	Long term maths planning – Year 5 2017 - 2018							
wk	**Autumn Term 4th September - 21st December 2017 10th Nov Phase 1 ends**		wk	**Spring Term 8th January – 29th March 2018 9th Feb Phase 2 ends**		wk	**Summer Term 16th April-23rd July 2018 4th May Phase 3 ends**	
1	4/9 Number-Place Value		1	8/1 Number-Place Value *(use <, > and = signs in different contexts)*		1	16/4 Number-Place Value *(Repeat from Phase 1,2-deeper)*	
2	11/9 Number-Place Value (*Negative numbers, square/cubes, Roman Numerals)*		2	15/1 The four operations (*Multi step word problems /Measurements)*		2	23/4 Addition/Subtraction (*Multi step word problems /Measurements, , repeat from Phase 1,2-deeper)*	
3	18/9 Addition/Subtraction		3	22/1 Fractions/%/Decimals		3	30/4 Multiplication/Division (*Multiples, Factors, Prime No, repeat from Phase 1,2-deeper)* *Assessment – Data drop on Friday 4th May 2018*	
4	25/9 Addition/Subtraction (*Multi step w pb/Money)*		4	29/1 Fractions/%/Decimals		4	7/5 Geometry (*Angles/3D shapes, repeat from Phase 1,2-deeper)*	
5	2/10 Multiplication/Division (*Multiples, Factors, Prime No)*		5	5/2 Geometry (*Angles, 2D/3D shapes, Area/Perimeter)* *Assessment – Data drop on Friday 9th February 2018*		5	14/5 Geometry *(Position and Direction, , repeat from Phase 1,2-deeper)*	
				Half term (12/2-18/2/2018)		6	21/5 The four operations (*Multi step word problems /Measurements)*	
6	9/10 Multiplication/Division		6	19/2 Geometry (*Angles,*			Half term (28/5-3/6/2018)	

	(W pb using factors, multiples, squares and cubes			*2D/3D shapes, Area/Perimeter)*				
			7	26/2 Number-Place Value *(Roman Numerals)*				
7	16/10 Statistics (*Tables/line graphs)*		8	5/3 Addition/Subtraction (*Multi step word problems /Time, repeat from Phase 1,2-deeper)*		7	4/6 Fractions/%/Decimals *(Repeat from Phase 1,2-deeper)*	
	Half term (23/10-29/10/2017)		9	12/3 Addition/Subtraction *(Statistics, repeat from Phase 1,2-deeper)*		8	11/6 Fractions/%/Decimals *(Repeat from Phase 1,2-deeper)*	
8	30/10 Fractions *(Compare and order fractions whose denominators are all multiples of the same number, recognise mixed numbers, improper fractions, +/- fractions with the same denominator, round decimals)*		10	19/3 Multiplication/Division *(Prime numbers, square and cubes, formal written methods for x/÷)*		9	18/6 Measurement (*Perimeter and area, convert between units of metric measure, repeat from Phase 1,2-deeper)*	
9	6/11 Fractions *(As previous week)* *Assessment - Data drop on Friday 10th Nov 2017*		11	26/3 Fractions *(x proper fractions and mixed numbers by whole numbers)*		10	25/6 Statistics *(Repeat from Phase 1,2-deeper)*	
10	13/11 Measurement *(Convert between units of measurement, calculate Area/Perimeter)*					11	2/7 Geometry *(Angles, repeat from Phase 1,2-deeper)*	
11	20/11 Geometry *(2D/3D shapes/Angles)*		By the end of spring term the **minimum** children need to be able to do:			12	9/7 The four operations (*Multi step word problems*	

12	27/11 Number/PV *(Negative numbers, w.pb)*	
13	4/12 Addition/Subtraction (*Statistics, w.pb)*	
14	11/12 Multiplication/Division *(Word pb)*	
15	18/12 Revision	

By the end of autumn term, the **minimum** children need to be able to do:

- Read, write, order and compare numbers to 1,000,000 and determine the value of each digit
- Identify multiples and factors including finding all factor pairs of a number and common factors of two numbers.
- Compare and order fractions whose denominators are all multiples of the same number.
- Convert between different units of metric measure *(e.g. km and m; cm and mm; g and kg)*
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
- Calculate and compare the area of rectangles (incl. squares) and including using standard units, square centimetres and square metres and estimate the area of irregular shapes.
- Complete, read and interpret information in tables, including timetables.
- Read, spell and pronounce mathematical vocabulary correctly

- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero
- Add and subtract whole numbers with more than four digits, including using formal written methods *(columnar addition and subtraction)*
- Complete, read and interpret information in tables, including timetables
- Solve problems involving multiplication and division including using a knowledge of factors and multiples, squares and cubes
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
- Read and writes decimal numbers as fractions *eg 0.71 = 71/100*
- Read, write, order and compare numbers with up to three decimal places
- 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
- Convert between different units of metric measure *(e.g. km and m; cm and mm; g and kg; l and ml)*
- Draw given angles and measures them in degrees (0)
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles

	/Measurements/ Metric/Imperial units)	
13	16/7 Revision	

By the end of Y5, a child should be **fluent** with:

- Formal written methods for addition and subtraction
- Using a developing knowledge of formal methods of multiplication and division
- Solving problems including properties of numbers and arithmetic
- Making connections between fractions, decimals and percentages
- Classifying shapes with geometric properties and using the vocabulary needed to describe them
- Reading, spelling and pronouncing mathematical vocabulary correctly