Busy Ant Maths Year 5 Medium-Term Plans

Unit 1

Number -		Geometry -
Number & place value	Addition & subtraction	Properties of shapes

Unit 2

Number -		Geometry -
Multiplication & division	Fractions	Position & direction

Unit 3

Number -		Measurement (mass)
Addition & subtraction	Decimals	

Unit 4

Number -		Measurement (time)
Multiplication & division	Multiplication & division	

Unit 5

Number -		Geometry -
Number & place value	Addition & subtraction	Properties of shapes

Unit 6

Number -		Measurement (length)
Multiplication & division	Fractions	

Unit 7

Number -		Statistics
Decimals	Addition & subtraction	

Unit 8

Number -		Measurement (perimeter & area)
Multiplication & divison	Percentages (including fractions and decimals)	

Unit 9

Number -		Geometry -
Number & place value	Addition & subtraction	Properties of shapes

Unit 10

Number -		Measurement (volume & capacity)
Multiplication & division including Measurement (money)	Fractions	

Unit 11

Number -		Geometry -
Addition & subtraction including Measurement (money)	Percentages (including fractions and decimals)	Position & direction

Unit 12

Number -		Statistics
Multiplication & divison including Measurement (money)	Multiplication & divison including Measurement (money)	

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Unit 1	Number – Number and place value Number – Addition and subtraction Geometry – Properties of shapes	

National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Number and place value	**Week 1**	
• read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	• Read and write numbers to 100 000 and determine the value of each digit	1
• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	• Order and compare numbers to 100 000 and determine the value of each digit	2
	• Count forwards and backwards in steps 10 and 100	3
• round any number up to 1 000 000 to the nearest 10, 100 and 1000	• Round numbers up to 100 000 to the nearest 10, 100 and 1000	4
Number – Addition and subtraction	**Week 2**	
• add and subtract numbers mentally with increasingly large numbers	• Add numbers mentally	1
	• Subtract numbers mentally	2
• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	• Subtract numbers mentally	3
	• Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why	4
Geometry – Properties of shapes	**Week 3**	
• identify 3-D shapes, including cubes and other cuboids, from 2-D representations	• Identify 3-D shapes with parallel or perpendicular faces or edges	1
	• Use properties to identify 3-D shapes from 2-D representations	2
	• Visualise from the front, side and top 2-D representations of 3-D shapes made with interlocking cubes	3
	• Investigate and identify 3-D shapes which can be made using interlocking cubes	4

Unit 2	Number – Multiplication and division Number – Fractions Geometry – Position and direction	

National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	**Week 1**	
• multiply and divide numbers mentally drawing upon known facts	• Multiply numbers mentally drawing upon known facts	1
	• Multiply whole numbers by 10, 100 and 1000	2
• multiply and divide whole numbers by 10, 100 and 1000	• Multiply numbers mentally drawing upon known facts	3
	• Multiply and divide numbers mentally drawing upon known facts • Multiply whole numbers by 10 and 100	4
Number – Fractions	**Week 2**	
• compare and order fractions whose denominators are all multiples of the same number	• Find fractions of numbers and quantities using fractions as operators	1
• identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	• Practise counting forwards and backwards in simple fractions • Recognise fraction sequences and find the term to term rule	2
• develop their understanding of fractions as numbers, measures and operators by finding fractions of numbers and quantities *	• Identify, name and write equivalent fractions of a given fraction, represented visually	3
• practise counting forwards and backwards in simple fractions *	• Compare and order fractions whose denominators are all multiples of the same number	4
• recognise and describe linear number sequences, including those involving fractions and find the term-to-term rule * [Domain: Number – Number and place value]		
Geometry – Position and direction	**Week 3**	
• identify, describe and represent the position of a shape following a translation, using the appropriate language, and know that the shape has not changed	• Recognise where a shape will be after a translation on a 2-D grid and know that the shape has not changed	1
	• Translate two or more shapes to make a tiling pattern on a 2-D grid	2
	• Create 2-D shapes which following translations to the left/right and up/down form a tiling pattern	3
	• Identify, describe and represent the position of a shape following a translation in the first quadrant of a coordinate grid and know that the shape has not changed	4

* Notes and guidance (non-statutory)

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Unit 3	Number – Addition and subtraction Number – Decimals Measurement (mass)	

National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Addition and subtraction	**Week 1**	
• add whole numbers with more than 4 digits, including using formal written methods (columnar addition) • add numbers mentally with increasingly large numbers • use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	• Add numbers mentally	1
	• Add whole numbers with five digits using the formal written method • Estimate and check the answer to a calculation	2
	• Add whole numbers with five digits using the formal written method • Estimate and check the answer to a calculation	3
	• Add whole numbers with five digits using the formal written method • Use rounding to check answers to calculations	4
Number – Decimals	**Week 2**	
• read and write decimal numbers as fractions [for example, $0·71 = \frac{71}{100}$] • round decimals with two decimal places to the nearest whole number and to one decimal place • practise adding decimals, including complements of 1 (for example, $0·83 + 0·17 = 1$) * • recognise and describe linear number sequences involving decimals, and find the term-to-term rule* [Domain: Number – Number and place value]	• Read and write decimal numbers as fractions	1
	• Round decimals with two decimal places to the nearest whole number • Add complements of 1	2
	• Round decimals with two decimal places to one decimal place	3
	• Recognise and describe linear number sequences involving decimals, and find the rule	4
Measurement (mass)	**Week 3**	
• convert between different units of metric measure (for example, gram and kilogram) • understand and use approximate equivalences between metric units and common imperial units such as pounds • use all four operations to solve problems involving measure [for example, mass] using decimal notation, including scaling	• Use knowledge of place value, multiplication and division to convert between units of mass (gram and kilogram)	1
	• Know and use approximate equivalences between metric units of mass (kilograms and grams) and common imperial units (pounds)	2
	• Use all four operations to solve problems involving mass using decimal notation	3
	• Use all four operations to solve problems involving mass using decimal notation, including scaling	4

* Notes and guidance (non-statutory)

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Unit 4	Number – Multiplication and division Number – Multiplication and division Measurement (time)	
National Curriculum attainment targets Pupils should be taught to:	**Lesson objectives** Pupils will be taught to:	**Lesson**
Number – Multiplication and division	**Week 1**	
• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • multiply numbers up to 4 digits by a one-digit number using a formal written method • multiply and divide numbers mentally drawing upon known facts • multiply whole numbers by 10, 100 and 1000 • recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}) • solve problems involving multiplication and division including using their knowledge of squares and cubes • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	• Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	1
	• Use the formal written method of short multiplication to calculate ThHTO x O • Estimate and check the answer to a calculation	2
	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	3
	• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	4
Number – Multiplication and division	**Week 2**	
• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • divide numbers mentally drawing upon known facts • divide whole numbers by 10, 100 and 1000 • solve problems involving multiplication and division including using their knowledge of factors and multiples	• Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • Establish whether a number up to 100 is prime and recall prime numbers up to 19	1
	• Divide whole numbers by 10, 100 and 1000	2
	• Divide numbers mentally drawing upon known facts	3
	• Solve problems involving multiplication and division including using their knowledge of factors and multiples	4
Measurement (time)	**Week 3**	
• solve problems involving converting between units of time • use all four operations to solve problems involving measure, including scaling	• Solve problems involving converting between units of time	1
	• Solve problems involving converting between units of time to calculate durations of time	2
	• Use all four operations in problems involving time, including conversions (for example, days to weeks, expressing the answer as weeks and days)	3
	• Use all four operations to solve problems involving time, including scaling	4

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Unit 5	Number – Number and place value Number – Addition and subtraction Geometry – Properties of shapes		
National Curriculum attainment targets Pupils should be taught to:	**Lesson objectives** Pupils will be taught to:		**Lesson**
Number – Number and place value	**Week 1**		
• read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero • round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • solve number problems and practical problems that involve all of the above	• Read, write, order and compare numbers up to 1 000 000 and determine the value of each digit		1
	• Count forwards and backwards in steps of 10, 100 and 1000 • Round any number up to 1 000 000 to the nearest 10, 100 and 1000		2
	• Count backwards through zero with negative numbers • Interpret negative numbers in context		3
	• Solve negative number problems		4
Number – Addition and subtraction	**Week 2**		
• subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction) • subtract numbers mentally with increasingly large numbers • use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • practise adding and subtracting decimals, including a mix of whole numbers and decimals * [Domain: Number – Fractions (including decimals and percentages)]	• Subtract numbers mentally		1
	• Subtract whole numbers with five digits using the formal written method (decomposition) • Estimate and check the answer to a calculation		2
	• Subtract whole numbers with five and six digits using the formal written method (decomposition) • Use rounding to check answers		3
	• Add and subtract decimals to two decimal places using the formal written method		4
Geometry – Properties of shapes	**Week 3**		

• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
• 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 $\frac{1}{2}$ a turn (total 180°)
  - other multiples of 90°
	• Know angles are measured in degrees: estimate, compare and measure with a protractor acute, obtuse and reflex angles		1

	• Use a protractor to measure and draw angles to the nearest 5°		2
	• Make accurate drawings of given angles, drawing lines with a ruler to the nearest millimetre and measuring angles to the nearest degree		3
	• Identify angles at a point and one whole turn (total 360°), angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°), other multiples of 90°		4

* Notes and guidance (non-statutory)

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Unit 6	Number – Multiplication and division Number – Fractions Measurement (length)	

National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	**Week 1**	
• 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 • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	• Use the formal written method of short division to calculate HTO ÷ O • Estimate and check the answer to a calculation	1
	• Use the formal written method of short division to calculate HTO ÷ O with a fraction remainder • Estimate and check the answer to a calculation	2
	• Use the formal written method of short division to calculate HTO ÷ O with a decimal remainder • Estimate and check the answer to a calculation	3
	• Solve division problems including answers that involve rounding remainders up or down	4
Number – Fractions	**Week 2**	
• 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 • recognise and use thousandths and relate them to tenths and hundredths	• Recognise and use thousandths and relate them to tenths and hundredths	1
	• Compare and order fractions whose denominators are all multiples of the same number	2
	• Add fractions with the same denominator and denominators that are multiples of the same number	3
	• Subtract fractions with the same denominator and denominators that are multiples of the same number	4
Measurement (length)	**Week 3**	
• convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre) • understand and use approximate equivalences between metric units and common imperial units such as inches • use all four operations to solve problems involving measure [for example, length] using decimal notation, including scaling	• Use knowledge of place value, multiplication and division to convert between units of length (kilometre and metre; centimetre and metre; centimetre and millimetre)	1
	• Know and use approximate equivalences between metric units of length (centimetres) and common imperial units (inches)	2
	• Use all four operations to solve problems involving length using decimal notation	3
	• Use all four operations to solve problems involving length using decimal notation, including scaling	4

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Unit 7	Number – Decimals Number – Addition and subtraction Statistics	
National Curriculum attainment targets Pupils should be taught to:	**Lesson objectives** Pupils will be taught to:	**Lesson**
Number – Percentages, decimals and fractions	**Week 1**	
• read and write decimal numbers as fractions • recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • round decimals with two decimal places to the nearest whole number and to one decimal place • read, write, order and compare numbers with up to three decimal places • solve problems involving number up to three decimal places	• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	1
	• Read, write, order and compare numbers with up to three decimal places	2
	• Read, write, order and compare numbers with up to three decimal places • Round decimals with two decimal places to the nearest whole number and to one decimal place	3
	• Solve problems involving number up to three decimal places	4
Number – Addition and subtraction	**Week 2**	
• mentally add and subtract tenths, and one-digit whole numbers and tenths * • practise adding and subtracting decimals, including a mix of whole numbers and decimals, decimals with different numbers of decimal places, and complements of 1 [for example, 0·83 + 0·17 = 1]* * [Domain: Number – Fractions (including decimals and percentages)]	• Add decimals with one and two decimal places mentally	1
	• Subtract decimals with one and two decimal places mentally	2
	• Add and subtract a mix of whole numbers and decimals	3
	• Add and subtract decimals with different numbers of decimal places	4
Statistics	**Week 3**	
• solve comparison, sum and difference problems using information presented in a line graph • complete, read and interpret information in tables, including timetables	• Solve comparison, sum and difference problems using information presented in a line graph	1
	• Solve comparison, sum and difference problems using information presented in a line graph	2
	• Complete, read and interpret information in tables, including timetables	3
	• Connect work on coordinates and scales to interpreting information in time graphs	4

Unit 8	Number – Multiplication and division Number – Percentages (including fractions and decimals) Measurement (perimeter and area)	
National Curriculum attainment targets Pupils should be taught to:	**Lesson objectives** Pupils will be taught to:	**Lesson**
Number – Multiplication and division	**Week 1**	
• 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 • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	• Use partitioning to calculate TO x TO • Estimate and check the answer to a calculation	1
	• Use partitioning and the grid method to calculate TO x TO • Estimate and check the answer to a calculation	2
	• Use the expanded written method of long multiplication to calculate TO x TO • Estimate and check the answer to a calculation	3
	• Solve problems involving addition, subtraction, multiplication and division	4
Number – Percentages (including fractions and decimals)	**Week 2**	
• recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 and 25 • make connections between percentages, fractions and decimals *	• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred' • Write percentages as a fraction with a denominator of 100	1
	• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred' • Write percentages as a decimal with two places	2
	• Know percentage equivalents of certain fractions	3
	• Solve problems involving percentages	4
Measurement (perimeter and area)	**Week 3**	
• measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • 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	• Measure and calculate the perimeter P of composite rectilinear shapes in centimetres and metres, including using the rule $P = 2(a + b)$ where a and b are the dimensions of the sides in the same unit	1
	• Calculate and compare the area A of rectangles (including squares), using standard units, square centimetres (cm²) and square metres (m²), and using the rule $A = a \times b$; and estimate the area of irregular shapes	2
	• Use the relations of perimeter or area to find unknown lengths	3
	• Calculate the area of irregular shapes formed from rectangles	4

* Notes and guidance (non-statutory)

Busy Ant Maths Year 5 Medium-Term Plans

Unit 9	Number – Number and place value Number – Addition and subtraction Geometry – Properties of shapes	

National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Number and place value	**Week 1**	
• read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	• Read, write, order and compare numbers to 1 000 000 and determine the value of each digit	1
• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	• Count forwards and backwards in steps of 100, 1000, 10 000 and 100 000 • Round any number up to 1 000 000 to the nearest 10 000 and 100 000	2
• round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	• Solve number problems	3
• solve number problems and practical problems that involve all of the above	• Read Roman numerals to 1000 (M) • Recognise years written in Roman numerals	4
• read Roman numerals to 1000 (M) and recognise years written in Roman numerals		
Number – Addition and subtraction	**Week 2**	
• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	• Add and subtract mentally whole numbers and decimals	1
• practise adding and subtracting decimals, including a mix of whole numbers and decimals * [Domain: Number – Fractions (including decimals and percentages)	• Add whole numbers with five and six digits using the formal written method • Use rounding to check answers to calculations	2
• add and subtract numbers mentally with increasingly large numbers	• Subtract whole numbers with five and six digits using the formal written method (decomposition) • Use rounding to check answers to calculations	3
• use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	• Solve multi-step problems involving number and money, including some multiplication and division, deciding which operations to use and why	4
• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why		
Geometry – Properties of shapes	**Week 3**	
• use the properties of rectangles to deduce related facts and find missing lengths and angles	• Use the properties of rectangles to deduce related facts and find missing lengths and angles	1
• distinguish between regular and irregular polygons based on reasoning about equal sides and angles	• Use the term diagonal and make conjectures about the angles formed between sides, and between diagonals and parallel sides, and other properties of quadrilaterals; use conventional markings for parallel lines and right angles	2
• use angle sum facts and other properties to make deductions about missing angles and relate these to missing number problems *	• Distinguish between regular and irregular polygons based on reasoning about equal sides and angles	3
• use the term diagonal and make conjectures about the angles formed between sides, and between diagonals and parallel sides, and other properties of quadrilaterals*	• Use angle sum facts and other properties to make deductions about missing angles and relate these to missing number problems	4
• use conventional markings for parallel lines and right angles *		

* Notes and guidance (non-statutory)

Busy Ant Maths Year 5 Medium-Term Plans

Unit 10	Number – Multiplication and division, including Measurement (money) Number – Fractions Measurement (volume and capacity)	
National Curriculum attainment targets Pupils should be taught to:	**Lesson objectives** Pupils will be taught to:	**Lesson**
Number – Multiplication and division	**Week 1**	
• multiply and divide numbers mentally drawing upon known facts	• Use the most efficient method to calculate ThHTO x O and ThHTO ÷ O • Estimate and check the answer to a calculation	1
• multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	2
• solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	• Multiply numbers mentally drawing upon known facts • Multiply TO x TO using factors	3
Measurement (money)		
• use all four operations to solve problems involving measure [for example, money] using decimal notation, including scaling	• Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates • Use all four operations to solve problems involving money using decimal notation, including scaling	4
Number – Fractions	**Week 2**	
• recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]	• Recognise mixed numbers and improper fractions and convert from one form to the other • Write mathematical statements > 1 as a mixed number	1
• multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	• Recognise mixed numbers and improper fractions and convert from one form to the other • Connect fractions > 1 that simplify to integers with divison and other fractions > 1 to division with remainders	2
• connect equivalent fractions > 1 that simplify to integers with division and other fractions > 1 to division with remainders, using the number line and other models, and hence move from these to improper and mixed fractions *	• Multiply proper fractions by whole numbers	3
	• Multiply mixed numbers by whole numbers	4
Measurement (volume and capacity)	**Week 3**	
• convert between different units of metric measure (for example litre and millilitre)	• Use knowledge of place value, multiplication and division to convert between units of capacity (litre and millilitre)	1
• understand and use approximate equivalences between metric units and common imperial units such as pints	• Know and use approximate equivalences between metric units of capacity (litres) and common imperial units (pints), and estimate capacity	2
• estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]	• Estimate volume using 1 cm³ blocks to build cuboids (including cubes)	3
• use all four operations to solve problems involving measure [for example volume] using decimal notation, including scaling	• Use all four operations to solve problems involving volume and capacity using decimal notation, including scaling	4

* Notes and guidance (non-statutory)

Busy Ant Maths Year 5 Medium-Term Plans

Unit 11	Number – Addition and subtraction, including Measurement (money) Number – Percentages (including fractions and decimals) Geometry – Position and direction		
National Curriculum attainment targets Pupils should be taught to:		**Lesson objectives** Pupils will be taught to:	**Lesson**
Number – Addition and subtraction		**Week 1**	
• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • add and subtract numbers mentally with increasingly large numbers • 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		• Add and subtract mentally whole numbers and decimals	1
		• Add whole numbers with up to six digits using the formal written method • Use rounding to check answers to calculations	2
		• Subtract whole numbers with up to six digits using the formal written method (decomposition) • Use rounding to check answers to calculations	3
Measurement (money)			
• use all four operations to solve problems involving measure [for example, money] using decimal notation, including scaling		• Solve multi step problems involving number and money, including some multiplication and division, deciding which operations to use and why	4
Number – Percentages (including fractions and decimals)		**Week 2**	
• Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100, and as a decimal • solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 • make connections between percentages, fractions and decimals *		• Know percentage and decimal equivalents of fractions	1
		• Find percentages of amounts • Solve problems involving percentages	2
		• Solve percentage problems • Solve problems involving percentages	3
		• Solve problems involving percentages	4
Geometry – Position and direction		**Week 3**	
• identify, describe and represent the position of a shape following a reflection, using the appropriate language, and know that the shape has not changed		• Recognise and use reflection in a variety of diagrams, including continuing to use a 2-D grid	1
		• Recognise where a shape will be after a reflection in given mirror lines and know that the shape has not changed	2
		• Reflect a 2-D shape using coordinates in the first quadrant and lines that are parallel to the axes	3
		• Identify, describe and represent the position of a shape following a reflection in two mirror lines at right angles and parallel to the axes in the first quadrant	4

* Notes and guidance (non-statutory)

Busy Ant Maths Year 5 Medium-Term Plans

Unit 12	Number – Multiplication and division, including Measurement (money) Statistics	

National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	**Week 1**	
• multiply numbers up to 4 digits by a two-digit number using a formal written method, including long multiplication for two-digit numbers • 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 • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	• Use partitioning to calculate HTO x TO • Estimate and check the answer to a calculation	1
	• Use partitioning and the grid method to calculate HTO x TO • Estimate and check the answer to a calculation	2
	• Use the expanded written method of long multiplication to calculate HTO x TO • Estimate and check the answer to a calculation	3
	• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign • Use all four operations to solve problems involving money using decimal notation, including scaling	4
	Week 2	
	• Use the formal written method of short division to calculate ThHTO ÷ O (decimal remainder) • Estimate and check the answer to a calculation	1
	• Use the formal written method of short division to calculate ThHTO ÷ O (fraction remainder) • Estimate and check the answer to a calculation	2
	• Use the formal written method of short division to calculate ThHTO ÷ O (rounding remainders) • Estimate and check the answer to a calculation	3
Measurement (money)		
• use all four operations to solve problems involving measure [for example money] using decimal notation, including scaling	• Use all four operations to solve problems involving money using decimal notation, including scaling	4
Statistics	**Week 3**	
• solve comparison, sum and difference problems using information presented in a line graph • complete, read and interpret information in tables	• Solve comparison, sum and difference problems using information presented in a line graph	1
	• Complete, read and interpret information in tables	2
	• Connect work on coordinates and scales to interpreting information in time graphs	3
	• Complete, read and interpret information in tables and begin to decide which representations of data are most appropriate and why	4