



MATHS COMPOSITE KNOWLEDGE COVERAGE

KEY STAGE 3

Intent:

At Applebee Wood School, we aim to instil in our students a fundamental understanding of how Mathematics links to the wider world. Mathematics equips students with a uniquely powerful set of tools to understand and change the world in which they live. Learning basic principles of maths is essential to functioning independently within the world. In everyday life we are faced with numbers, from getting the right bus, counting money in a shop to employment. Students understand and make connections in different areas of maths so they can apply skills to solve problems in a range of contexts.

At Applebee Wood School, Maths is delivered using a spiral curriculum model to develop Mastery through revisiting learning to ensure learners have a deep understanding of concepts and their functional uses.

		WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	TAUGHT THROUGHOUT THE YEAR
Autumn	1	NUMBER – PLACE VALUE - 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			NUMBER – ADDITION - 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... - estimate the answer to a calculation and use inverse operations to check answers			MEASUREMENT – TIME - tell...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...use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon
	2	NUMBER – SUBTRACTION ...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 of columnar...subtraction - estimate the answer to a calculation and use inverse operations to check answers			NUMBER – MULTIPLICATION - 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			

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Spring	1	NUMBER – DIVISION - recall and use...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			NUMBER – PLACE VALUE - 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			- 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].
	2	NUMBER – FRACTIONS - 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				NUMBER – SOLVING PROBLEMS - solve number problems and practical problems involving these ideas. - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction - 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. - solve problems that involve fractions.		

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Summer	1	MEASUREMENT – MONEY using both £ and p in practical contexts	STATISTICS - 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			MEASUREMENT – TIME - 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 events or tasks].		
	2	GEOMETRY – PROPERTIES OF SHAPES draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them			MEASUREMENT – LENGTH, PERIMETER, MASS & CAPACITY measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)			

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	- 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.			measure the perimeter of simple 2-D shapes			