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| **YEAR 8 CURRICULUM MEDIUM TERM PLAN - MATHS** |  | red rose badgepng |
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| **TOPIC** | **KEY LEARNING** | **ASSESSMENT** |
| HT 1: Expressions  HT 1: Angles | Collecting like terms. Multiplying variables using index notation and laws of indices. Simplify algebraic fractions. Simplify expressions. Write expressions & use the order of operations. Expanding brackets & factorising.  Use angle notation. Find angles on a straight line and at a point. Find angles in-between parallel lines. Recognise and find missing angles in triangles. Find missing angles in quadrilaterals. Reason geometrically to problem solve. | Assessment on:  Expressions  Angles |
| HT 2: Formulae | Write a formula to describe a relationship. Use and substitute numbers into formulae. Rearranging formulae in 1 step  (including squares and roots). Rearranging formulae in 2 steps. | Assessment on:  Formulae |
| HT 3: Area Volume & 3D  HT3: Forming & Solving Equations | Review to find areas of triangles, parallelograms and trapezia. Write algebraic expressions for the area of shapes. Find areas of circles, semi circles and quarter circles and compound shapes. Find area of shaded regions. Write expressions for the area of compound shapes. Know properties of 3d shapes and find surface area of cuboids. Find volume of cuboids, prisms and cylinders.  Review to solve 1 step equations. Solve 2 step equations. Solve multi step equations.  Solve equations where the variable appears on both sides of the equals sign | Assessment on:  Area Volume & 3D  Forming & Solving Equations |
| HT4: Number Theory & Sequences | Recognise factors. Identify primes and composite numbers. Find product of prime factors. Find HCF. Recognise multiples, factors, squares, cubes and primes. Find LCM. Odds evens and multiples in Algebra. Finding term to term rules for sequences for arithmetic, geometric and Fibonacci style sequences. Finding Nth term rule for sequences. Determine if a number is part of a sequence. | Assessment on:  Number Theory & Sequences |
| HT 5: Functions, Coordinates & Graphs | Recognise an algebraic function. Plot coordinates & solve geometric problems involving coordinates.  Plot linear graphs. Plot non-linear graphs. Read graphs. Use graphs to solve simultaneous equations. | Assessment on:  Functions, Coordinates  & Graphs |
| HT6: Introduction to Statistics | Collect data and understand bias in sampling methods. Record data and know different data types. Draw and interpret pictograms, bar charts, pie charts, scatter diagrams. Recognise misleading graphs. Calculate mean, median, mode and range | Assessment on:  Introduction to Statistics |