



# Manor Drive Primary Academy

## Maths Curriculum Overview

### Year 3

Block 1					
W1	<a href="#">3.1.8</a> & <a href="#">3.1.9</a> Make numbers up to 1000 using dienes	<a href="#">3.1.8</a> & <a href="#">3.1.9</a> Make numbers up to 1000 using dienes and relate these to numbers on a 0-1000 number line where only 100s are marked	<a href="#">3.1.8</a> & <a href="#">3.1.9</a> Estimate the location of numbers on a 0-1000 number line where only 0 and 1000 are shown	<a href="#">3.1.1</a> & <a href="#">3.1.2</a> Read numbers up to 1000 aloud from digits; write numbers up to 1000 in words	<a href="#">3.1.3</a> Know that hundreds can be seen as ten tens (e.g. 14 tens = 140; 180 = 18 tens) using dienes to convert between the two
W2	<a href="#">3.1.3</a> Know that hundreds can be seen as ten tens (e.g. 14 tens = 140; 180 = 18 tens) using dienes to convert between the two	<a href="#">3.1.4</a> Partition numbers up to 1000 into hundreds, tens and ones; recognise that there are 10 hundreds in 1000	<a href="#">3.1.5</a> Recognise the value of each digit in a 3-digit number	<a href="#">3.1.6</a> Compare numbers up to 1000 using "is greater than", "is less than", "is equal to", "most/greatest", "least", "closest" and "furthest".	<a href="#">3.1.6</a> Compare numbers up to 1000 using >, < and =
W3	<a href="#">3.1.7</a> Order three to five numbers up to 1000, understanding the terms "ascending order" and "descending order"	<a href="#">3.1.8</a> Divide 100 into 2, 4, 5 and 10 equal parts and read scales marked in multiples of 100 with 2, 4, 5 or 10 equal parts	Consolidation of <a href="#">3.1</a> <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.4.1</a> Begin counting in multiples of 4 and find related multiplication and division facts	<a href="#">2.5.23</a> Convert to 'friendly' numbers (find equivalent expressions) to solve addition questions mentally (e.g. 53 + 19 → 52 + 20 = 44)
W4	<a href="#">2.5.23</a> Convert to 'friendly' numbers (find equivalent expressions) to solve subtraction questions mentally (e.g. 53 - 9 → 54 - 10 = 44)	<a href="#">3.2.2</a> Add 1 and 10 to numbers up to 990 mentally, without bridging 100, using dienes to visualise	<a href="#">3.2.2</a> Add 1 and 10 to numbers up to 990 mentally, bridging 100, using dienes to visualise	<a href="#">3.2.3</a> Add 100 to numbers up to 900, using dienes to visualise	<a href="#">3.2.4</a> Subtract 1-digit numbers from 2-digit numbers using number bond knowledge (e.g. 12-4=8 so 62-4=58)
W5	<a href="#">3.2.5</a> Subtract 1 and 10 from numbers up to 1000, without bridging 100, using dienes to visualise	<a href="#">3.2.5</a> Subtract 1 and 10 from numbers up to 1000, bridging 100, using dienes to visualise	<a href="#">3.2.6</a> Subtract 100 from numbers up to 1000, using dienes to visualise	<a href="#">3.2.7</a> Add two 2-digit numbers using expanded column addition without need to rename e.g. $\begin{array}{r} 40 & 5 \\ + & 30 & 2 \\ \hline 70 & 7 \end{array}$ → 77	<a href="#">3.2.8</a> Add two 2-digit numbers using expanded column addition including need to rename e.g. $\begin{array}{r} 60 & 9 \\ + & 20 & 6 \\ \hline 80 & 15 \end{array}$ → 95
W6	<a href="#">3.2.9</a> Use expanded column addition to add 2-digit numbers to 3-	<a href="#">3.2.10</a> Use expanded column addition to add three 2-digit numbers	<a href="#">3.2.11</a> Subtract a 2-digit number from another using	<a href="#">3.2.11</a> Subtract a 2-digit number from another using	<a href="#">3.2.12</a> Use expanded column subtraction to subtract 2-digit

digit numbers and 3-digit numbers to 3-digit numbers	and to add three 3-digit numbers	expanded column subtraction without need to rename e.g. $\begin{array}{r} 80 \ 4 \\ - \ 50 \ 3 \\ \hline 30 \ 1 \end{array}$	expanded column subtraction including need to rename e.g. $\begin{array}{r} 6050 \ 12 \\ - \ 30 \ 7 \\ \hline 20 \ 5 \end{array}$  NB: Prepare all the necessary renaming before any subtraction	numbers from 3-digit numbers  NB: Prepare all the necessary renaming before any subtraction
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## Block 2

<b>W1</b>	<a href="#">3.2.13</a> Use expanded column subtraction to subtract 3-digit numbers from 3-digit numbers  NB: Prepare all the necessary renaming before any subtraction	<a href="#">3.2.13</a> Use column addition and column subtraction when questions are mixed	<a href="#">3.1.10</a> Relate missing numbers to the parts of a bar model in addition and subtraction equations	<a href="#">3.1.10</a> & <a href="#">3.2.14</a> Relate missing numbers to the parts of a bar model in addition and subtraction equations <u>and solve</u>	<a href="#">3.1.11</a> Understand aggregation, augmentation and additive comparison contexts for addition, then solve using written addition
<b>W2</b>	<a href="#">3.1.11</a> Understand partition (parts of a whole), reduction (take away or other change) and comparison contexts for subtraction, then solve using written subtraction	<a href="#">3.2.15</a> Solve addition and subtraction word problems within a variety of contexts	Consolidation of 3.2  <a href="#">Link to reasoning and problem-solving activities</a>	Consolidation of 3.2  <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.4.1</a> Begin counting in multiples of 8 and find related multiplication and division facts
<b>W3</b>	<a href="#">3.3.1</a> & <a href="#">3.3.2</a> In preparation for solving money problems, find complements of 100 (e.g. $45 + \underline{\quad} = 100$ )	<a href="#">3.3.1</a> & <a href="#">3.3.2</a> Know that there are 100p in a pound be able to convert between pounds and pence; solve simple money problems involving counting coins and notes using this knowledge	<a href="#">3.3.3</a> Solve money problems where multiple items are bought, visualising with a bar model	<a href="#">3.3.4</a> Solve money problems where single items are bought and change is given using a bar model  NB: the change is part of the bar; the total of the bars is the money at the start	<a href="#">3.3.5</a> Know the rough length of 1mm, 1 cm, 1 m and 1 km, and choose appropriate units of length for estimation
<b>W4</b>	<a href="#">3.3.6</a> Know the rough mass of 1g, 10g, 100g, 1kg and 1 tonne, and choose appropriate units for estimation	<a href="#">3.3.7</a> Know the rough volume of 1L, 100mL and 10mL and use appropriate units for estimation	<a href="#">3.3.8</a> Use rulers and metre sticks to measure length to the nearest cm, beginning to relate cm to m	<a href="#">3.4.3</a> & <a href="#">3.4.4</a> Count in multiples of 50 and 100 by relating these to counting in 5s and 10s; recognise how 100 can be split into two groups of 50 and ten groups of 10	<a href="#">3.4.4</a> Count in multiples of 20 and 25, spotting the repeating pattern; recognise how 100 can be split into five groups of 20 and four groups of 25
<b>W5</b>	<a href="#">3.3.9</a> Use weighing scales to measure mass to the nearest 100 g, beginning to relate g to kg	<a href="#">3.3.10</a> Read marked scales on measuring cylinders and other containers, beginning to relate ml to L	<a href="#">3.3.11</a> Begin to convert between g and kg; ml and L; and cm and m on practical measuring devices	<a href="#">3.3.12</a> Solve addition and subtraction for measures questions using simple conversion between cm and m	<a href="#">3.3.13</a> Understand what perimeter is and measure the perimeter of given rectangles
<b>W6</b>	<a href="#">3.3.14</a> Calculate the perimeter of regular polygons	<a href="#">3.3.15</a> Measure the perimeter of irregular polygons	Consolidate 3.3	<a href="#">3.4.1</a> Begin counting in multiples of 3 and find	<a href="#">3.4.7</a> Know that sometimes we want to be able to talk about

		<a href="#">Link to reasoning and problem-solving activities</a>	<b>related multiplication and division facts</b>	amounts that are not whole numbers and that we can use fractions to do this; introduce the concept of tenths using a bar model as examples of a fraction
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Block 3					
<b>W1</b>	<a href="#">3.4.7</a> Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths; identify tenths between 0 and 1 on a number line	<a href="#">3.4.7</a> Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths; identify tenths between 0 and <u>10</u> on a number line	<a href="#">3.4.9</a> <b>Count in tenths up to 10 and continue sequences that increase or decrease in tenths</b>	<a href="#">3.4.8</a> Understand that division can mean that something is scaled down that many times; divide ones by 10 to get fractions	<a href="#">3.4.10</a> Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths, but that we can divide these into other fractions (e.g. 1/2s, 1/3s, 1/4s, 1/5s, etc)
<b>W2</b>	<a href="#">3.4.10</a> Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths, but that we can divide these into other fractions (e.g. 1/2s, 1/3s, 1/4s, 1/5s, etc)	<a href="#">3.4.11</a> Understand that the denominator shows how many equal pieces 1 is broken into; understand that this remains true if multiple 'ones' are present (e.g. 2 ones split into fifths are still fifths, even though there are 10 pieces); show this by beginning to recognise improper fractions and relating these to mixed numbers	<a href="#">3.4.12</a> Represent fractions using a bar model, and begin to recognise the names of fractions in words (specifically 'half', 'third', 'quarter', 'fifth', 'sixth', 'eighth' and 'tenth')	<a href="#">3.4.12</a> Use a bar model to find unit fractions of amounts (e.g. $\frac{1}{4}$ of 16 or $\frac{1}{3}$ of 15)	<a href="#">3.4.13</a> Use a bar model to find fractions of amounts where the numerator is greater than 1
<b>W3</b>	<a href="#">3.4.14</a> <b>Use bar models to add fractions with the same denominator</b>	<a href="#">3.4.15</a> <b>Use bar models to subtract fractions with the same denominator</b>	<a href="#">3.4.16</a> <b>Use bar models to find pairs of fractions that make 1</b>	<a href="#">3.4.17</a> Use bar models to subtract fractions from 1 (e.g. $1 - \frac{2}{5}$ )	<a href="#">3.4.17</a> Solve a mixture of addition and subtraction questions involving fractions, including adding and subtracting fractions with the same denominator and subtracting fractions from 1
<b>W4</b>	<a href="#">3.4.19</a> Use 'is greater than' and 'is less than' to compare different unit fractions	<a href="#">3.4.19</a> Use > and < to compare different unit fractions	<a href="#">3.4.20</a> Place three or more unit fractions in ascending or descending order including use of "largest/greatest" and "smallest"	<a href="#">3.4.21</a> Solve problems relating to comparing and ordering fractions, explaining reasoning, perhaps using pictures as part of explanations	<b>Consolidate 3.4</b> <a href="#">Link to reasoning and problem-solving activities</a>
<b>W5</b>	<b>Consolidate 3.4</b> <a href="#">Link to reasoning and problem-solving activities</a>	<b>Consolidate 3.4</b> <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.4.1</a> <b>Begin counting in multiples of 6 and find related multiplication and division facts</b>	<a href="#">3.5.1</a> Tell the time in 5-minute intervals on an analogue clock	<a href="#">3.5.2</a> Relate time on analogue clocks in 5-minute intervals to the equivalent time on a digital clock
<b>W6</b>	<a href="#">3.5.2</a> Relate time on analogue clocks in 5-minute intervals to the equivalent time on a digital clock	<a href="#">3.5.3</a> Understand that time can be told on a 24-hour clock and relate this to the equivalent times of the 12-hour clock	<a href="#">3.5.4</a> Draw a given time on a blank analogue clock, starting with the hour hand before considering the minute hand	<a href="#">3.5.5</a> Tell the time in 5-minute intervals from analogue clocks with Roman numerals	<a href="#">3.5.6</a> Tell the time to 5 minute intervals on clocks with only 3, 6, 9 and 12 marked or where no numbers are marked

## Block 4

W1	<a href="#">3.5.7</a> Read analogue clocks to the nearest minute	<a href="#">3.5.8</a> Read analogue clocks to the nearest minute and understand the purpose of the second hand	<a href="#">3.5.9</a> Measure the length of short events to the nearest second using a stopwatch	<a href="#">3.5.10</a> Make tables of results that show times recorded for short events in seconds or minutes and seconds, converting between the two	<a href="#">3.5.11</a> Choose reasonable estimates for the duration of events
W2	<a href="#">3.5.12</a> Compare times on analogue clocks using language of 'before', 'after', 'fast' and 'slow'	<a href="#">3.5.13</a> Use a blank number line to find the gap in time between events	<a href="#">3.5.14</a> Use a blank number line to find when events end when given the duration and the start time, and find when events begin given the duration and the end time	Consolidate 3.5 <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.4.2</a> Continue sequences where 3, 4, 6 or 8 is added each time, including sequences that are not multiples of these numbers
W3	<a href="#">3.6.1</a> Solve multiplication questions related to the 2, 3, 4, 5, 6, 8 and 10 times table times table, and understand multiplication grids	<a href="#">3.6.3</a> Solve division questions related to the 2, 3, 4, 5, 6, 8 and 10 times table times table	<a href="#">3.6.2</a> Solve a mixture of multiplication and division questions related to 2, 3, 4, 5, 6, 8 and 10 times table	<a href="#">3.6.2</a> Solve a mixture of multiplication and division questions related to 2, 3, 4, 5, 6, 8 and 10 times table	<a href="#">3.6.8</a> Understand what multiplication in an equation means in words and use this to find the other related facts from a given multiplication fact (e.g. $3 \times 7 = 21$ gives $7 \times 3 = 21$ , $21 \div 3 = 7$ and $21 \div 7 = 3$ )
W4	<a href="#">3.6.8</a> Understand what division in an equation means and use this to find the other related facts from a given division fact (e.g. $45 \div 5 = 9$ gives $45 \div 9 = 5$ , $9 \times 5 = 45$ , $5 \times 9 = 45$ )	<a href="#">3.6.4</a> Use known multiplication facts to multiply multiples of 10 (e.g. $4 \times 5 = 20$ so $4 \times 50 = 200$ )	<a href="#">3.6.4</a> Use known multiplication facts to multiply multiples of 10 (e.g. $4 \times 5 = 20$ so $4 \times 50 = 200$ )	<a href="#">3.6.10</a> Understand that an area context of multiplication is an example of an array by drawing areas to match multiplication facts	<a href="#">3.6.12</a> Understand that the area context of multiplication can be used to see that multiplication is distributive across addition (e.g. $2 \times 15 \rightarrow 2 \times 10 + 2 \times 5$ )
W5	<a href="#">3.6.12</a> Understand that the area context of multiplication can be used to see that multiplication is distributive across addition (e.g. $3 \times 48 \rightarrow 3 \times 40 + 3 \times 8$ )	<a href="#">3.6.14</a> Use a simplified area model to multiply 1-digit numbers by 2-digit numbers in a grid method, relating this to the area context	<a href="#">3.6.14</a> Use a simplified area model to multiply 1-digit numbers by 2-digit numbers in a grid method, relating this to the area context	<a href="#">3.6.5</a> Solve multiplication word problems using known facts and grid methods in the context of repeated addition and scaling	<a href="#">3.6.5</a> Solve division word problems using known facts in the context of sharing and grouping
W6	<a href="#">3.6.6</a> Solve a mixture of multiplication and division word problems	Consolidation of 3.6	Consolidation of 3.6	<a href="#">3.7.1</a> Read data from a pictogram including the use of halves of symbols	<a href="#">3.7.2</a> & <a href="#">3.7.6</a> Collect data using tally charts with increasing confidence

	<a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">Link to reasoning and problem-solving activities</a>		
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Block 5					
<b>W1</b>	<a href="#">3.7.3</a> Represent collected data in a pictogram	<a href="#">3.7.4</a> Read data from a bar chart, including differences between bars and totals where values for bars are added	<a href="#">3.7.5</a> Add data to Venn diagrams	<a href="#">3.7.5</a> Add data to Carroll diagrams	<a href="#">3.7.7</a> Solve word problems relating to pictograms and tally charts
<b>W2</b>	<a href="#">3.7.8</a> Solve word problems relating to bar charts	<a href="#">3.7.9</a> Draw several conclusions from a given chart or table	Consolidation of <a href="#">3.7</a>  <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.8.1</a> & <a href="#">3.8.2</a> Understand that an angle represents an amount of turn, and identify the number of angles inside a given shape	<a href="#">3.8.3</a> Recognise right angles, acute angles and obtuse angles in real and abstract contexts
<b>W3</b>	<a href="#">3.8.4</a> Understand the terms 'clockwise' and 'anti-clockwise', and use these to describe a turn as a number of right angles in a given direction	<a href="#">3.8.6</a> Understand the terms 'horizontal' and 'vertical', and identify horizontal and vertical lines	<a href="#">3.8.7</a> & <a href="#">3.8.8</a> Understand the terms 'perpendicular' and 'parallel', and identify perpendicular and parallel lines	<a href="#">3.8.9</a> Identify examples of horizontal, vertical, perpendicular and parallel lines in given shapes	<a href="#">3.8.10</a> Recognise and define a trapezium, rhombus (including parallelogram), semi-circle and a kite in different orientations in terms of their sides and angles
<b>W4</b>	<a href="#">3.8.11</a> Draw rectangles (including squares), triangles, trapezia, rhombuses and kites	<a href="#">3.8.12</a> Recognise and define the common 3D shapes (even when presented in different orientations) including cube, cuboid, prism, pyramid, sphere and hemisphere	<a href="#">3.8.13</a> Use cubes and other materials to make common 3D shapes	<a href="#">3.8.5</a> & <a href="#">3.8.14</a> Sort shapes into groups using Venn diagrams based on the types of angle they contain	<a href="#">3.8.5</a> & <a href="#">3.8.14</a> Sort shapes into groups using Carroll diagrams based on the types of angle they contain
<b>W5</b>	Consolidation of <a href="#">3.8</a>  <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.9.1</a> Convert between seconds and minutes (e.g. 75 seconds = 1 minute 15 seconds)	<a href="#">3.9.2</a> and <a href="#">3.9.3</a> Begin to know how many days are in each month of the year and to read a calendar; know that there are 365 days in a year and that every fourth year is a leap year with 366 days	<a href="#">3.9.4</a> Use a blank number line to calculate the duration of events, given start and end time	<a href="#">3.9.5</a> Begin to read basic timetables and use them to calculate the duration of given events or journeys
<b>W6</b>	<a href="#">3.9.6</a> Calculate amounts and costs for time-based events	Consolidate <a href="#">3.9</a>	<a href="#">3.10.1</a> Solve addition problems in the context of	<a href="#">3.10.2</a> Solve subtraction problems in the context of	<a href="#">3.10.3</a> Solve subtraction problems in the context of

(e.g. Cost for 2½ hours if something costs £20 per hour)	<a href="#">Link to reasoning and problem-solving activities</a>	aggregation and augmentation, visualising these using part-whole bar models and using subtraction to check	partitioning and reduction, visualising these using part-whole bar models and addition to check	finding a difference/comparing, visualising these using comparison bar models and addition to check
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Block 6					
W1	<a href="#">3.10.4</a> Decide whether addition or subtraction is required to solve particular one-step word problems and construct bar models to show why	<a href="#">3.10.5</a> Solve two-step word problems involving addition and subtraction, visualising these with bar models where appropriate	<a href="#">3.10.6</a> Solve two-step word problems involving addition and subtraction, visualising these with bar models where appropriate	<a href="#">3.10.7</a> Solve missing number problems involving known multiplication and division facts and facts derived through multiples of 10 (e.g. $30 \times \_ = 210$ )	<a href="#">3.10.8</a> Use bar models to solve simple correspondence problems using multiplication, given one unit (e.g. one car takes 30 minutes to wash. How long would it take to wash four cars?)
W2	<a href="#">3.10.9</a> Use bar models to solve correspondence problems where the answer can be found by simple scaling (e.g. It takes 20 sweets to fill 2 boxes. How many sweets would fill 4 boxes?)	<a href="#">3.10.10</a> Use bar models to solve correspondence problems by first finding the value for one unit (e.g. It takes 40 minutes to wash 2 bikes. How long would it take to wash 3 bikes)	<a href="#">3.10.11</a> Solve multiplication problems relating to measures	<a href="#">3.10.12</a> Estimate the answer to addition and subtraction calculations by rounding numbers (roughly) to create friendly numbers with which to calculate (e.g. $203 + 487 \rightarrow 200 + 500$ )	<a href="#">3.10.13</a> Use estimates before calculating the answer to addition and subtraction questions as a means of checking
W3	<a href="#">3.10.14</a> Use estimates before calculating the answer to multiplication questions as a means of checking	<b>Consolidation 3.10</b> <a href="#">Link to reasoning and problem-solving activities</a>	<a href="#">3.11.1</a> Understand that fractions are made from equal shares of a whole and understand the term 'unit fractions' and 'non-unit fractions'	<a href="#">3.11.2</a> Understand that the denominator of a fraction shows how many pieces each 'one' is divided equally into (including when there is more than one 'one')	<b>3.11.3 Use a bar model to find unit fractions of an amount, using known division facts</b>
W4	<a href="#">3.11.3</a> Use a bar model to find unit fractions of an amount, using known division facts	<b>3.11.4 Use a bar model to find non-unit fractions of an amount, using known division and multiplication facts</b>	<a href="#">3.11.4</a> Use a bar model to find non-unit fractions of an amount, using known division and multiplication facts	<a href="#">3.11.5</a> Solve word problems which require the finding of unit fractions of amounts	<a href="#">3.11.5</a> Solve word problems which require the finding of non-unit fractions of amounts
W5	<a href="#">3.11.6</a> Using a 'fraction wall' diagram, find equivalent fractions, understanding these as fractions that have the same value	<a href="#">3.11.6</a> Using a coloured parts of a whole, diagram, find equivalent fractions, understanding these as fractions that have the same value	<a href="#">3.11.7</a> Shade in a half, a third, a quarter and a fifth on diagrams where the number of divisions is a multiple of the denominator	<a href="#">3.11.9</a> Using bar models, find fraction pairs that add together to make 1	<a href="#">3.11.8</a> Find the fraction of given shapes that is shaded and the fraction that is not shaded
W6	<a href="#">3.11.10</a> Solve multistep problems where unit fractions of amounts need to be calculated	<a href="#">3.11.11</a> Solve multistep problems where unit and non-unit fractions of	<a href="#">3.11.11</a> Solve multistep problems where unit and non-unit fractions of	<b>Consolidation of 3.11</b> <a href="#">Link to reasoning and problem-solving activities</a>	<b>Consolidation of 3.11</b> <a href="#">Link to reasoning and problem-solving activities</a>

		amounts need to be calculated	amounts need to be calculated		
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Arithmetic

Fractions

Geometry

Measures & Time

Properties of number and place value

Statistics