

YEAR 10 CURRICULUM MEDIUM TERM PLAN – MATHS (F 3YR Yr 10 Sept 22)



TOPIC	KEY LEARNING	ASSESSMENT
HT1: Averages & Range HT1: Perimeter Area & Volume 1	Finding means and ranges from frequency tables. Finding mode median and range from charts and tables. Compare types of averages. Estimating the mean. Sampling Perimeter, area and lengths of rectangles, parallelograms, triangles and trapezia. Convert between area units. Areas of compound shapes. Surface area of 3d solids. Volume and surface area of prisms	<u>Assessment on Averages & Range</u> Perimeter Area & Volume 1
HT2: Graphs HT2: Transformations	Coordinate system. Linear graphs. Gradients. Plotting $y=mx+c$. Drawing and interpreting graphs from real data. Use and draw distance time graphs. Velocity time graphs. Predicting using graphs Describing and drawing translations, reflections, rotations on coordinates grids. Enlargement by a scale factor. Enlargement using a centre of enlargement. Identify and describe scale factors and centres of enlargements. Combining transformations	<u>Assessment on Graphs</u> Transformations
HT3:Ratio and Proportion	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.	<u>Assessment on Ratio and Proportion</u>
HT4: Right Angled Triangles HT4: Probability	Pythagoras ' theorem finding hypotenuse. Pythagoras ' theorem finding shorter sides. Trigonometry (Sin Cos Tan ratios) finding lengths and angles. Calculating probability of events. Probability of two events. Experimental probability. Venn diagrams. Tree diagrams. Dependent and independent events and tree diagrams	<u>Assessment on Right Angled Triangles</u> Probability
HT5: Multiplicative Reasoning	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	<u>Assessment on Multiplicative Reasoning</u>
HT6:Constructions Loci & Bearings	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	<u>Assessment on Constructions Loci & Bearings</u>