

Edenham CofE Primary School Lower KSI Maths Overview

Week	Area of Maths	Year 3	Year 4
1-3	Place Value	<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 	<ul style="list-style-type: none"> count in multiples of 6, 7, 9, 25 and 1000 <p>find 1000 more or less than a given number</p> <ul style="list-style-type: none"> 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.
4-7	<p>Addition</p> <p style="text-align: center;">-</p> <p>Subtraction</p>	<ul style="list-style-type: none"> add numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds add numbers with up to three digits, using formal written methods of columnar addition and subtraction <p>estimate the answer to a calculation and use inverse operations to check answers</p> <ul style="list-style-type: none"> subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds subtract numbers with up to three digits, using formal written methods estimate the answer to a calculation and use inverse operations to check answers 	<ul style="list-style-type: none"> add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate
8	Addition and Subtraction	<ul style="list-style-type: none"> solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	<ul style="list-style-type: none"> solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

			<ul style="list-style-type: none"> estimate and use inverse operations to check answers to a calculation
9-10	Multiplication	<ul style="list-style-type: none"> recall and use multiplication facts for the 3, 4 and 8 multiplication tables write and calculate mathematical statements for multiplication 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, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. 	<ul style="list-style-type: none"> recall multiplication facts for multiplication tables up to 12×12 use place value, known and derived facts to multiply, including: 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 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
11-12	Division	<ul style="list-style-type: none"> recall division facts for the 3, 4 and 8 multiplication tables write and calculate mathematical statements for 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 	<ul style="list-style-type: none"> recall division facts for multiplication tables up to 12×12 use place value, known and derived facts divide mentally

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1-2	Multiplication and division	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.	
3-4	Decimals	<ul style="list-style-type: none"> Pupils connect tenths to place value, decimal measures and to division by 10 Pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately. The decimal recording of money is introduced formally in year 4. 	<ul style="list-style-type: none"> recognise and write decimal equivalents of any number of tenths or hundredths 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 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 decimals to two decimal places. count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
5-6	Fractions	<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 nonunit 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, $7\frac{5}{10} + 7\frac{1}{10} = 7\frac{6}{10}$] compare and order unit fractions, and fractions with the same denominators solve problems that involve all of the above. 	<ul style="list-style-type: none"> recognise and show, using diagrams, families of common equivalent fractions 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 add and subtract fractions with the same denominator recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$
7-8	Length, perimeter and area	<ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm) measure the perimeter of simple 2-D shapes 	<ul style="list-style-type: none"> Convert between different units of measure [for example, kilometre to metre] measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

			<ul style="list-style-type: none"> • find the area of rectilinear shapes by counting squares
9-10	Mass and Capacity	<ul style="list-style-type: none"> • measure, compare, add and subtract mass (kg/g); volume/capacity (l/ml) 	<ul style="list-style-type: none"> • Convert between different units of measure [grams to kilograms, litres to ml]
11-12	Statistics	<ul style="list-style-type: none"> • 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 	<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.

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1-3	4 operations	<ul style="list-style-type: none"> Pupils solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts, (for example, four times as high, eight times as long etc.) and correspondence problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits?; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children). 	<ul style="list-style-type: none"> Pupils solve two-step problems in contexts, choosing the appropriate operation, working with increasingly harder numbers. This should include correspondence questions such as the numbers of choices of a meal on a menu, or three cakes shared equally between 10 children.
4-5	Time	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.
6-7	Geometry	<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. 	<ul style="list-style-type: none"> compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes identify acute and obtuse angles and compare and order angles up to two right angles by size 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 describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon.
8-9	Fractions (re-visited)	<ul style="list-style-type: none"> They begin to understand unit and non-unit fractions as numbers on the number line, and deduce relations between them, such as size and equivalence. They should go beyond the [0, 1] interval, including relating this to measure. 	<ul style="list-style-type: none"> They extend the use of the number line to connect fractions, numbers and measures. Pupils continue to practise adding and subtracting fractions with the same denominator, to become fluent

		<ul style="list-style-type: none"> They continue to recognise fractions in the context of parts of a whole, numbers, measurements, a shape, and unit fractions as a division of a quantity 	<p>through a variety of increasingly complex problems beyond one whole</p> <ul style="list-style-type: none"> They practise counting using simple fractions and decimals, both forwards and backwards.
10	Measurement	<ul style="list-style-type: none"> Solving problems involving different units Recognising the most appropriate unit 	
11-12	Re-visiting previously taught content to consolidate and deepen based on assessed needs	Teacher assessment used to analyse areas that need to be consolidated in preparation for the following year	

Counting				
Monday	Tuesday	Wednesday	Thursday	Friday
Count up and down Multiples of 25 and 50	Count up and down in multiples of 3, 6	Count up and down in multiples of 4, 8	Count up and down in multiples of 9	Multiplication facts
				Summer Term - Fractions