Marston Thorold Mathematics Medium Term Plan Y3 / Y4

WEEK		AUTUMN TERM		YEAR 3	YEAR 4
1		**Number** Number and Place Value		- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number - recognise the place value of each digit in a three-digit number (hundreds, tens, ones) - compare and order numbers up to 1000 - identify, represent and estimate numbers using different representations - read and write numbers up to 1000 in numerals and in words - solve number problems and practical problems involving these ideas.	- count in multiples of 6, 7, 9, 25 and 1000 - find 1000 more or less than a given number - count backwards through zero to include negative numbers - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) - order and compare numbers beyond 1000 - identify, represent and estimate numbers using different representations - round any number to the nearest 10, 100 or 1000 - solve number and practical problems that involve all of the above and with increasingly large positive numbers - 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.
2		**Number** Number and Place Value			
3		**Number** Number and Place Value			
4		**Number** Number and Place Value	**Number** Addition and Subtraction	- add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds - add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction - estimate the answer to a calculation and use inverse operations to check answers - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	*Pupils continue to practice mental methods (from Notes & Guidance)* - add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate - estimate and use inverse operations to check answers to a calculation - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
5			**Number** Addition and Subtraction		
6			**Number** Addition and Subtraction		
7			**Measurement**	- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks - estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight - know the number of seconds in a minute and the number of days in each month, year and leap year - compare durations of events [for example to calculate the time taken by particular events or tasks].	- read, write and convert time between analogue and digital 12- and 24-hour clocks - solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
8		**Number** Number and Place Value	**Measurement**	- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks - estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight - know the number of seconds in a minute and the number of days in each month, year and leap year - compare durations of events [for example to calculate the time taken by particular events or tasks].	- read, write and convert time between analogue and digital 12- and 24-hour clocks - solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
9			**Number** Multiplication and Division	- recall and use multiplication and division facts for the 3x multiplication tables - write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental - solve problems, including missing number problems, involving multiplication and division	- recall multiplication and division facts for multiplication tables up to 12 × 12 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers - recognise and use factor pairs and commutativity in mental calculations - solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit,
10			**Number** Multiplication and Division		
11			**Number** Fractions	- recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 - recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators - recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators - compare and order unit fractions, and fractions with the same denominators - solve problems that involve all of the above.	-recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. - 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 - 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 - solve simple measure problems involving fractions
12			**Number** Fractions		

Marston Thorold Mathematics Medium Term Plan Y3 / Y4

13			**Geometry** Properties of Shape	- recognise angles as a property of shape or a description of a turn - identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle	- identify acute and obtuse angles and compare and order angles up to two right angles by size
14			**Geometry** Properties of Shape **Geometry** Position and Direction (Y4 Properties of Shape – (Y3)	- draw 2-D shapes - identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	- identify lines of symmetry in 2-D shapes presented in different orientations - complete a simple symmetric figure with respect to a specific line of symmetry. - describe positions on a 2-D grid as coordinates in the first quadrant - plot specified points and draw sides to complete a given polygon.

Marston Thorold Mathematics Medium Term Plan Y3 / Y4

WEEK		SPRING TERM	YEAR 3	YEAR 4
1		**Number** Addition and Subtraction	- add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds - add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction - estimate the answer to a calculation and use inverse operations to check answers - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	*Pupils continue to practice mental methods (from Notes & Guidance)* - add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate - estimate and use inverse operations to check answers to a calculation - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
2		**Number** Addition and Subtraction		
3		**Statistics**	- interpret and present data using pictograms - solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	- interpret and present discrete data using appropriate pictograms and tables - solve comparison, sum and difference problems using information presented in pictograms and tables
4		**Statistics**	- interpret and present data using bar charts - solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts - solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables
5		**Number** Multiplication and Division	- recall and use multiplication and division facts for the 3x and 4x tables - write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods - solve problems, including missing number problems, involving multiplication and division,	- recall multiplication and division facts for multiplication tables up to 12 × 12 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers - recognise and use factor pairs and commutativity in mental calculations - multiply two-digit by a one-digit number using formal written layout - solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit,
6		**Number** Multiplication and Division		
7		**Measurement**	- measure, compare, add and subtract: lengths (m/cm/mm) - measure the perimeter of simple 2-D shapes	- Convert between different units of measure [for example, kilometre to metre; hour to minute] - measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
8		**Measurement**	- measure, compare, add and subtract: lengths (m/cm/mm) - measure the perimeter of simple 2-D shapes	- Convert between different units of measure [for example, kilometre to metre; hour to minute] - measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
9		**Statistics**	- interpret and present data using pictograms - solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	- interpret and present discrete data using appropriate pictograms and tables - solve comparison, sum and difference problems using information presented in pictograms and tables
10		**Number** Fractions	- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 - recognise and show, using diagrams, equivalent fractions with small denominators - solve problems that involve all of the above.	- recognise and show, using diagrams, families of common equivalent fractions - count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. - recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to 1/4, 1/2, 3/4 - solve simple measure and money problems involving fractions and decimals to two decimal places.
11		**Number** Fractions		
12		**Geometry** Properties of Shape – Y3	- Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	- compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
12		**Geometry** Position and Direction – Y4 Properties of Shape		- describe movements between positions as translations of a given unit to the left/right and up/down

Marston Thorold Mathematics Medium Term Plan Y3 / Y4

WEEK	WEEK BEGINNING	SUMMER TERM		YEAR 3	YEAR 4
1	19.04.2021	Number and Place Value	**Number** Number and Place Value	- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number - recognise the place value of each digit in a three-digit number (hundreds, tens, ones) - compare and order numbers up to 1000 - identify, represent and estimate numbers using different representations - read and write numbers up to 1000 in numerals and in words - solve number problems and practical problems involving these ideas.	- count in multiples of 6, 7, 9, 25 and 1000 - find 1000 more or less than a given number - count backwards through zero to include negative numbers - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) - order and compare numbers beyond 1000 - identify, represent and estimate numbers using different representations - round any number to the nearest 10, 100 or 1000 - solve number and practical problems that involve all of the above and with increasingly large positive numbers - 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.
2	26.04.2021		**Number** Addition and Subtraction	- add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds - add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction - estimate the answer to a calculation and use inverse operations to check answers	- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. *Pupils continue to practice mental methods (from Notes & Guidance)* - add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate - estimate and use inverse operations to check answers to a calculation - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
3	04.05.2021		**Number** Addition and Subtraction		
tep4	10.05.2021		**Measurement**	- add and subtract amounts of money to give change, using both £ and p in practical contexts	- estimate, compare and calculate different measures, including money in pounds and pence
5	17.05.2021		**Measurement**	- measure, compare, add and subtract: lengths (m/cm/mm); and mass (kg/g);	- Convert between different units of measure [for example, kilometre to metre; hour to minute] - find the area of rectilinear shapes by counting squares
6	24.05.2021	**Number** Number and Place Value	**Statistics**	- interpret and present data using tables - solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. - solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
7	[		**Number** Multiplication and Division	- recall and use multiplication and division facts for the 3, 4 and 8x multiplication tables - write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods - solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	- recall multiplication and division facts for multiplication tables up to 12 × 12 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers - recognise and use factor pairs and commutativity in mental calculations - multiply two-digit and three-digit numbers by a one-digit number using formal written layout - 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.
8	[		**Number** Multiplication and Division		
9	[		**Number** Fractions	- add and subtract fractions with the same denominator within one whole [for example, 75 + 71 = 76] - solve problems that involve all of the above.	- add and subtract fractions with the same denominator solve simple measure problems involving fractions
10	[		**Number** Fractions	- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 - recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators - recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators - recognise and show, using diagrams, equivalent fractions with small denominators - add and subtract fractions with the same denominator within one whole [for example, 75 + 71 = 76]	- compare and order unit fractions, and fractions with the same denominators - solve problems that involve all of the above. - round decimals with one decimal place to the nearest whole number - compare numbers with the same number of decimal places up to two decimal places - solve simple measure and money problems involving fractions and decimals to two decimal places.
11	[		**Number** Fractions		

12			**Measurement**	- measure, compare, add and subtract: volume/capacity (l/ml)	- Convert between different units of measure [for example, kilometre to metre; hour to minute] - estimate, compare and calculate different measures, including money in pounds and pence