

## 10AEL End of year revision checklist – Higher GCSE 9-1 book

You will have two end of year tests in Maths – 1 calculator and 1 non-calculator. Each test will be 50 min, and those entitled to extra time will get another 25% (12.5 mins).

This is a list of the topics you will be tested on. Topics from **year 9 and 10**.

Remember, for Maths you need to DO questions and test yourself. Reading notes is not enough. Checking what you're doing is right is crucial and so you need to use the answers at the back of the textbook.

	Grade yourself before starting? 1 – 5	Questions done	Confidence after revision 1 - 5
<b>Chapter 1, Number</b>	☹ ☺		☹ ☺
6-9 Number problems and reasoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-7 Place value and estimating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-8 HCF and LCM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9 Calculating with powers (indices)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8-12 Zero, negative and fractional indices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9 Powers of 10 and standard form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Surds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-8 Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Chapter 2, Algebra

7-10 Algebraic indices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-10 Expanding and factorising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9 Equations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9 Formulae	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name: \_\_\_\_\_

- Doing check-ups at the end of each unit can help you identify areas you need to work on, if you are unsure.
- Questions from each section, unit tests and questions from 'strengthen' and 'extend' at the end of each chapter can help you.
- You may find the following websites useful also:  
[www.mymaths.co.uk](http://www.mymaths.co.uk)   [www.khanacademy.org](http://www.khanacademy.org)   [www.mathsgenie.co.uk](http://www.mathsgenie.co.uk)  
[www.mathsmadeeasy.co.uk](http://www.mathsmadeeasy.co.uk)   mathswatch.co.uk/vle
- Numbers to the left indicate the difficulty level from 1-12, as done in the textbook, where 12 is the most difficult. (Not to confuse with grades 1-9)

	Grade yourself before starting? 1 – 5	Questions done	Confidence after revision 1 – 5
<b>Chapter 2, Algebra</b> cont	☹ ☺		☹ ☺
6-8 Linear sequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9 Non-linear sequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-10 More expanding and factorising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-10 Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Chapter 3, Interpreting and representing data

4-7 Statistical diagrams 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Time series	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-7 Scatter graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-7 Line of best fit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5-8 Averages and range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5-6 Statistical diagrams 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Grade yourself before starting? 1 – 5	Questions done	Confidence after revision 1 – 5
		☹ ☺		☹ ☺
<b>Chapter 4, Fractions, ratio and percentages</b>				
6-8	Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Ratios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-8	Ratio and proportion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9	Percentages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-10	Fractions, decimals and percentages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-8	Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 5, Angles and trigonometry

6	Angles properties of tri and quads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Interior angles of a polygon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-8	Exterior angles of a polygon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Pythagoras' Theorem 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Pythagoras' Theorem 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9	Trigonometry 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9	Trigonometry 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9	Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 6, Graphs

		Grade yourself before starting? 1 – 5	Questions done	Confidence after revisio 1 – 5
		☹		☹
6-8	Linear graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-8	More linear graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-10	Graphing rates of change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-8	Real-life graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-10	Line segments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-8	Quadratic graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8-10	Cubic and reciprocal graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9	More graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 7, Area and Volume

6	Perimeter and area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-10	Units and accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-9	Prisms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-8	Circles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8-12	Sectors of circles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8-11	Cylinders and spheres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-12	Pyramids and cones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-12	Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Grade yourself before starting? 1 – 5	Questions done	Confidence after revision 1 – 5
	☹ ☺		☹ ☺
<b>Chapter 8, Geometry: Transformations and constructions</b>			
6-7	3D solids	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Reflections and rotation	<input type="checkbox"/>	<input type="checkbox"/>
6-10	Enlargement	<input type="checkbox"/>	<input type="checkbox"/>
7-8	Transformations & comb of transf.	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Bearings and scale drawings	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Constructions 1	<input type="checkbox"/>	<input type="checkbox"/>
7-8	Constructions 2	<input type="checkbox"/>	<input type="checkbox"/>
7-10	Loci	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 9, Equations and inequalities

7-9	Solving quadratic equations 1	<input type="checkbox"/>	<input type="checkbox"/>
8-10	Solving quadratic equations 2	<input type="checkbox"/>	<input type="checkbox"/>
7-12	Completing the square	<input type="checkbox"/>	<input type="checkbox"/>
8-10	Solving simultaneous equations	<input type="checkbox"/>	<input type="checkbox"/>
9	More simultaneous equations	<input type="checkbox"/>	<input type="checkbox"/>
10-12	Solving linear and quadratic sim eq.	<input type="checkbox"/>	<input type="checkbox"/>
6-9	Solving linear inequalities	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 10, Probability

	Grade yourself before starting? 1 – 5	Questions done	Confidence after revisio 1 – 5
	☹		☹
5-8	Combined events	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Mutually exclusive events	<input type="checkbox"/>	<input type="checkbox"/>
6-8	Experimental probability	<input type="checkbox"/>	<input type="checkbox"/>
7-10	Independent events & tree diagrams	<input type="checkbox"/>	<input type="checkbox"/>
8-12	Conditional probability	<input type="checkbox"/>	<input type="checkbox"/>
6-10	Venn diagrams and (set notation)	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 11, Multiplicative reasoning

8-9	Growth and decay	<input type="checkbox"/>	<input type="checkbox"/>
6-7	Compound measures	<input type="checkbox"/>	<input type="checkbox"/>
6-8	More compound measures	<input type="checkbox"/>	<input type="checkbox"/>
6-9	Ratio, Direct and Indirect proportion	<input type="checkbox"/>	<input type="checkbox"/>
8-9	Problem solving	<input type="checkbox"/>	<input type="checkbox"/>

### Chapter 12, Similarity and congruence

6-10	Congruence	<input type="checkbox"/>	<input type="checkbox"/>
12	Geometric proof and congruence	<input type="checkbox"/>	<input type="checkbox"/>
5-9	Similarity	<input type="checkbox"/>	<input type="checkbox"/>
9-11	More similarity	<input type="checkbox"/>	<input type="checkbox"/>
9-12	Similarity in 3D-solids	<input type="checkbox"/>	<input type="checkbox"/>