



Year 3 Mathematics Progressive Programme of study

Number **Measure** **Geometry** **Statistics** *Ready To Progress Criteria*

Year 3 Autumn	<u>Number: Place Value</u> - 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) - Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10. - 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. - I know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10. - Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).	<u>Number: Addition and subtraction</u> - add and subtract numbers mentally, including: - 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, including missing number problems, using number facts, place value, and more complex addition and subtraction. - Secure fluency in addition and subtraction facts that bridge 10, through continued practice. - Calculate compliments to 100. - Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.	<u>Measurement: Money</u> add and subtract amounts of money to give change, using both £ and p in practical contexts	<u>Measurement: Length and perimeter</u> - measure, compare, add and subtract: lengths (m/cm/mm) - measure the perimeter of simple 2-D shapes	Consolidation & Assessment
Year 3 Spring	<u>Number: Multiplication and Division</u> - recall and use multiplication and division facts for the 10, 5, 2, 3, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. - Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. - 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 - 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. - Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	<u>Number: Fractions</u> - 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, $5/7 + 1/7 = 6/7$] - compare and order unit fractions, and fractions with the same denominators - solve problems that involve all of the above. - Find unit fractions of quantities using known division facts (multiplication tables fluency).	<u>Measurement: Mass and Capacity</u> - measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml) - Non – Statutory: Pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm). - The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication.)		Consolidation & Assessment



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Number

Measure

Geometry

Statistics

Ready To Progress Criteria

Year 3 Summ er	<u>Statistics</u>	<u>Measurement: Time</u>	<u>Geometry: Properties of Shape</u>	Consolidation & Assessment
	- 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.	- 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].	- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them <i>recognise angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.</i> - 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. <i>Draw polygons by joining marked points, and identify parallel and perpendicular sides.</i>	