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| **Algebra 1 Expressions:** Understand algebraic notation, forming expressions, simplifying by collecting like terms, expanding single brackets, factorising expressions by removing single term common factors, simple index notation. Know and use index laws for multiplication and division of integer powers, add simple algebraic fractions, expand 2 linear expressions. **Algebra 2 Co-ordinates:** Understand how co-ordinates work, plot and identify co-ordinates in all 4 quadrants, Draw shapes with given coordinates or find missing coordinates of a shape by considering properties of different shapes, find a midpoint of two coordinates on a line A and B given the coordinates of A and B. Find either A or B having been given the midpoint and either A or B. | **Algebra 1** A4, A6, A7a,b, A8, A9, A18**Algebra 2** A1a,b, |
| **Geometry 1 Area and Perimeter:** Calculate area and perimeter of rectangles, triangles, parallelograms, trapeziums and compounds shapes. Find the area and circumference of circles and parts of circles. Calculate the surface area and volume of shapes made from cubes and cuboids, calculate the surface area of nets made up of rectangles and triangles. **Geometry 2 Units of Measure and Scales:** Identify suitable metric units for weight, distance and capacity, interpret scales and compare readings, convert between units of measurement (including using decimals), convert between area or volume measures, use and interpret maps and scale drawings to find lengths on a map or real life. Construct scale drawings, use speed, distance, time to find unknown values. | **Geometry 1**G2, G8a,b, G9**,** G20a,b,c,d, G22a,b, G24,G21a,b, G25a,b **Geometry 2**R2, N7a,b,c, N8, G15,  |
| **Probability:** Describe probability using key vocabulary, understand that the probability scale is 0-1 and probability cannot be more than 1, find basic probability of equally likely outcomes, list all possible outcomes of a single or two successive events, know that P(a) = 1 – P(a), know that probabilities of mutually exclusive outcomes sum to 1, understand the difference between experimental and theoretical probabilities, recognise that more trials give more reliability, use language of probability understanding notation like P(A), P(A’), P(A U B), complete and interpret Venn diagrams.  | **Probability** P1, P2a,b, P3, P4, P5, P6,  |
| **Number 1 Written Calculation Methods:**Mental calculations (using x, ÷, + and -), use written methods to add, subtract, multiply and divide given values including decimals, use function keys on a calculator to solve harder problems, understand and apply the rules of BIDMAS. Understand the effects of multiplying and dividing by numbers between 0 and 1, recognise and use reciprocals, know that any number multiplied by its reciprocal is 1 and that zero has no reciprocal. **Number 2 Decimals and Place Value:**Use decimal notation and place value, order values (integer or decimal) on a number line, write numbers in words and from words (including decimals), multiply and divide by powers of 10 and explain the effect, round positive numbers to any power of 10, round decimals to the nearest whole number or a given decimal place, make estimations and approximations to solutions using rounding. Round to any given number of significant figures and use this to approximate answers to problems, identify upper and lower bounds of numbers. | **Number 1**N2b, N3,a,b, N4a,b, N13a,b, N14a,b, N15a,b, N16, N19a,b, N20, N25, N28a,b, N29a,b, N40a,b, N44**Number 2**N10, N11, N17a,b, N18, N27a,b, N38, N43a,b |

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