Maths APP Levels 1 to 5 all on one sheet. PrimaryTools.co.uk

Algebra	Numbers and the Number System	Calculating	Using and Applying Mathematics	Shape, Space and Measure	Handling Data
recognise sequences of numbers, including odd and even numbers	count up to 10 objects	understand addition as finding the total of two or more sets of objects	use mathematics as an integral part of classroom activities	use everyday language to describe properties of 2-D and 3-D shapes	sort and classify objects
recognise a wider range of sequences	read, write numbers to 10	understand subtraction as 'taking away' objects from a set and finding how many are left	represent their work with objects or pictures	use everyday language to describe positions of 2-D and 3-D shapes	represent their work
begin to understand the role of '=' (the 'equals' sign)	order numbers to 10	add and subtract numbers of objects to 10	discuss their work	measure and order objects using direct comparison	demonstrate the criterion they have used
begin to use simple formulae expressed in words	begin to use the fraction, one-half	begin to know some addition facts	draw simple conclusions from their work	order events	sort objects and classify them using more than one criterion
use and interpret coordinates in the first quadrant	count sets of objects reliably	solve addition/subtraction problems involving up to 10 objects	recognise and use a simple pattern or relationship	use mathematical names for common 3-D and 2-D shapes	understand vocabulary relating to handling data
construct, express in symbolic form, and use simple formulae involving one or two operations	begin to understand the place value of each digit; use this to order numbers up to 100	record their work	select the mathematics they use in some classroom activities	describe their properties, including numbers of sides and corners	collect and sort data to test a simple hypothesis
use and interpret coordinates in all four quadrants	begin to use halves and quarters and relate the concept of half of a small quantity to the concept of half of a shape	use the knowledge that subtraction is the inverse of addition and understand halving as a way of 'undoing' doubling and vice versa	discuss their work using mathematical language	describe the position of objects	record results in simple lists, tables, pictograms and block graphs
	understand place value in numbers to 1000	use mental recall of addition and subtraction facts to 10	predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions	distinguish between straight and turning movements, recognise right angles in turns and understand angle as a measurement of turn	communicate their findings, using the simple lists, tables, pictograms and block graphs they have recorded
	use place value to make approximations	use mental calculation strategies to solve number problems including those involving money and measures	explain why an answer is correct	begin to use a wider range of measures including to use everyday non-standard and standard units to measure length and mass	gather information
	recognise negative numbers in contexts such as temperature	record their work in writing	select the mathematics they use in a wider range of classroom activities	begin to understand that numbers can be used not only to count discrete objects but also to describe continuous measures	construct bar charts and pictograms, where the symbol represents a group of units
	use simple fractions that are several parts of a whole and recognise when two simple fractions are equivalent	choose the appropriate operation when solving addition and subtraction problems	try different approaches and find ways of overcoming difficulties that arise when they are solving problems	classify 3-D and 2-D shapes in various ways using mathematical properties such as reflective symmetry for 2-D shapes	use Venn and Carroll diagrams to record their sorting and classifying of information
	begin to use decimal notation in contexts such as money	derive associated division facts from known multiplication facts	begin to organise their work and check results	begin to recognise nets of familiar 3-D shapes, e.g. cube, cuboid, triangular prism, square-based pyramid	extract and interpret information presented in simple tables, lists, bar charts and pictograms
	recognise and describe number patterns	add and subtract two-digit numbers mentally	use and interpret mathematical symbols and diagrams	recognise shapes in different orientations and reflect shapes, presented on a grid, in a vertical or horizontal mirror line	collect and record discrete data
	recognise and describe number relationships including multiple, factor and square	add and subtract three digit numbers using written method	understand a general statement by finding particular examples that match it	describe position and movement	group data, where appropriate, in equal class intervals
	use place value to multiply and divide whole numbers by 10 or 100	multiply and divide two digit numbers by 2, 3, 4 or 5 as well as 10 with whole number answers and remainders	review their work and reasoning	use a wider range of measures including non-standard units and standard metric units of length, capacity and mass in a range of contexts	continue to use Venn and Carroll diagrams to record their sorting and classifying of information
	recognise approximate proportions of a whole and use simple fractions and percentages to describe these	use mental recall of addition and subtraction facts to 20 in solving problems involving larger numbers	develop own strategies for solving problems	use standard units of time	construct and interpret frequency diagrams and simple line graphs
	order decimals to three decimal places	solve whole number problems including those involving multiplication or division that may give rise to remainders	use their own strategies within mathematics and in applying mathematics to practical contexts	use the properties of 2-D and 3-D shapes	understand and use the mode and range to describe sets of data
	begin to understand simple ratio	use a range of mental methods of computation with all operations	begin to organise their work and check results	make 3-D models by linking given faces or edges and draw common 2-D shapes in different orientations on grids	ask questions, plan how to answer them and collect the data required
	use understanding of place value to multiply and divide whole numbers and decimals by 10, 100 and 1000 and explain the effect	recall multiplication facts up to 10 × 10 and quickly derive corresponding division facts	present information and results in a clear and organised way	reflect simple shapes in a mirror line, translate shapes horizontally or vertically and begin to rotate a simple shape or object about its centre or a vertex	in probability, select methods based on equally likely outcomes and experimental evidence, as appropriate
	round decimals to the nearest decimal place and order negative numbers in context	use efficient written methods of addition and subtraction and of short multiplication and division	search for a solution by trying out ideas of their own	choose and use appropriate units and instruments	understand and use the probability scale from 0 to 1
	recognise and use number patterns and relationships	multiply a simple decimal by a single digit	identify and obtain necessary information to carry through a task and solve mathematical problems	interpret, with appropriate accuracy, numbers on a range of measuring instruments	understand and use the mean of discrete data and compare two simple distributions, using the range and one of mode, median or mean
	use equivalence between fractions and order fractions and decimals	solve problems with or without a calculator	check results, considering whether these are reasonable	find perimeters of simple shapes and find areas by counting squares	understand that different outcomes may result from repeating an experiment
	reduce a fraction to its simplest form by cancelling common factors	check the reasonableness of results with reference to the context or size of numbers	solve word problems and investigations from a range of contexts	use a wider range of properties of 2-D and 3-D shapes and identify all the symmetries of 2-D shapes	interpret graphs and diagrams, including pie charts, and draw conclusions
	understand simple ratio	use known facts, place value, knowledge of operations and brackets to calculate including using all four operations with decimals to two places	show understanding of situations by describing them mathematically using symbols, words and diagrams	use language associated with angle and know and use the angle sum of a triangle and that of angles at a point	create and interpret line graphs where the intermediate values have meaning
		use a calculator where appropriate to calculate fractions/percentages of quantities/measurements	draw simple conclusions of their own and give an explanation of their reasoning	reason about position and movement and transform shapes	
		understand and use an appropriate non-calculator method for solving problems that involve multiplying and dividing any three digit number by any two-digit number		measure and draw angles to the nearest degree, when constructing models and drawing or using shapes	
		solve simple problems involving ordering, adding, subtracting negative numbers in context		read and interpret scales on a range of measuring instruments, explaining what each labelled division represents	
		solve simple problems involving ratio and direct proportion		solve problems involving the conversion of units and make sensible estimates of a range of measures in relation to everyday situations	
		apply inverse operations and approximate to check answers to problems are of the correct magnitude		understand and use the formula for the area of a rectangle and distinguish area from perimeter	

Key:
Level 1
Level 2
Level 3
Level 4
Level 5