|  |  |  |
| --- | --- | --- |
| **YEAR 11 CURRICULUM MEDIUM TERM PLAN - MATHS (F) Yr 11 Sept 24** |  | red rose badgepng |
|  |  |  |
| **TOPIC** | **KEY LEARNING** | **ASSESSMENT** |
| HT1: Transformations  HT1:Ratio&Proportion  HT1: Right Angled Triangles | Describing and drawing translations, reflections, rotations on coordinates grids. Enlargement by a scale factor and using centre of enlargement. Identify and describe scale factors and centres of enlargements. Combining transformations  Ratio notation. Writing ratio in simplest form. Use ratios involving decimals including for shapes and enlargements. Use ratios to convert between units. Share in a given ratio in 2 and 3 parts. Bar modelling with ratio. Compare and write ratio in form 1:n or n:1. Using proportion. Best value for money. Direct Proportion on graphs. Direct & inverse proportion.  Pythagoras ‘ theorem finding hypotenuse. Pythagoras ‘ theorem finding shorter sides. Trigonometry ( finding lengths and angles. | Assessment on  Ratio & Proportion  Right Angled Triangles |
| HT2: Probability  HT2: Multiplicative Reasoning | Calculating probability of events. Probability of two events. Experimental probability. Venn diagrams. Tree diagrams.  Dependent and independent events and tree diagrams  Percentage change. Repeated percentage change. Growth and decay. Compound interest. Compound measures. Distance, speed and time. Kinematics formulae for moving objects. Direct proportion and Inverse proportion | Assessment on  Mock Exams |
| HT3: Constructions Loci & Bearings  HT3: Quadratic Equations & Graphs | 3d solids. Plans and elevations. Planes of symmetry. Constructing and identifying triangles from unique descriptions. Scale drawings and maps. Using scales. Draw angles and 2d shapes with ruler protractor and compasses. Draw nets accurately. Constructions and bisections. Loci. Regions bounded by Loci. Bearings  Expanding double brackets. Plotting quadratic graphs. Using quadratic graphs. Factorising quadratic expressions.  Solving quadratic equations algebraically. | Assessment on  Mock Exams  Practice Past Papers |
| HT4: Perimeter, Area and Volume 2  HT4: Fractions, Indices & Standard form | Finding circumferences. Calculating circumference and radius’. Error Intervals. Areas of circles. Use terms of Pi. Identifying parts of a circle. Area and perimeter of sectors of circles. Volume and surface areas of 2d shapes, cylinders, pyramids, cones, spheres.  Volume and surface area of composite solids  Multiplying and dividing mixed numbers and fractions. Know and use the laws of indices ( including negative indices).  Standard form ( large numbers). Standard form (small numbers).  Convert from standard form to ordinary numbers( including negative indices) Calculating using all 4 functions with standard form.. | Assessment on:  Practice Past Papers |
| HT5: Congruence Similarity & Vectors  HT5: More Algebra | Understand and use similarity and enlargement. Finding scale factors. Determining when shapes are/ are not similar.  Similarity in regular polygons. Perimeters of similar shapes. Understand and use conditions of congruency to work out unknown sides and angles. Add and subtract vectors. Find resultant vectors. Find vector multiples. Parallel vectors.  Interpret and draw cubic and reciprocal graphs. Solving problems with non-linear graphs. Solving simultaneous equations graphically. Solving simultaneous equations algebraically. Rearranging formulae. Knowing and understanding the differences between expressions, equations, formulae and identities. Algebraic proof. | Assessment on:  Practice Past Papers |
| HT6: Revision | Revision of topics from GCSE Foundation course these will be determined individually by each teacher dependent upon each individual classes need. Revision from Units 1 to 17 from the GCSE curriculum is suggested as starting points during this revision period. | Assessment on:  Practice Past Papers |