

# Busy Ant Maths Year 4 Medium-Term Plans

Unit 1		
<i>Number -</i>		<i>Geometry -</i>
Number & place value	Addition & subtraction	Properties of shape

Unit 5		
<i>Number -</i>		<i>Geometry -</i>
Number & place value	Addition & subtraction	Properties of shape

Unit 9		
<i>Number -</i>		<i>Geometry -</i>
Number & place value	Addition & subtraction including <i>Measurement</i> (money)	Properties of shape

Unit 2		
<i>Number -</i>		<i>Geometry-</i>
Multiplication & division including Number & place value	Fractions	Position & direction

Unit 6		
<i>Number -</i>		<i>Measurement</i> (length)
Multiplication & division including Number & place value	Fractions	

Unit 10		
<i>Number -</i>		<i>Measurement</i> (volume & capacity)
Multiplication & division	Fractions	

Unit 3		
<i>Number -</i>		<i>Measurement</i> (mass)
Addition & subtraction	Decimals	

Unit 7		
<i>Number -</i>		<i>Statistics</i>
Addition & subtraction	Addition & subtraction	

Unit 11		
<i>Number -</i>		<i>Geometry -</i>
Addition & subtraction including <i>Measurement</i> (money)	Decimals	Position & direction

Unit 4		
<i>Number -</i>		<i>Measurement</i> (time)
Multiplication & division including Number & place value	Multiplication & division	

Unit 8		
<i>Number -</i>		<i>Measurement</i> (perimeter & area)
Multiplication & division	Decimals	

Unit 12		
<i>Number -</i>		<i>Statistics</i>
Multiplication & division	Multiplication & division	

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<b>Unit 1</b> <b>Number – Number and place value</b> <b>Number – Addition and subtraction</b> <b>Geometry – Properties of shape</b>		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Number and place value	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>find 1000 more or less than a given number</li> <li>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>order and compare numbers beyond 1000</li> <li>identify, represent and estimate numbers using different representations</li> </ul>	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>Identify, represent and estimate numbers using different representations</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>Identify, represent and estimate numbers using different representations</li> </ul>	2
	<ul style="list-style-type: none"> <li>Order and compare numbers beyond 1000</li> </ul>	3
	<ul style="list-style-type: none"> <li>Find 1000 more or less than a given number</li> </ul>	4
Number – Addition and subtraction	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>practise mental methods with increasingly large numbers to aid fluency *</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<ul style="list-style-type: none"> <li>Use mental methods for addition</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use mental methods for subtraction</li> </ul>	2
	<ul style="list-style-type: none"> <li>Solve one-step problems in contexts</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve two-step problems in contexts</li> </ul>	4
Geometry – Properties of shape	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul>	<ul style="list-style-type: none"> <li>Identify lines of symmetry in 2-D shapes</li> </ul>	1
	<ul style="list-style-type: none"> <li>Reflect 2-D shapes along a line of symmetry</li> </ul>	2
	<ul style="list-style-type: none"> <li>Complete simple symmetric figures with respect to a specific line of symmetry</li> </ul>	3
	<ul style="list-style-type: none"> <li>Make patterns by repeatedly reflecting shapes in vertical lines of symmetry</li> </ul>	4

<b>Unit 2</b> <b>Number – Multiplication and division, including Number and place value</b> <b>Number – Fractions</b>		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>recognise and use factor pairs and commutativity in mental calculations</li> </ul>	<ul style="list-style-type: none"> <li>Count in multiples of 9</li> <li>Recall multiplication and division facts for the 9 multiplication table</li> <li>Understand that multiplication can be done in any order</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recall multiplication and division facts for the 9 multiplication table</li> <li>Understand that multiplication can be done in any order</li> </ul>	2
	<ul style="list-style-type: none"> <li>Count in multiples of 6</li> <li>Recall multiplication and division facts for the 6 multiplication table</li> <li>Understand that multiplication can be done in any order</li> </ul>	3
	<ul style="list-style-type: none"> <li>Recall multiplication and division facts for the 6 multiplication table</li> <li>Understand that multiplication can be done in any order</li> </ul>	4
Number – Fractions	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>recognise and show, using diagrams, families of common equivalent fractions</li> <li>understand the relation between non-unit fractions and multiplication and division of quantities *</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and show, using diagrams, families of common equivalent fractions</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recognise and show, using diagrams, families of common equivalent fractions</li> </ul>	2
	<ul style="list-style-type: none"> <li>Understand the relation between non-unit fractions and multiplication and division of quantities</li> </ul>	3
	<ul style="list-style-type: none"> <li>Understand the relation between non-unit fractions and multiplication and division of quantities</li> </ul>	4
Geometry – Position and direction	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>plot specified points and draw sides to complete a given polygon</li> </ul>	<ul style="list-style-type: none"> <li>Recognise where a shape will be after translations of a given unit to the left/right and up/down on square and triangular grids</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use coordinates to describe the position of a point on a grid in the first quadrant</li> </ul>	2
	<ul style="list-style-type: none"> <li>Plot specified points on a coordinate grid in the first quadrant</li> </ul>	3
	<ul style="list-style-type: none"> <li>Recognise where a shape will be after translations of a given unit to the left/right and up/down on a coordinate grid in the first quadrant</li> </ul>	4

\* Notes and guidance (non-statutory)

# Busy Ant Maths Year 4 Medium-Term Plans

<b>Unit 3</b> <b>Number – Addition and subtraction</b> <b>Number – Decimals</b> <b>Measurement (mass)</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Addition and subtraction</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>practise mental methods with increasingly large numbers to aid fluency *</li> <li>add numbers with up to 4 digits using the formal written method of columnar addition where appropriate</li> <li>estimate answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<ul style="list-style-type: none"> <li>Use mental methods for addition</li> </ul>	1
	<ul style="list-style-type: none"> <li>Add numbers with up to 4 digits using the formal written method of columnar addition</li> <li>Estimate the answer to a calculation</li> </ul>	2
	<ul style="list-style-type: none"> <li>Add numbers with up to 4 digits using the formal written method of columnar addition</li> <li>Estimate the answer to a calculation</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	4
<b>Number – Decimals</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>extend understanding of the number system and decimal place value to tenths *</li> <li>recognise and write decimal equivalents of any number of tenths</li> <li>round decimals with one decimal place to the nearest whole number</li> <li>compare numbers with the same number of decimal places up to two decimal places</li> <li>solve simple measure problems involving decimals to two decimal places</li> </ul>	<ul style="list-style-type: none"> <li>Understand the place value of tenths</li> <li>Recognise and write decimal equivalents of any number of tenths</li> </ul>	1
	<ul style="list-style-type: none"> <li>Compare numbers with one decimal place</li> </ul>	2
	<ul style="list-style-type: none"> <li>Round decimals with one decimal place to the nearest whole</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve simple problems involving decimals with one decimal place</li> </ul>	4
<b>Measurement (mass)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>convert between different units of measure</li> <li>estimate, compare and calculate different measures</li> </ul>	<ul style="list-style-type: none"> <li>Read and write the relationships between metric units for mass; use decimal notation to tenths to record mass</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use multiplication to convert from larger to smaller units of</li> </ul>	2
	<ul style="list-style-type: none"> <li>Estimate and compare mass; round numbers on scales to the nearest whole number</li> </ul>	3
	<ul style="list-style-type: none"> <li>Calculate different measures of mass using decimals to one place</li> </ul>	4

<b>Unit 4</b> <b>Number – Multiplication and division, including Number and place value</b> <b>Measurement (time)</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>use place value, known and derived facts to multiply mentally, including: multiplying by 0 and 1; multiplying together three numbers</li> <li>recognise and use factor pairs and commutativity in mental calculations</li> <li>multiply two-digit numbers by a one-digit number using formal written layout</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one-digit</li> </ul>	<ul style="list-style-type: none"> <li>Recall square numbers to <math>12 \times 12</math> and the related division facts</li> </ul>	1
	<ul style="list-style-type: none"> <li>Count in multiples of 7</li> <li>Recall multiplication and division facts for the 0, 1 and 7 multiplication tables</li> <li>Understand that multiplication can be done in any order</li> </ul>	2
	<ul style="list-style-type: none"> <li>Recall multiplication and division facts for the 11 and 12 multiplication tables</li> <li>Recognise and find factors of numbers to multiples up to <math>12 \times 12</math></li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division facts of all multiplication tables to <math>12 \times 12</math> and reason mathematically</li> </ul>	4
<b>Number – Number and place value</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>count in multiples of 7</li> </ul>	<ul style="list-style-type: none"> <li>Use partitioning to calculate <math>TO \times O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use partitioning and the grid method to calculate <math>TO \times O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	2
	<ul style="list-style-type: none"> <li>Use the expanded written method to calculate <math>TO \times O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	3
	<ul style="list-style-type: none"> <li>Use place value, including <math>\times 0</math>, <math>\times 1</math>, <math>\times 10</math> to derive multiplication facts; multiply together three numbers</li> </ul>	4
<b>Measurement (time)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>convert between different units of measure</li> <li>read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>	<ul style="list-style-type: none"> <li>Convert between different units of time</li> </ul>	1
	<ul style="list-style-type: none"> <li>Read, write and convert time between analogue and digital 12-hour clocks</li> </ul>	2
	<ul style="list-style-type: none"> <li>Read, write and convert time between analogue and digital 24-hour clocks</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>	4

# Busy Ant Maths Year 4 Medium-Term Plans

<b>Unit 5</b> <b>Number – Number and place value</b> <b>Number – Addition and subtraction</b> <b>Geometry – Properties of shape</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Number and place value</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>count backwards through zero to include negative numbers</li> <li>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>order and compare numbers beyond 1000</li> <li>round any number to the nearest 10 or 100</li> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> </ul>	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>Order and compare numbers beyond 1000</li> </ul>	1
	<ul style="list-style-type: none"> <li>Solve number and practical problems that involve place value</li> </ul>	2
	<ul style="list-style-type: none"> <li>Round any number to the nearest 10 or 100</li> </ul>	3
	<ul style="list-style-type: none"> <li>Count backwards through zero to include negative numbers</li> </ul>	4
<b>Number – Addition and subtraction</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>practise mental methods with increasingly large numbers to aid fluency *</li> <li>subtract numbers with up to 4 digits using the formal written method of columnar subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<ul style="list-style-type: none"> <li>Use mental methods for subtraction</li> </ul>	1
	<ul style="list-style-type: none"> <li>Subtract numbers with up to 4 digits using the formal written method of columnar subtraction (decomposition)</li> <li>Estimate and use inverse operations to check answers to a calculation</li> </ul>	2
	<ul style="list-style-type: none"> <li>Subtract numbers with up to 4 digits using the formal written method of columnar subtraction (decomposition)</li> <li>Estimate and use inverse operations to check answers to a calculation</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	4
<b>Geometry – Properties of shape</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>identify acute and obtuse angles and compare and order angles up to two right angles by size</li> </ul>	<ul style="list-style-type: none"> <li>Identify acute and obtuse angles</li> </ul>	1
	<ul style="list-style-type: none"> <li>Identify acute and obtuse angles in 2-D shapes</li> </ul>	2
	<ul style="list-style-type: none"> <li>Compare and order angles up to two right angles by size</li> </ul>	3
	<ul style="list-style-type: none"> <li>Decide if a polygon is regular or irregular by comparing lengths and angles</li> </ul>	4

<b>Unit 6</b> <b>Number – Multiplication and division, including Number and place value</b> <b>Number – Fractions</b> <b>Measurement (length)</b>			
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>	
<b>Number – Multiplication and division</b>	<b>Week 1</b>		
<ul style="list-style-type: none"> <li>multiply two-digit numbers by a one-digit number using formal written layout</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</li> </ul>	<ul style="list-style-type: none"> <li>Count in multiples of 25, 100 and 1000</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Use the formal written method to calculate <math>TO \times O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Use the most efficient method to calculate <math>TO \times O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Solve problems and reason mathematically</li> </ul>	4	
<b>Number – Number and place value</b>	<b>Week 2</b>		
<ul style="list-style-type: none"> <li>count in multiples 25 and 1000</li> </ul>		<ul style="list-style-type: none"> <li>Use the number line to connect fractions and numbers</li> </ul>	1
<b>Number – Fractions</b>		<ul style="list-style-type: none"> <li>Count up and down in hundredths</li> <li>Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</li> </ul>	2
		<ul style="list-style-type: none"> <li>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</li> <li>Use multiplication and division to find non-unit tenths and hundredths</li> </ul>	3
<ul style="list-style-type: none"> <li>solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</li> </ul>	<ul style="list-style-type: none"> <li>Solve fraction problems to calculate quantities including non-unit fractions</li> </ul>	4	
<b>Measurement (length)</b>	<b>Week 3</b>		
<ul style="list-style-type: none"> <li>convert between different units of measure [for example, kilometre to metre]</li> <li>estimate, compare and calculate different measures</li> </ul>	<ul style="list-style-type: none"> <li>Read and write the relationships between metric units for length (kilometres and metres); use decimal notation to tenths to record length</li> <li>Use multiplication to convert from larger to smaller units of length</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Read and write the relationships between metric units for length (metres, centimetres and millimetres); use decimal notation to tenths to record length</li> <li>Use multiplication to convert from larger to smaller units of length</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Estimate and compare length; round numbers on measuring tapes to the nearest whole number</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Calculate different measures of length using decimals to one place</li> </ul>	4	

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# Busy Ant Maths Year 4 Medium-Term Plans

Unit 7 Number – Addition and subtraction Statistics		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Addition and subtraction	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>practise mental methods with increasingly large numbers to aid fluency *</li> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	• Use mental methods for addition	1
	• Use mental methods for subtraction	2
	• Solve two-step problems in contexts, deciding which operations and methods to use and why	3
	• Add numbers with up to 4 digits using the formal written method of columnar addition	4
	• Estimate and use inverse operations to check answers to a calculation	
	<b>Week 2</b>	
	• Add numbers with up to 4 digits using the formal written method of columnar addition	1
	• Estimate and use inverse operations to check answers to a calculation	2
	• Subtract numbers with up to 4 digits using the formal written method of columnar subtraction (decomposition)	
	• Estimate and use inverse operations to check answers to a calculation	3
• Subtract numbers with up to 4 digits using the formal written method of columnar subtraction (decomposition)		
• Estimate and use inverse operations to check answers to a calculation	4	
• Solve two-step problems in contexts, deciding which operations and methods to use and why		
Statistics	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> <li>solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</li> </ul>	• Interpret and present discrete data using appropriate graphical methods, including scaled bar charts	1
	• Interpret and present continuous data using appropriate graphical methods, using simple time graphs	2
	• Use information presented in scaled pictograms, bar charts and tables to solve problems	3
	• Use information presented in simple time graphs to solve problems	4

Unit 8 Number – Multiplication and division Number – 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	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>multiply three-digit numbers by a one-digit number using formal written layout</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</li> </ul>	• Use partitioning to calculate $HTO \times O$	1
	• Estimate and check the answer to a calculation	
	• Use partitioning and the grid method to calculate $HTO \times O$	2
	• Estimate and check the answer to a calculation	
	• Use the expanded written method to calculate $HTO \times O$	3
• Estimate and check the answer to a calculation		
• Solve problems and reason mathematically	4	
Number – Decimals	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>extend understanding of the number system and decimal place value to hundredths *</li> <li>recognise and write decimal equivalents of any number of hundredths</li> <li>find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>compare numbers with the same number of decimal places up to two decimal places</li> </ul>	• Understand the place value of hundredths	1
	• Recognise and write decimal equivalents of any number of hundredths	
	• Compare numbers with two decimal places	2
	• Divide one-digit and two-digit numbers by 10	3
• Divide one-digit and two-digit numbers by 100	4	
Measurement (perimeter and area)	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>find the area of rectilinear shapes by counting squares</li> <li>relate area to arrays and multiplication *</li> </ul>	• Measure and calculate the perimeter of rectilinear figures in cm and m, and use the rule $P = 2(a + b)$ to calculate the perimeter (P) where a and b are the dimensions of the sides in the same unit	1
	• Find the area of rectilinear shapes by counting squares	2
	• Find the area of rectilinear and other simple 2-D shapes by counting squares	3
	• Relate area to arrays and multiplication	4

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# Busy Ant Maths Year 4 Medium-Term Plans

<b>Unit 9</b> <b>Number – Number and place value</b> <b>Number – Addition and subtraction, including Measurement (money)</b> <b>Geometry – Properties of shape</b>		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Number and place value</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>count backwards through zero to include negative numbers</li> <li>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>order and compare numbers beyond 1000</li> <li>round any number to the nearest 10, 100 or 1000</li> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value</li> </ul>	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>Order and compare numbers beyond 1000</li> <li>Solve number and practical problems that involve place value</li> </ul>	1
	<ul style="list-style-type: none"> <li>Round any number to the nearest 10, 100 or 1000</li> </ul>	2
	<ul style="list-style-type: none"> <li>Count backwards through zero to include negative numbers</li> </ul>	3
	<ul style="list-style-type: none"> <li>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value</li> </ul>	4
<b>Number – Addition and subtraction</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<ul style="list-style-type: none"> <li>Add numbers with up to 4 digits using the formal written method of columnar addition</li> <li>Estimate and use inverse operations to check answers to a calculation</li> </ul>	1
	<ul style="list-style-type: none"> <li>Subtract numbers with up to 4 digits using the formal written method of columnar subtraction (decomposition)</li> <li>Estimate and use inverse operations to check answers to a calculation</li> </ul>	2
	<ul style="list-style-type: none"> <li>Solve two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	3
	<ul style="list-style-type: none"> <li>Estimate, compare and calculate with money in pounds and pence</li> </ul>	4
<b>Measurement (money)</b>		
<ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>		
<b>Geometry – Properties of shape</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> </ul>	<ul style="list-style-type: none"> <li>Compare and classify triangles based on their properties and sizes</li> </ul>	1
	<ul style="list-style-type: none"> <li>Compare and classify parallelograms and rhombuses based on their properties and sizes</li> </ul>	2
	<ul style="list-style-type: none"> <li>Compare and classify trapeziums and kites based on their properties and sizes</li> </ul>	3
	<ul style="list-style-type: none"> <li>Compare and classify quadrilaterals based on their properties and sizes</li> </ul>	4

<b>Unit 10</b> <b>Number – Multiplication and division</b> <b>Number – Fractions</b> <b>Measurement (volume and capacity)</b>		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>multiply three-digit numbers by a one-digit number using formal written layout</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</li> </ul>	<ul style="list-style-type: none"> <li>Use the formal written method to calculate HTO x O</li> <li>Estimate and check the answer to a calculation</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use the formal written method to calculate HTO x O</li> <li>Estimate and check the answer to a calculation</li> </ul>	2
	<ul style="list-style-type: none"> <li>Use the most efficient method to calculate HTO x O</li> <li>Estimate and check the answer to a calculation</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems and reason mathematically</li> </ul>	4
<b>Number – Fractions</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>use factors and multiples to recognise equivalent fractions and simplify where appropriate [for example, <math>\frac{6}{9} = \frac{2}{3}</math> or <math>\frac{1}{4} = \frac{2}{8}</math>]*</li> <li>recognise and show, using diagrams, families of common equivalent fractions</li> <li>add and subtract fractions with the same denominator</li> <li>solve simple measure and money problems involving fractions</li> </ul>	<ul style="list-style-type: none"> <li>Use factors and multiples to recognise equivalent fractions and simplify where appropriate</li> </ul>	1
	<ul style="list-style-type: none"> <li>Add fractions with the same denominator</li> </ul>	2
	<ul style="list-style-type: none"> <li>Subtract fractions with the same denominator</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve simple measure and money problems involving fractions</li> </ul>	4
<b>Measurement (volume &amp; capacity)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>convert between different units of measure</li> <li>estimate, compare and calculate different measures</li> </ul>	<ul style="list-style-type: none"> <li>Read and write the relationship between metric units for capacity; use decimal notation to hundredths to record capacity</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use multiplication to convert from larger to smaller units of capacity</li> </ul>	2
	<ul style="list-style-type: none"> <li>Estimate and compare capacity; round numbers to the nearest whole number</li> </ul>	3
	<ul style="list-style-type: none"> <li>Calculate different measures of capacity using decimals to two places</li> </ul>	4

\* Notes and guidance (non-statutory)

# Busy Ant Maths Year 4 Medium-Term Plans

<b>Number – Addition and subtraction, including Measurement (money)</b>		
<b>Unit 11 Number – Decimals Geometry – Position and direction</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Addition and subtraction</b>		
<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<b>Week 1</b> <ul style="list-style-type: none"> <li>Add numbers with up to 4 digits using the formal written method of columnar addition</li> <li>Estimate and use inverse operations to check answers to a calculation</li> </ul>	1
	<ul style="list-style-type: none"> <li>Subtract numbers with up to 4 digits using the formal written method of columnar subtraction (decomposition)</li> <li>Estimate and use inverse operations to check answers to a calculation</li> </ul>	2
	<ul style="list-style-type: none"> <li>Estimate, compare and calculate with money in pounds and pence</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems in contexts, deciding which operations and methods to use and why</li> </ul>	4
<b>Measurement (money)</b>		
<ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>		
<b>Number – Decimals</b>		
<ul style="list-style-type: none"> <li>extend understanding of the number system and decimal place value to tenths and then hundredths*</li> <li>recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>recognise and write decimal equivalents to <math>\frac{1}{4}, \frac{1}{2}, \frac{3}{4}</math></li> <li>find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>round decimals with one decimal place to the nearest whole number</li> <li>compare numbers with the same number of decimal places up to two decimal places</li> <li>solve simple measure and money problems involving decimals to two decimal places</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and write decimal equivalents of any number of tenths and hundredths</li> </ul>	1
	<ul style="list-style-type: none"> <li>Compare decimals with up to two places</li> <li>Round decimals with one decimal place to the nearest whole number</li> </ul>	2
	<ul style="list-style-type: none"> <li>Divide one-digit and two-digit numbers by 10 and 100</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve simple measure and money problems involving decimals to two places</li> </ul>	4
<b>Geometry – Position and direction</b>		
<ul style="list-style-type: none"> <li>describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>plot specified points and draw sides to complete a given polygon</li> </ul>	<ul style="list-style-type: none"> <li>Describe the position of a point on a grid as coordinates in the first quadrant</li> </ul>	1
	<ul style="list-style-type: none"> <li>Plot specified points and draw sides to complete a given polygon</li> </ul>	2
	<ul style="list-style-type: none"> <li>Describe the position of a point on a grid as coordinates in the first quadrant</li> </ul>	3
	<ul style="list-style-type: none"> <li>Plot specified points and draw sides to complete a given polygon; make use of ICT tools</li> </ul>	4

<b>Unit 12 Number – Multiplication and division Statistics</b>			
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>	
<b>Number – Multiplication and division</b>			
<ul style="list-style-type: none"> <li>use place value, known and derived facts to divide mentally, including dividing by 1</li> <li>practise to become fluent in the formal written method of short division with exact answers *</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</li> </ul>	<b>Week 1</b> <ul style="list-style-type: none"> <li>Use place value, known and derived facts to divide mentally, including dividing by 1</li> <li>Use mental methods to partition and calculate <math>TO \div O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Use the formal written method of short division to calculate <math>TO \div O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Use mental methods to partition and calculate <math>HTO \div O</math></li> </ul>	3	
	<ul style="list-style-type: none"> <li>Use the expanded written method to calculate <math>HTO \div O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	4	
	<b>Week 2</b>		
	<ul style="list-style-type: none"> <li>Use the formal written method of short division to calculate <math>HTO \div O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Use the formal written method of short division to calculate <math>HTO \div O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Use the most efficient method to calculate <math>HTO \div O</math></li> <li>Estimate and check the answer to a calculation</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Solve problems and reason mathematically</li> </ul>	4	
	<b>Statistics</b>		
<ul style="list-style-type: none"> <li>interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> <li>solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</li> </ul>	<ul style="list-style-type: none"> <li>Interpret and present discrete data using appropriate graphical methods, including scaled bar charts</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Interpret and present continuous data using appropriate graphical methods, using simple time graphs</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Use information presented in scaled pictograms, bar charts and tables to solve problems</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Use information presented in simple time graphs to solve problems</li> </ul>	4	

# Busy Ant Maths Year 4 Medium-Term Plans