Denton Community College 2019/20

Departmental Curriculum Map Template

Subject: Maths   **Year Group: Year 11**

	Autumn 1	Autumn 1	Autumn 2	Autumn 2	Spring 1
Topics	Ratio	Algebra	Geometric Reasoning	Area and volume	Statistical reasoning
What will students learn during this unit?	Changing between units by using scale factors Use ratio notation, including simplifying, splitting. Relate ratios to fractions (H1 and H2 including algebraic fractions) Compare similar shapes (F - lines, H - lines, area and volume) Use compound units	Iterative processes (H) Simplify expressions including expanding, factorising, with indices. Form and solve equations. Use coordinates and plot linear and quadratic graphs (H - recognise types of graphs) Straight lines (F1 paprallel lines, H2 and H1 parallel and perpendicular lines)	Solve problems involving angles. H1, H2, F1 will do Trigonometry. H1 and H2 will also learn Sine and Cosine Rule. H - apply and use circle theorems H1 - prove circle theorems	Interpret plans and elevations Use and apply circle definitions and properties Know and apply the formula for the area of a triangle, trapezium, parallelogram Find the volume of prisms (H - and cones spheres, H1 - frustums) H - find the area of a non-right angled triangle	Language of probability and the probability scale Interpret and construct bar charts, pie charts, frequency diagrams. H - cumulative frequency, histograms Create and use probability tree diagrams and two way tables to calculate probabilities Create and use Venn diagrams Calculate average. H - averages from tables and grouped tables
When will students be assessed?	SSDD after each component of learning	SSDD after each component of learning	SSDD after each component of learning	SSDD after each component of learning	SSDD after each component of learning
How will students be assessed?	SSDD (Same Surface, Different Depth) as a formative assessment.	SSDD (Same Surface, Different Depth) as a formative assessment.	SSDD (Same Surface, Different Depth) as a formative assessment.	SSDD (Same Surface, Different Depth) as a formative assessment.	SSDD (Same Surface, Different Depth) as a formative assessment.
Key Vocabulary	Compound Scale Ratios Fractions	Iteration Solve Factorise Linear	Parallel Hypotenuse Exterior Interior	Circumference Arc Radius Diameter	Chart Graph Cumulative frequency Frequency density

	Lines Area Volume	Quadratic Turning point Roots Function Composite Invers	Translate Rotate Reflect Invariant Vector Congruent	Surface area Volume Cross section Units Perpendicular height	Mean Estimate for the mean Median Mode Modal group Range Interquartile range
Homework opportunities to broaden or deepen student knowledge	Mathswatch	Mathswatch - algebra	Mathswatch - geometry	Mathswatch - geometry	Mathswatch - statistics
Links to the National Curriculum			Reason deductively in geometry, number and algebra, including using geometrical constructions		