

Second Year Higher Level Revision List for Summer Test

All Work should be in your Blue Book and Hardback
Your previous tests throughout the year should also help with revision.

Patterns and Sequences Chapter 18 Textbook	You Must be able to:	Date Revised
	Recognise a sequence be able to explain the words: sequence, term, position	
	Look at repeating patterns and be able to identify any term in the pattern	
	Identify a linear sequence and how to find any term in a sequence	
	Find the nth term of a sequence	
	Identify a quadratic sequence	
	Be able to graph sequences	

Algebra 1 Chapter 1	You must be able to:	Date Revised
	Simplify expressions	
	Remove brackets	
	Evaluating expressions	
	Solve linear equations	
	Solve problems using line equations	
	Solve inequalities	

Factorising Chapter 2	You must be able to:	Date Revised
	Factorise with common factors	
	Factorise by grouping terms	
	Factorise the difference of two squares	
	Factorise quadratic equations	
	Using factors to simplify algebraic fractions	

Second Year Higher Level Revision List for Summer Test

Quadratic equations Chapter 8	You must be able to:	Date Revised
	Solve quadratic equations using factors	
	Use the quadratic formula Page 20 in the tables book (Can only use in trinomials)	
	Solve word problems that become quadratic equations	
	Use graphs to solve quadratic equations	
	Form quadratic equations when given its roots.	

Sets Chapter 3	You must be able to:	Date Revised
	Use set terminology to answer questions regarding sets. E.g. Union, intersection, subset, universal, complement, cardinal number, set difference	
	Work with Venn diagrams to solve questions in sets	
	Solve problems involving three sets	

Chapter 6 Perimeter Area and Vol	You must be able to:	Date Revised
	Find the perimeter and area of regular and irregular shapes	
	Find the area of a parallelogram	
	Find the area and Circumference of a circle	
	Find the surface area and volume of three dimensional shapes	
	Use and understand scale drawings	

Second Year Higher Level Revision List for Summer Test

Chapter 17 Cylinder Cone Sphere	You must be able to:	Date Revised
	You must be able to find the surface area, total area and volume of all three circular shapes	
	You must also be able to solve problems using these shapes	

Statistics Chapter 5,7,13	You must be able to:	Date Revised
Chapter 5	• Know the different types of data • Understand how to collect data • How to get a sample and be able to explain and re write questionnaires to avoid bias	
Chapter 7	Find the average (Mean, median and mode)	
	• Know which average to use • Use frequency tables and find the average using these • Understand and explain range and variability	
Chapter 13	• Use line plots and bar charts and be • Be able to construct a Pie chart and/or answer questions on pie charts • Know the use and how to construct a histogram • Be able to interpret and construct Ste and leaf plots • Be able to calculate the range, interquartile range and median in a stem and leaf plot and a back to back stem and leaf plot	

Second Year Higher Level Revision List for Summer Test

Coordinate Geometry of the Line Chapter 11	You must be able to:	Date Revised
	Find the distance between two points	
	Find the midpoint between two points	
	Use the slope formula to a) Find the slope between two points b) Find out if two lines are parallel or perpendicular Be able to interpret the slope in real life situations	
	• Find the equation of a line when given a point and the slope, or when given two points • Be able to rewrite the equation of a line in the form $y = mx + c$ • Be able to find an equation of a line that is parallel or perpendicular to a line in the form $y = mx + c$	
	• Graph lines on the Cartesian plane, • Find the points of intersection between two lines, using the graph • Using simultaneous equations	

Simultaneous equations Chapter 14	You must be able to:	Date Revised
	Solve simultaneous equations	
	Solve simultaneous equations containing fractions	
	Solve word problems that become Simultaneous equations	
	Use graphs to solve simultaneous equations	

Second Year Higher Level Revision List for Summer Test

Geometry 1 Chapter 9	You must be able to	Date revised
	• Be able to explain what a line is and the different types of angles there are • Work out missing angles in a triangle • Understand and answer questions on quadrilaterals • Know and explain congruent triangles • Understand and use Pythagoras	

The best way to revise maths is to practice questions:

- www.projectmaths.ie has a student section useful to revise exam style questions.
- The Test yourself section of each chapter is also good
- Some useful websites to help include
- www.Purplemath.com
- www.Mathsisfun.com

For the exam, BE PREPARED: Pens, Pencils, Ruler, Calculator and your Formula Book. GOOD LUCK!