

**All Work should be in your Blue Book and Hardback**

**Your previous tests throughout the year should also help with revision.**

<b>Patterns and Sequences Chapter 18 Textbook</b>	<b>You Must be able to:</b>	<b>Date Revised</b>
	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	

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

<b>Factorising Chapter 2</b>	<b>You must be able to:</b>	<b>Date Revised</b>
	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

<b>Quadratic equations Chapter 8</b>	<b>You must be able to:</b>	<b>Date Revised</b>
	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.	

<b>Sets Chapter 3</b>	<b>You must be able to:</b>	<b>Date Revised</b>
	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	

<b>Chapter 6 Perimeter Area and Vol</b>	<b>You must be able to:</b>	<b>Date Revised</b>
	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	

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<b>Chapter 17</b> <b>Cylinder</b> <b>Cone</b> <b>Sphere</b>	<b>You must be able to:</b>	<b>Date Revised</b>
	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	

<b>Statistics</b> <b>Chapter 5,7,13</b>	<b>You must be able to:</b>	<b>Date Revised</b>
<b>Chapter 5</b>	<ul style="list-style-type: none"> <li>• Know the different types of data</li> <li>• Understand how to collect data</li> <li>• How to get a sample and be able to explain and re write questionnaires to avoid bias</li> </ul>	
<b>Chapter 7</b>	<b>Find the average ( Mean, median and mode)</b>	
	<ul style="list-style-type: none"> <li>• Know which average to use</li> <li>• Use frequency tables and find the average using these</li> <li>• Understand and explain range and variability</li> </ul>	
<b>Chapter 13</b>	<ul style="list-style-type: none"> <li>• Use line plots and bar charts and be</li> <li>• Be able to construct a Pie chart and/or answer questions on pie charts</li> <li>• Know the use and how to construct a histogram</li> <li>• Be able to interpret and construct Ste and leaf plots</li> <li>• 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</li> </ul>	

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<b>Coordinate Geometry of the Line Chapter 11</b>	<b>You must be able to:</b>	<b>Date Revised</b>
	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	
	<ul style="list-style-type: none"> <li>Find the equation of a line when given a point and the slope, or when given two points</li> <li>Be able to rewrite the equation of a line in the form <math>y = mx + c</math></li> <li>Be able to find an equation of a line that is parallel or perpendicular to a line in the form <math>y = mx + c</math></li> </ul>	
	<ul style="list-style-type: none"> <li>Graph lines on the Cartesian plane,</li> <li>Find the points of intersection between two lines, using the graph</li> <li>Using simultaneous equations</li> </ul>	

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

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<b>Geometry 1 Chapter 9</b>	<b>You must be able to</b>	<b>Date revised</b>
	<ul style="list-style-type: none"><li>• Be able to explain what a line is and the different types of angles there are</li><li>• Work out missing angles in a triangle</li><li>• Understand and answer questions on quadrilaterals</li><li>• Know and explain congruent triangles</li><li>• Understand and use Pythagoras</li></ul>	

The best way to revise maths is to practice questions:

- [www.projectmaths.ie](http://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](http://www.Purplemath.com)
- [www.Mathsisfun.com](http://www.Mathsisfun.com)

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