Year 9 Revision List – Higher HT2

Algebra, Indices and Sequences:

Objective	Sparx Task
Recognise arithmetic and quadratic sequences,	M381,
continue sequences and find terms using nth term rule	M866, M991
Find the nth term rule of a quadratic sequence	M418
Recognise properties of sequences based on triangle numbers and Fibonacci	M981
Expand brackets of the type $5(x+2) +2x$ and $x3(3x-2)-2(x+3)$	M792
Expand double brackets e.g. (x+5)(x+3)	M960
Expand double brackets in context e.g. areas of shapes	M957
Find the square of a single bracket e.g. $(x-3)^2$ and $(x+3)^2$	M960
Factorise quadratic expressions using sum product	U858
Factorise quadratic expressions using difference of two squares	U963
Recognise when an equation can be factorised using either single or double brackets	M908
Solve a quadratic equation by factorising	U228, U960
Represent inequalities on a number line	M384
Solve single linear inequalities and represent solutions on a number line	M118
Solve double sided linear inequalities and represent solutions on a number line	M732
Use index law to write algebraic expressions as negatives powers and as fractions	U235, U694
Recognise a formula, equation and a function. Solve linear equations with fractions on both sides	M830
Form solve equations from pictures	U599
Change the subject in simple formulae e.g. y=mx+c	U556

Write formulae from words and rearrange	U599	
Change algebraic fractions to equivalent fractions	U103	
Make x the subject in a formula e.g. x^-1=9-y	U556	

Accuracy and Measures:

Objective	Sparx Task
Find average speed from a distance time graph	U462
Find average speed given in different measures	U151
Use average speed to find distance and time taken	U462
Convert compound units	
Convert metric units of volume and area	M772,
	M530, M761
Understand density	U910
Understand pressure	U527
Calculations with density and pressure	U910, U527