

John Emmerson Batty Primary School Mathematics Curriculum – Year 3

Year 3	KEY VOCABULARY						
Number System	Number - Addition and Subtraction	Number - Multiplication and Division	Number - Fractions/Decimals/Percentages and Ratio	Algebra	Measurement	Statistics	Geometry
<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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 using number facts, place value, and more complex addition and subtraction. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (revision of 2 and 5 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 (and 3-digit numbers) solve problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ compare and order unit fractions, and fractions with the same denominators solve problems that involve all of the above. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> solve missing number problems using number facts, place value, and more complex addition and subtraction. solve missing number problems involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) measure the perimeter of simple 2-D shapes add and subtract amounts of money to give change, using both £ and p in practical contexts 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]. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and 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. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them 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 horizontal and vertical lines and pairs of perpendicular and parallel lines.
KEY VOCABULARY		Online resources to support learning					
divisor	right angle	Hit the Button (Top Marks) Times Tables Rockstars					
parallel	obtuse						
intersecting	acute						
perpendicular	horizontal						
numerator	vertical						
denominator							

Termly / Weekly Focus (Guide for the Class Teacher) – Year 3

Wk	Term 1a	Wk	Term 1b
1	Number and Place Value	1	Adding - 1s, 10s, 100s, problem Solving
2	Addition and Subtraction - 2 and 3-digit numbers	2	Subtracting - 1s, 10s, 100s, problem Solving
3	Properties of Shapes - Naming 3D, Making 3D models, Classifying/Describing, using cubes	3	Angles - Right Angles, Turning, Giving/Following Directions
4	Multiplication - counting in 2s, 3s, 5s and 10s, 3x table	4	Multiplication/Division - Counting in 4s, 4x table, Doubling to find 4x
5	Fractions - Finding fractions, Adding Fractions, Problem solving	5	Multiplication/Division - Counting in 8s, 8x table, Doubling and doubling to find 8x, Word Problems
6	Measurement - Mass g/kg	6	Measurement - Time - Up to Minute, Timelines, Roman Numerals, 24hr Time
7	Assessments	7	Assessments

Wk	Term 2a	Wk	Term 2b
1	Number and Place Value - 3-digit, Ordering to 1000, Money to 3-Digit	1	Addition - Column Addition, Mental Addition
2	Addition and Subtraction - Measurement - Money	2	Subtraction - Column Subtraction, Mental Subtraction
3	Properties of Shapes including drawing/naming, Matching 2D, Properties of 2D	3	Statistics - Tally Charts, Pictograms, Bar Charts
4	Multiplication/Division - Counting in steps of 2, 4 and 8, division facts for 4x and 8x tables	4	Multiplication/Division - Counting in steps of 50 and 100, Revising Multiplication/Division Facts, Problem solving
5	Fractions and Division, Ordering Fractions, Fractions on Number Lines	5	Fractions - Visual, Subtracting Fractions, Equivalent Fractions, Fraction Wall
6	Measurement - Length - cm, mm, Measuring/Comparing/Adding/Subtracting Lengths Assessments	6	Measurement - Perimeter - Perimeter of Rectangles, Drawing/Calculating Perimeters, Regular Perimeters, 2D Shapes Assessments

Wk	Term 3a	Wk	Term 3b
1	Number and Place Value - Number Lines, Partitioning 3-digit numbers	1	Addition/Subtraction (including Money) - Estimating/Checking Column Addition, Adding/Subtracting Money
2	Addition/Subtraction - Adding/Subtracting Mentally, Column Addition/Subtraction, Word Problems	2	Addition/Subtraction - Estimating/Checking Column Subtraction, Jumping Forwards/Backwards
3	Properties of Shapes - Horizontal/Vertical Lines, Perpendicular/Parallel Lines, 3D shapes	3	Measurement - Time - Minutes, Using a Calendar
4	Assessments - In School End of Year Assessments	4	Multiplication - Expanded Written Method Formal Written Method, Word Problems
5	Multiplication - Multiplication Using Partitioning, Grid Method, Expanded Method, Problem Solving	5	Division - Division Using Partitioning, Expanded Written Method, Method Formal Written Method, Word Problems
6	Fractions - Equivalent, Tenths	6	Assessments
7	Measurement - Volume and Capacity - Fractions of 1 litre, ml, Adding/Subtracting capacities	7	Statistics - Pictograms, Bar Charts (Transition)

Place Value	1. Count from 0 in multiples of 4, 8, 50 and 100. Find 10 or 100 more or less than a given number.
	2. Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).
	3. Compare and order nos up to 1000. Read and write nos up to 1000 in numerals and in words.
	4. Identify, represent and estimate numbers using different representations.
	5. Solve number problems and practical problems involving these ideas.
Add and Sub	6. Add and subtract numbers mentally, including: a 3-digit no and 1s, 10s, 100s.
	7. Add and sub numbers with up to 3 digits, using formal written methods of columnar add and sub.
	8. Estimate the answer to a calculation and use inverse operations to check answers.
	9. Solve Problems, inc missing no Problems, using number facts, place value, and more complex add/sub.
Mult and Div	10. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
	11. Write and calc math statements for \times and \div using the tables they know, including 2-digit numbers times 1-digit numbers, using mental and formal written methods.
	12. Solve Problems and missing number Problems, involving \times and \div , including integer scaling Problems and correspondence Problems in which n objects are connected to m objects.
Fractions	13. 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.
	14. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
	15. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
	16. Recognise and show, using diagrams, equivalent fractions with small denominators.
	17. Add and sub fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$).
	18. Compare and order unit fractions, and fractions with the same denominators.
MEASURE	19. Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
	20. Measure the perimeter of simple 2-D shapes.
	21. Add and subtract amounts of money to give change, using both £ and p in practical contexts.
	22. Tell/write the time from an analogue clock, inc. Roman numerals from I to XII, and 12-hr/24-hr clocks.
	23. Estimate and read time with increasing accuracy to nearest min; record/compare time in secs, mins, hrs. Use vocab such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.
	24. Know the no of seconds in a minute and the number of days in each month, year and leap year.
GEOMETRY	25. Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
	26. Recognise that angles are a property of shape or a description of a turn.
	27. Identify right angles, recognise that 2 right angles make a half-turn, 3 make three quarters of a turn and 4 a complete turn. Identify whether angles are greater than or less than a right angle.
	28. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
STATS	29. Interpret and present data using bar charts, pictograms and tables.
	30. Solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.