectives (2014 Curriculum)
			Summer Term
1	22.4.19 (3 Days)	Measurement	• Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
2	29.4.19		• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. • Estimate volume (e.g. using 1 cm3 blocks to build cuboids (including cubes) and capacity (e.g. using water). • Solve problems involving converting between units of time.
3	6.5.19 (4 Days)		• Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling.
4	13.5.19	Measurement Area and Perimeter	• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. • Calculate and compare the area of rectangles (including squares), and
5	20.5.19		including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes.
			HALF TERM
1	3.6.19	Number The Four Operations	• Add and subtract numbers mentally with increasingly large numbers. • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
2	10.6.19		• Multiply and divide numbers mentally drawing upon known facts. • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
3	17.6.19		• Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
4	24.6.19		ASSESSMENT WEEK
5	1.7.19		TRANSITION WEEK
6	8.7.19		CONSOLIDATION
7	15.7.19		

Cross Curricular Links: