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| **YEAR 9 CURRICULUM MEDIUM TERM PLAN - MATHS** |  | red rose badgepng |
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| **TOPIC** | **KEY LEARNING** | **ASSESSMENT** |
| HT 1: Non Calculator Fractions Decimals & Percentages  HT 1: Linear Graphs & Gradient | FDP conversions. Using all 4 operations with fractions and mixed numbers. Identify reciprocals. Multiply decimals. Find fractions and percentage of an amount. Find percentage change. Problem solve with FDP. Solve reverse fraction and percentage problems.  Plot graphs of linear functions with positive and negative gradients. Find x and y intercepts of an equation. Calculate gradients of a line of line segment. Y=mx+c. Interpret gradient and intercept of a straight line in real life contexts. | Assessment on:  Non Calculator Fractions Decimals & Percentages  Linear Graphs & Gradient |
| HT 2: Transformations | Translate shapes by given vectors. Reflect shape in horizontal, vertical and diagonal reflection lines. Rotate shapes about a given point. Enlarge shapes by positive, fractional and negative scale factors. Describe transformations. Combine transformations. Recognise invariant points. | Assessment on:  Transformations |
| HT 3: Non Calculator Ratio and Proportion  HT3: Angles & Similarity | Use ratio notation. Simplify ratio. Use equivalent ratios. Write ratio in the form 1:n or n:1. Convert between ratios fractions and percentages. Share in a given ratio. Use direct proportion and inverse proportion. Express ratio and proportion algebraically.  Basic angle review. Recognise & name polygons. Interior and exterior angles in polygons Identify similar shapes and use similarity to find missing information in shapes. | Assessment on:  Non Calculator Ratio and Proportion  Angles & Similarity |
| HT4: Pythagoras & Trigonometry | Finding missing lengths on right angled triangles using Pythagoras’ theorem. Using Trigonometrical ratios Sin, Cos, Tan to find missing side lengths and missing angles in right angled triangles. | Assessment on:  Pythagoras & Trigonometry |
| HT 5: Probability  HT 5: Maps & Constructions | Describe probability on a scale. Recognise mutually exclusive outcomes. Use sample space diagrams and systematic lists for outcomes of an event. Work with probability for dependent and independent events. Experimental probability. Using two way table & Venn diagrams to sort and analyse data.  Measure bearings and use map scales. Calculate bearings using angle facts. Know how to construct Loci. Construct Triangles accurately using a protractor. Identify congruent triangles. Draw plans and elevations for 3d shapes. Identify a shape from plans and elevations. | Assessment on:  Probability  Maps & Constructions |
| HT6: Percentages (Calculator methods)  Or  Calculations | Using Decimal multipliers. Calculate percentage increase and decrease. Calculate percentage change. Calculate profit & loss. Work out reverse percentages. Successive Percentage change including compound interest.  Find Fractions of an amount. Find Percentage of an amount. Calculate percentage change. Solve mixed proportion problems including ratio. Use correct order of operations and use mental maths strategies. | Assessment on:  Percentages (Calculator methods)  Or  Calculations |