YEAR 9 CURRICULUM MEDIUM TERM PLAN - MATHS

TOPIC	KEY LEARNING	ASSESSMENT
HT 1: Indices and Standard Form. HT 1: Expressions and Formulae	Indices. Calculations and estimates. Negative and zero indices. Standard form (large and small numbers). Solving Equations. Substituting into expressions. Writing and using formulae. Using & rearranging formulae. Laws of Indices. Expanding & factorising. Expanding double brackets.	Assessment on: Indices and Standard Form. Expressions and Formulae
HT 2: Dealing With Data HT 2: Multiplicative Reasoning	Planning a survey. Hypotheses. Collecting data. Design questionnaires. Calculating averages from tables. Displaying and analysing data. Presenting data. Stem & leaf diagrams. Comparing data. Enlargement 2d shapes from centre of enlargement. Negative whole number and fractional scale factors. Calculating percentage change. Compound Measures. Direct and inverse proportion.	Assessment on: Dealing With Data Multiplicative Reasoning
HT 3: Constructions HT3: Sequences Inequalities, Equations and Proportion	Using Scales on maps and diagrams. Make accurate basic constructions. Constructing triangles. Construct accurate nets of solids involving triangles. Construct and draw accurate scale diagrams. Find and Use the Nth term of an arithmetic sequence. Non linear sequences (geometric and quadratic sequences). Inequalities on number lines. Find integer values that satisfy inequalities. Construct and solving equations including fractions and powers. Direct proportion. Inverse proportion.	Assessment on: Constructions Sequences Inequalities, Equations and Proportion
HT4: Circles Pythagoras and Prisms	Calculate circumference of a circle. Estimate calculations involving Pi. Calculate area of a circle. Using and applying the formula for Pythagoras' theorem. Find volumes and surface areas of prisms and cylinders. Calculate percentage errors and find upper and lower bounds.	Assessment on: Circles Pythagoras and Prisms
HT 5: Graphs HT 5: Probability	Using y=mx+c. Draw graphs in the form ax + by = c. Solve simultaneous equations by drawing graphs. Draw graphs of quadratic functions in the form $y=x^2$. Draw and interpret non linear graphs. Identify mutually exclusive events and find their probabilities. Experimental probability. Theoretical probability. Sample space diagrams. Find outcomes in two way tables and calculate their probabilities. Draw venn diagrams and calculate their probabilities.	Assessment on: Graphs Probability
HT6: Comparing Shapes	Congruent and similar shapes. Conditions of congruence. Ratios in similar triangles. The tangent ratio. The sine ratio. The cosine ratio. Using trigonometry to find angles.	Assessment on: Comparing Shapes