

Year 7 Scheme of learning 2021-2022 – Term 1

Stretch key learning in italics

Topic	Key learning	Hegarty clips	☹	😊	☺
Types of number	Identify factors and multiples.	27,33			
	Identify prime numbers less than 100	28			
	Identify square, cube and triangle numbers and square and cube roots.	99,101			
	Recognise and use the lowest common multiples and highest common factors.	31,32,34,36			
	<i>Write numbers as products of their prime factors.</i>	29,30			
Negative numbers	Order negative numbers and use the symbols =, ≠, <, >, ≤, ≥ appropriately	44			
	Solve problems involving negative numbers.				
	Add, subtract, multiply and divide with negative numbers.	37,39,40,41,42,43,44			
Approximation	Round numbers and measures to any number of decimal places	56			
	Round numbers and measures to any number of significant figures	130			
	Estimate calculations by rounding to one significant figure	132			
	<i>Identify error limits using inequality notation $a \leq x < b$</i>	774, 775, 776, 777			
October half term					
Decimals & percentages	Add, subtract, multiply and divide with decimals	47,48,50			
	Change between decimals and percentages	55,83,149			
	Find a percentage of an amount (with and without a calculator)	86			
	Increase and decrease an amount by a percentage (with and without a calc)	88,90,91,92			
	<i>Use multipliers to increase and decrease by a percentage</i>	84 - 91			
Time	Read the time from both analogue and digital clocks	n/a			
	Convert between 12 hour and 24 hour clock.	709,710,711			
	Calculate duration of events in minutes and hours	709,710,711			
	Solve problems involving time	36			
	<i>Plan a journey using timetables</i>	36			
Measures	Covert between metric units of length, weight and capacity	692,693,698,695			
	Convert between units of time and money	709,710,			
	Measure lengths accurately and read various scales	864			
Perimeter	Find the perimeter of a shape by counting or measuring.	548			
	Find the perimeter of a shape where the lengths of edges are given.	66,549			
	Find the perimeter of a shape where there are some unknown sides	550,551			
	<i>Find a length when given a perimeter</i>	550			
Christmas holidays					

Year 7 Scheme of learning 2021-2022 - Term 2

Stretch key learning in italics

Topic	Key learning	Hegarty clips	☹	😊	☺
Algebraic thinking	BIDMAS	24,44,120,150			
	Form expressions from situations described in words or pictures, including area and perimeter of simple shapes	151,152,188			
	Simplify expressions by collecting like terms	153,156,157			
	Multiply and divide algebraic terms	158, 159			
	Substitute numerical values into, problems given in words, formulae and expressions	178			
	Multiply by single bracket	160			
	<i>Factorise an expression</i>	168,169			
	Expand and simplify single brackets	153,156,160,161,188			
Solving equations	Solve one step equations	178,179			
	Solve simple worded equations	151,152,188			
	Solve multi step equations including those with brackets	179,181,182,183,557			
	Construct and solve linear equations	486, 552, 560			
February half term					
Fractions	Represent fractions using bar models and number lines	58,64			
	Calculate with fractions including add, subtract, multiply and divide	60,63,64,65,66			
	Recognise and find equivalent fractions including simplifying fractions	59,60,61			
	Compare and order fractions using the symbols =, ≠, <, ≤, >, ≥	60,73			
	Convert between improper fractions and mixed numbers	63,64			
	Calculate with mixed numbers	63,64			
	Convert between fractions and decimals	73,74,			
	Calculate fractions of amounts	77			
	<i>Calculate reverse fractions of amounts</i>	79			
Angles	Estimate and measure angles	461			
	Draw acute, obtuse and reflex angles to the nearest degree	461			
	Use the properties of angles at a point, angles at a point on a straight line, vertically opposite angles	477,478,479,812,813,814			
	Find missing angles in triangles and quadrilaterals	485,486,487,560			
	Find missing angles in parallel lines using corresponding angles, alternate angles and co-interior angles	481,483			
	<i>Give reasons for all answers that have used angle properties</i>	815			
	<i>Solve angle problems involving algebra</i>	565			
Easter holidays					

Year 7 Scheme of learning 2021-2022 - Term 3

Stretch key learning in italics

Topic	Key learning	Hegarty clips	☹	😊	☺
Ratio and proportion	Recognise equivalent ratios	328			
	Write ratios to their simplest form	329,331			
	Solve problems that involve dividing in a given ratio in two or more parts	329,330,332,333,334			
	Compare and switch between ratios and fractions	330			
	Solve problems involving direct proportion, eg. could include recipe problems, best buy problems and exchange rates	330, 334, 339, 340, 707, 708, 739-742, 763-772			
Area of Polygons	Use the corrects units for area	691,692,693, 700			
	Find the area of squares, rectangles and parallelograms	159,554,556			
	Find the area of triangles	557,558			
	Find the area of trapeziums	559			
	<i>Find the area of compound shapes involving all the above</i>	555			
	<i>Convert between cm² and m²</i>	702,703			
May half term					
Percentages and fractions	Change between fractions and percentages	75,76			
	Write fractions in their simplest forms	59,61			
	Calculate fractions of amounts	77			
	Increase and decrease by a percentage or a fraction	78			
	Write one quantity as a fraction of another	62			
	Write a quantity as a percentage of another	91,92			
	Calculate with proper fractions, improper fractions and mixed numbers (addition, subtraction, multiplication and division)	63,64,65,66,67,68,69,70			
	Compare two quantities using percentages	84,85,86,87			
	<i>Use the formula for percentage change; percentage change = actual change ÷ original amount</i>	97			
	<i>Calculate reverse percentage problems and reverse fraction problems</i>	96			
	<i>Add, Subtract, Multiply and divide basic algebraic fractions</i>	172,187			
Shape	Recognise and name polygons	829			
	Identify parallel and perpendicular lines in shapes	668,			
	Identify and understand reflectional and rotational symmetry	639,640,641,828			
	Identify 3D shapes	829			
	Describe properties of 3D shapes	830,831			
	Understand the properties of a prism	570,571			
	Identify simple nets				
Summer holidays					