

Mathematics Target Sheet -Year 4

Year 4 Expectations

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Number and Place Value	Counting	count backwards through zero to include negative numbers
	Comparing Numbers	count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less than a given number
Number and Place Value	Identifying, Representing and Estimating Numbers	order and compare numbers beyond 1000 identify, represent and estimate numbers using different representations
	Reading and Writing 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.
Number and Place Value	Understanding Place Value	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
	Rounding	round any number to the nearest 10, 100 or 1000
	Problem Solving	solve number and practical problems that involve all of the above and with increasingly large positive numbers
Number: Addition and	Number bonds	
	Mental Calculations	
	Written Methods	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
	Inverse Operations, Estimating and Checking Answers	estimate and use inverse operations to check answers to a calculation
	Problem Solving	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
Number: Multiplication and Division	Multiplication and Division Facts	recall multiplication and division facts for multiplication tables up to 12×12
	Mental Calculation	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
	Written Calculation	multiply two-digit and three-digit numbers by a one-digit number using formal written layout
	Properties of Numbers	<i>recognise and use factor pairs and commutativity in mental calculations</i>
	Order of Operations	<i>estimate the answer to a calculation and use inverse operations to check answers</i>
	Inverse Operations, Estimating and Checking Results	
	Problem Solving	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
Number:	Counting in Fractional Steps	count up and down in hundredths
	Recognising Fractions	recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten

	<p>Comparing Fractions</p> <p>Comparing Decimals</p> <p>Rounding including Decimals</p> <p>Equivalence (Including Fractions, Decimals and Percentages)</p>	<p>compare numbers with the same number of decimal places up to two decimal places</p> <p>round decimals with one decimal place to the nearest whole number</p> <p>recognise and show, using diagrams, families of common equivalent fractions</p> <p>recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>recognise and write decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$</p>
	<p>Addition and Subtraction of Fractions</p> <p>Multiplication and Division of Fractions</p>	<p>add and subtract fractions with the same denominator</p>
	<p>Multiplication and Division of Decimals</p> <p>Problem Solving</p>	<p>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</p> <p>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</p> <p>solve simple measure and money problems involving fractions and decimals to two decimal places.</p>
	<p>Ratio and Proportion</p>	
Measurement	<p>Comparing and Estimating</p>	<p>estimate, compare and calculate different measures, including money in pounds and pence</p>
	<p>Measuring and Calculating</p>	<p>estimate, compare and calculate different measures, including money in pounds and pence</p> <p>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>find the area of rectilinear shapes by counting squares</p>
	<p>Telling the Time</p>	<p>read, write and convert time between analogue and digital 12 and 24-hour clocks</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>
	<p>Converting</p>	<p>convert between different units of measure (e.g. kilometre to metre; hour to minute)</p>
Geometry: Properties of	<p>Identifying Shapes and their Properties</p>	<p>identify lines of symmetry in 2-D shapes presented in different orientations</p>
	<p>Drawing and Constructing</p>	<p>complete a simple symmetric figure with respect to a specific line of symmetry</p>
	<p>Comparing and Classifying</p>	<p>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p>
	<p>Angles</p>	<p>identify acute and obtuse angles and compare and order angles up to two right angles by size</p>
	<p>Position, Direction and Movement</p> <p>Pattern</p>	<p>describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>describe movements between positions as translations of a given unit to the left/right and up/down</p> <p>plot specified points and draw sides to complete a given polygon</p>
Statistics	<p>Interpreting, Constructing and Presenting Data</p>	<p>interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</p>
	<p>Solving Problems</p>	<p>solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p>

Algebra

Equations

Formulae

Sequences

Perimeter can be expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit.