## Year 9 Revision List – Higher HT2 2022-23

## Algebra, Indices and Sequences:

Objective	Sparx Task
Recognise arithmetic and quadratic sequences,	M381,
continue sequences and find terms using nth	M866, M991
term rule	141866, 141331
Find the nth term rule of a quadratic sequence	M418
Recognise properties of sequences based on	M981
triangle numbers and Fibonacci	
Expand brackets of the type 5(x+2) +2x and	M792
x3(3x-2)-2(x+3)	
Expand double brackets e.g. (x+5)(x+3)	M960
Expand double brackets in context e.g. areas of	M957
shapes	
Find the square of a single bracket e.g. (x-3) <sup>2</sup>	M960
and (x+3) <sup>2</sup>	
Factorise quadratic expressions using sum	U858
product	
Factorise quadratic expressions using	U963
difference of two squares	
Recognise when an equation can be factorised	M908
using either single or double brackets	
Solve a quadratic equation by factorising	U228, U960
Represent inequalities on a number line	M384
Solve single linear inequalities and represent	M118
solutions on a number line	
Solve double sided linear inequalities and	M732
represent solutions on a number line	
Use index law to write algebraic expressions as	U235, U694
negatives powers and as fractions	,
Recognise a formula, equation and a function.	M830
Solve linear equations with fractions on both	
sides	
Form solve equations from pictures	U599
Change the subject in simple formulae e.g.	U556
y=mx+c	

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