Autumn Term – Year 9

Below are a series of learning objectives from each of the units that are covered in year 9. For each learning objective there are additional revision resource (video), practice and extension tasks. These resources are additional resources that you can use with your daughter.

1. Straight line graphs

Learning Objective	Revision Resource	Practice	Extension
Using tables of values	Key Skill - Complete a table of values for a linear graph. - YouTube	Plotting Graphs (transum.org) level 1 only	Drawing Linear Graphs (corbettmaths.com)
Understand and use y = mx + c	GCSE Maths - What on Earth is y = mx + c #67 - YouTube	Equation of a Straight Line (transum.org) Level 1 only	Equation of a Line (corbettmaths.com)
Find the equation of a line from a graph	Finding equation of a linear graph - Corbettmaths - YouTube	Graph Patterns (transum.org) Straight line graphs only	Equation of a Line (corbettmaths.com)
Interpret gradients and intercepts of real life graphs	Real life Linear Graphs - Corbettmaths - YouTube	Deconstructing Graphs (transum.org)	

2. Forming & solving equations

Learning Objective	Revision Resource	Practice	Extension
Solve equations with unknowns on both sides	Solving Linear Equations with Unknowns Both Sides | GCSE Maths Tutor - YouTube	Equations - Level 3 (transum.org) Level 3 onwards	Equations (corbettmaths.com)
Solve inequalities with negative numbers	Solving Inequalities & Drawing Solutions on a Number Line | Higher & Foundation | GCSE Maths Tutor - YouTube	Inequalities (transum.org) Level 6 onwards	Inequalities (corbettmaths.com)
Solve inequalities with unknowns on both sides	Solving Inequalities & Drawing Solutions on a Number Line | Higher & Foundation | GCSE Maths Tutor - YouTube	Inequalities (transum.org) Level 6 onwards	Inequalities (corbettmaths.com)
Rearrange formulae (one-step)	Algebra - Rearranging Formulae (Foundation) (Video 1) - YouTube	Changing The Subject (transum.org)	https://corbettmaths.com/wp-content/uploads/2022/06/Changing-the-Subject.pdf

3. Testing conjectures

Learning Objective	Revision Resource	Practice	Extension
Factors, multiples and primes	Factors Multiples and Primes - YouTube	Prime Labyrinth (transum.org) Fizz Buzzer (transum.org) Factor Pairs of 24 (transum.org)	Multiples Factors Primes (corbettmaths.com)
Expand a pair of binomials	Expanding Two Brackets - YouTube	Brackets (transum.org) Level 3 onwards	Expanding two brackets (corbettmaths.com)
Expand three binomials	Expanding Three Brackets - YouTube	Brackets (transum.org) Level 10	Expanding three brackets (corbettmaths.com)

4. Three dimensional shapes

Learning Objective	Revision Resource	Practice	Extension
Sketch and recognise nets of cuboids and other 3D shapes	Nets - YouTube	Net or Not (transum.org)	Nets (corbettmaths.com)
Plans and elevations	Views and Elevations - YouTube	Plans and Elevations (transum.org)	4-plans-and-elevations.pdf (mathsgenie.co.uk)
Surface area of cubes and cuboids	Surface Area - YouTube	Surface Area (transum.org)	Surface area of a cuboid (corbettmaths.com)
Volume of cubes and cuboids	GCSE Maths - Volumes of Cubes and Cuboids #110 - YouTube	Volume (transum.org)	Volume of a Cuboid (corbettmaths.com)

5. Constructions & congruency

Learning Objective	Revision Resource	Practice	Extension
Construct a perpendicular bisector	Constructions - YouTube	Construction Bisectors (corbettmaths.com)	Constructions (corbettmaths.com)
Construct a perpendicular from a point	Constructions - YouTube	Other Constructions (corbettmaths.com)	Constructions (corbettmaths.com)
Construct a perpendicular to a point	Constructions - YouTube	Other Constructions (corbettmaths.com)	Constructions (corbettmaths.com)
Construct an angle bisector	Constructions - YouTube	Construction Bisectors (corbettmaths.com)	Constructions (corbettmaths.com)