Bryn Offa C of E Primary School

Year 3 - Autumn

Teacher Planning & Assessment Tool - Maths

Topic	Curriculum Objective
Reading, writing and ordering two- and three-digit numbers	● To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● To compare and order numbers up to 1000. ● To read and write numbers up to 1000 in numerals and in words.
Counting and estimating	● To count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number. ● To identify, represent and estimate numbers using different representations.
Number facts to 20 and to 100 Addition and Subtraction of 1 and 2-digit numbers	● To add and subtract numbers mentally, including: ● a three-digit number and ones ● a three-digit number and tens ● a three-digit number and hundreds. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and division facts	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.
Measuring using mm, cm and metres	● To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). ● To measure the perimeter of simple 2D shapes.
Recognising, describing and making 2D and 3D shapes	● To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy. ● To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines.
Counting and estimating	● To add and subtract numbers mentally, including: ● a three-digit number and ones ● a three-digit number and tens ● a three-digit number and hundreds. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Addition and subtraction of two- and three-digit numbers, using a number line and columns	● To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. ● To estimate the answer to a calculation and use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and division: doubling, halving and TU × U	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.
Fractions: representing, comparing and ordering unit fractions of shapes and numbers	● To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. ● To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● To compare and order unit fractions, and fractions with the same denominators. ● To solve problems that involve all of the above.
Read and write time to 5 minute intervals	● To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. ● To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight. ● To know the number of seconds in a minute and the number of days in each month, year and leap year. ● To compare durations of events, for example to calculate the time taken by particular events or tasks.
Read, present and interpret pictograms and tables	● To interpret and present data using bar charts, pictograms and tables ● To 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.

Topic	Curriculum Objective
Number, place value and rounding	● To count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number. ● To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● To compare and order numbers up to 1000. ● To identify, represent and estimate numbers using different representations. ● To read and write numbers up to 1000 in numerals and in words. ● To solve number problems and practical problems involving these ideas.
Use partitioning to add and subtract two-digit numbers	● To add and subtract numbers mentally, including: ● a three-digit number and ones ● a three-digit number and tens ● a three-digit number and hundreds. ● To estimate the answer to a calculation and use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and division: multiplying one- digit numbers by multiples of 10	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Multiplication and division: practical and informal written methods	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Measures: adding and subtracting money	● To add and subtract amounts of money to give change, using both £ and p in practical contexts.
Recognising and drawing right angles in 2D shapes	● To recognise angles as a property of shape and associate angles with turning. ● To 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.
Addition and subtraction of two- digit numbers using columns	● To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. ● To estimate the answer to a calculation and use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and division: multiplying by multiples of 10, and dividing with remainders	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Multiplication and division: multiplying and dividing larger numbers	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Measuring using grams and kilograms	● To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
Fractions: representing, comparing and ordering unit and non-unit fractions of shapes and numbers	● To 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. ● To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. ● To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● To recognise and show, using diagrams, equivalent fractions with small denominators. ● To compare and order unit fractions, and fractions with the same denominators. ● To solve problems that involve all of the above.
Read and interpret bar charts, using scales	● To interpret and present data using bar charts, pictograms and tables. ● To 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.

Bryn Offa C of E Primary School

Year 3 - Summer

Teacher Planning & Assessment Tool - Maths

Topic	Curriculum Objective
Read, write and order and round two- and three- digit numbers	● To count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number. ● To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● To compare and order numbers up to 1000. ● To identify, represent and estimate numbers using different representations. ● To read and write numbers up to 1000 in numerals and in words. ● To solve number problems and practical problems involving these ideas.
Multiplication and division problems	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Addition and subtraction of three-digit numbers and 1s, 10s and 100s	● To add and subtract numbers mentally, including: ● a three-digit number and ones ● a three-digit number and tens ● a three-digit number and hundreds. ● To estimate the answer to a calculation and use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Addition and subtraction of two- and three-digit numbers using columns	● To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. ● To estimate the answer to a calculation and use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Shape: identifying horizontal, vertical, and curved lines	● To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy. ● To recognise angles as a property of shape and associate angles with turning. ● To 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. ● To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines.
Measuring using millilitres and litres	● To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
Addition and subtraction of two- and three-digit numbers using and columns	● To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. ● To estimate the answer to a calculation and use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and division problems: written methods	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Short multiplication and division	● To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● To 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. ● To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
Fractions: equivalence, addition and subtraction within 1, finding tenths	● To 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. ● To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● To recognise and show, using diagrams, equivalent fractions with small denominators. ● To add and subtract fractions with the same denominator within one whole (5/7 + 1/7 = 6/7). ● To solve problems that involve all of the above.
Read and write time using 12 and 24 hour	● To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. ● To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight. ● To know the number of seconds in a minute and the number of days in each month, year and leap year. ● To compare durations of events, for example to calculate the time taken by particular events or tasks.
Construct and interpret bar charts using scales	● To interpret and present data using bar charts, pictograms and tables. ● To 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.