



# Gordon's School Mathematics Department

## GCSE - Curriculum Map



### Key Words / Skills:

#### Command Words

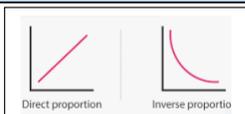
**Simplify** – simplify the given expression

**Solve** – find the solution of an equation or inequality

**Prove** – all steps and reasons should be given in a structured manner

**Express** – re-write in another form, some working may be needed

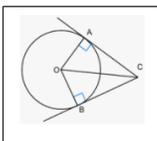
**Explain** – write a mathematical statement to show how you reached your conclusion



**Foundation:** Direct & Inverse Proportion, End of Year Catch-up & Consolidation

**Higher:** Iteration, End of Year Catch-up & Consolidation

$$\begin{aligned} 2x + y &= 12 \\ 6x + 5y &= 40 \end{aligned}$$



**Foundation:** Similarity & Congruence, Vectors, Rearranging Formulae, Simultaneous Equations, graphs

**Higher:** Representing Continuous data, Sketching Graphs, Circle Theorems, Rearranging Formulae

Exam Specification:



Should this QR code not work, please click [here](#) for the relevant specification.

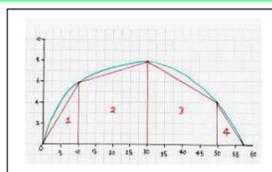
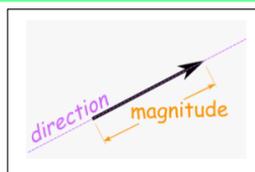
**Year 11**

**Foundation & Higher:** Final Preparation and sitting GCSE Exam

**Foundation & Higher:** continue with topics & regular past paper practice

**Foundation & Higher:** Year 11 Exam analysis & teacher judgement to determine class by class teaching

$$\begin{aligned} (d) \frac{x^2 - 7x - 8}{x^2 + 3x + 2} &= \frac{(x - 8)(x + 1)}{(x + 2)(x + 1)} \\ &= \frac{x - 8}{x + 2} \end{aligned}$$

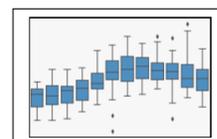
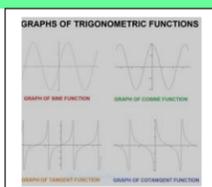
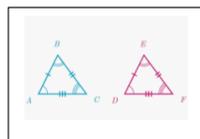
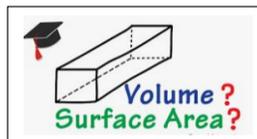


**Foundation & Higher:** Mock Exam preparation, Exam and analysis



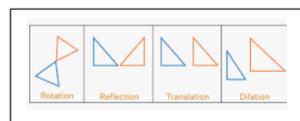
**Foundation:** Year 10 Exam Analysis to determine class by class teaching.

**Higher:** Year 10 Exam Analysis, Manipulating Surds, Algebraic Fractions, Proof, Functions, Vectors, Direct and Inverse Proportion, Transformations of Graphs, Gradients and Areas



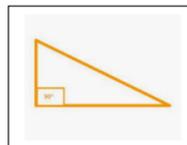
**Foundation:** Quadratic Expressions / Equations / Graphs, Circles, Advanced Volume & Surface Area, Standard Form

**Higher:** Similarity & congruence, Further Trigonometry, Graphs of Trig Functions, Comparing Data & Box Plots



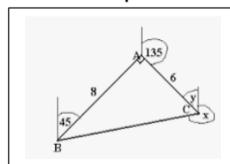
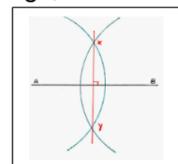
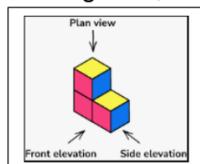
$$a : b = c : d$$

$$\frac{a}{b} = \frac{c}{d}$$



**Foundation:** Transformation, Ratio & Proportion, right-angled triangles

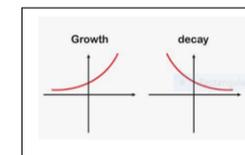
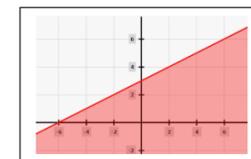
**Higher:** Transformations, Plans & Elevations, Constructions & Loci, Scale Diagrams, Bearings, Quadratic and Cubic Expressions



**Foundation:** Probability, Venn Diagrams, Probability Tree Diagrams, Compound Measures

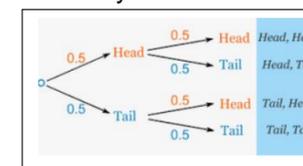
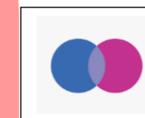
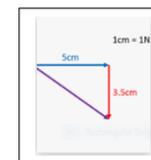
**Higher:** Quadratic Equations, Simultaneous Equations, Linear Inequalities, Harder Inequalities

$$\begin{aligned} 2x + y &= 12 \\ 6x + 5y &= 40 \end{aligned}$$



**Foundation:** Growth & Decay, Plans & Elevations, Constructions & Loci, Scale Diagrams, Bearings

**Higher:** Probability, Venn Diagrams, Probability Tree Diagrams, Compound Measures, Growth & Decay



Compound measures	
Speed = $\frac{\text{distance}}{\text{time}}$	$\frac{D}{S T}$
Density = $\frac{\text{mass}}{\text{volume}}$	$\frac{M}{D V}$
Pressure = $\frac{\text{force}}{\text{area}}$	$\frac{F}{P A}$

$$ax^2 + bx + c = 0$$