

Autumn Term 1 Maths Year 10

What? When? Why?	Lesson 1 Learning intentions (what can a student do at the end of the lesson)	Lesson 2 Learning intentions (what can a student do at the end of the lesson)	Lesson 3 Learning intentions (what can a student do at the end of the lesson)	Lesson 4 Learning intentions (what can a student do at the end of the lesson)
Week 1	Enlarge a shape by a positive integer scale factor -Without coordinates -With coordinates	Enlarge a shape by a fractional scale factor -Without coordinates -With coordinates Enlarge a shape by a negative scale factor (H)	Identify similar shapes Understand that angles do not change if a shape is similar.	Work out missing sides and angles in a given pair of similar shapes
Week 2	Use parallel line rules to work out missing angles. Understand corresponding, alternate, and co-interior angles.	Establish a pair of triangles are similar Including SAS, ASA, SSS, RHS triangles.	Explore areas of similar shapes Explore volumes of similar shapes (H)	Understand the difference between congruence and similarity
Week 3	Understand and use conditions for congruent triangles Prove a pair of triangles are congruent (H)	End of Unit Assessment	Using tables of values (Revision) Where $y=mx+c$, where $y+mx=c$, and where $y+c=mx$	Compare gradients Also where the scale of the x and y axis are not the same.
Week 4	Compare intercepts Also tie this in with comparing gradients with a view to looking at $y=mx+c$	Understand and use $y=mx+c$ Sketch a line given its equation. Write an equation in the form $y=mx+c$ (H)	Find the equation of a line from a graph.	Interpret gradients and intercepts of real-life graphs
Week 5	End of Unit Assessment		One and two-step equations and inequalities (Revision)	Equations and inequalities with brackets (Revision)
Week 6	Inequalities with negative numbers	Solve equations with unknowns on both sides	Solve inequalities with unknowns on both sides	Equations and inequalities in other mathematical contexts
Week 7	Formulae and equations	Rearrange formulae (one-step)	Rearrange formulae (two-step)	End of Unit Assessment

Autumn Term 2 Maths

What? When? Why?	Lesson 1 Learning intentions (what can a student do at the end of the lesson)	Lesson 2 Learning intentions (what can a student do at the end of the lesson)	Lesson 3 Learning intentions (what can a student do at the end of the lesson)	Lesson 4 Learning intentions (what can a student do at the end of the lesson)
Week 1	Understand the meaning of a solution	Form and solve one-step and two-step equations (R)	Form and solve one-step and two-step inequalities (R)	Show solutions to inequalities on a number line
Week 2	Interpret representation on number lines as inequalities	Represent solutions to inequalities using set notation (H)	Draw straight line graphs (R)	Find solutions to equations using straight line graphs
Week 3	Represent solutions to single inequalities on a graph (H)	Form and solve equations with unknowns on both sides (R)	Form and solve inequalities with unknowns on both sides	Form and solve more complex equations and inequalities
Week 4	Solve quadratic equations by factorisation (H)	End of Unit assessment	Know names of 2D and 3D shapes	Recognise prisms (including language of edges and vertices)
Week 5	Accurate nets of cuboids and other 3D shapes	Sketch and recognise nets of cuboids and other 3D shapes	Plans and elevations	Find area of 2D shapes (R)
Week 6	Surface area of cubes and cuboids	Surface area of triangular prisms	Surface area of a cylinder	Volume of cubes and cuboids
Week 7	Volume of other 3D shapes - prisms and cylinders	Explore volumes of cones, pyramids and spheres (H)	End of unit assessment	