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| **Algebra 1 Expressions:** Forming expressions, simplifying by collecting like terms, expanding single or double brackets, factorising expressions by removing common factors, use index notation, know and use index laws for multiplication and division of integer powers, add and simplify simple algebraic fractions, expand 2 linear expressions, difference of two squares. Factorise quadratics.**Algebra 2 Co-ordinates:** 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** A6, A7a, A7b, A8, A9, A18**Algebra 2** A1a, A1b |
| **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, calculate the volume and surface area of prisms and cylinders. Solve problems involving the volumes and surface areas of pyramids, cones and spheres.**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**G20a, G20b, G20c, G20D, G22a, G22b, G21a, G21b, G25a, G25b, G32, G33**Geometry 2**G15, R6 |
| **Probability:** 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, complete frequency trees and use them to find probabilities, complete tree diagrams to find probabilities for two or more events.  | **Probability** P1, P2a, P2b, P6, P7 |
| **Number 1 Written Calculation Methods:**Complete mental calculations using multiplication, division, addition and subtraction, use written methods to add, subtract, multiply and divide given values including decimals, use a calculators function keys 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:**Write numbers in words and from words (including decimals), multiply and divide integers and decimals 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, 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**N20, N40a, N40b, N44**Number 2**N25, N27a, N27b, N38 |

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