

KS3 Mathematics Curriculum Coverage: 2023 – 2024



Year 7 Summer Term

Sequenced	Block 11: Geometric Notation	Block 12: Developing Geometric Reasoning	Block 13: Developing Number Sense	Block 14: Sets & Probability	Block 15: Prime Numbers & Proof
Key Knowledge	<p>To know:</p> <ul style="list-style-type: none"> the names and properties of 2d shapes identify angles, shapes and line segments using three letter notation know how north, east, south and west relate to parts of turns Identify parallel lines from notation know different types of angles (acute, obtuse, reflex, right angle) 	<p>To know:</p> <ul style="list-style-type: none"> angles on a straight line sum to 180 vertically opposite angles are equal angles around a point sum to 360 angles in a triangle sum to 180. the relationship between alternate and corresponding angles on parallel lines (H) 	<p>To know:</p> <ul style="list-style-type: none"> know place value for integers and decimals. know how to perform mathematical operations to integers, decimals and fractions (from previous units). round numbers to decimal places or significant figures. 	<p>To know:</p> <ul style="list-style-type: none"> probability vocabulary impossible, unlikely, even, likely and certain probabilities lie between 0 and 1 on a scale probabilities are given as fractions, decimals or percentages sum of probabilities for all possible outcomes is equal to 1 	<p>To know:</p> <ul style="list-style-type: none"> what multiples and factors are that a prime number has exactly 2 factors 2 is the only even prime number the prime numbers between 0-30 a square number is the result when a number is multiplied by itself the first 10 square numbers what a triangular number is what LCM and HCF are that product means multiply understand the term product of primes
Key Skills	<p>To be able to:</p> <ul style="list-style-type: none"> draw and measure line segments using rulers draw and measure angles using protractors interpret scale drawings describe, sketch and draw using conventional terms and notations; points, lines, parallel lines, perpendicular lines, right-angles, regular polygons and other polygons that are reflectively and rotationally symmetric construct and interpret pie charts. construct triangles 	<p>To be able to:</p> <ul style="list-style-type: none"> calculate missing angles around a point calculate missing angles on a straight line. use multiple angle rules to solve complex problems. solve problems by finding missing lengths given the area of the above shapes use parallel line rules to solve problems (H) use the sum of angles in a triangle and use it to deduce the angles in any polygon (H) obtain simple geometric proof (H) 	<p>To be able to:</p> <ul style="list-style-type: none"> use mental strategies for addition and subtraction use mental strategies for multiplication and division use number facts to derive answers estimate solutions using rounding. begin to reason deductively in number and algebra. choosing the best/most efficient calculation strategy 	<p>To be able to:</p> <ul style="list-style-type: none"> Use the probability scale and associated vocabulary Read and create sample spaces Find probabilities of single events Calculate the probability of an event not happening 	<p>To be able to:</p> <ul style="list-style-type: none"> find and use multiples and factors identify and list prime numbers identify and list square and triangular numbers find LCM of 2 numbers find HCF of 2 numbers write a number as a product of its prime factors
	Tier 2 and 3 key vocabulary	Tier 2 and 3 key vocabulary	Tier 2 and 3 key vocabulary	Tier 2 and 3 key vocabulary	Tier 2 and 3 key vocabulary
Subject specific	line, line segment, geometric figure, notation, polygon, length, height, width, figure, tum. degrees, angles, rotation, acute, obtuse, reflex, right-angle exterior, interior, protractor, sum, measure, construct, parallel, perpendicular, intersect, equilateral, isosceles, scalene, square, rectangle, kite, rhombus, parallelogram, trapezium, polygon, edges, vertices, decagon, pair of compasses, vertex, side, diagonals, proportion, frequency, fraction, total, comparison, sector		compensation, associative, commutative, factors, partition, multiple, numerator, denominator, factor, equivalent, calculation, multiple, rounding, significant figures, estimate, overestimate, underestimate, product, quotient, equation, expression, equal, interpret	impossible, likely, even, unlikely, certain, random, bias, event, sample space, possibilities event, outcomes, element, set, random, simplify, equivalent, equally likely, scale, impossible, random, fair ,whole	multiple, factor, remainder, factorise, prime, odd, even, square, triangular, product, conjecture, counter example