

# Maths

## In November, you will sit two papers for Maths

- Paper 1 – Non calculator 1 hour 30
- Paper 2 – Calculator 1 hour 30

### The following equipment is required for each exam:

- Compass
- Protractor
- Pen
- Pencil
- Ruler

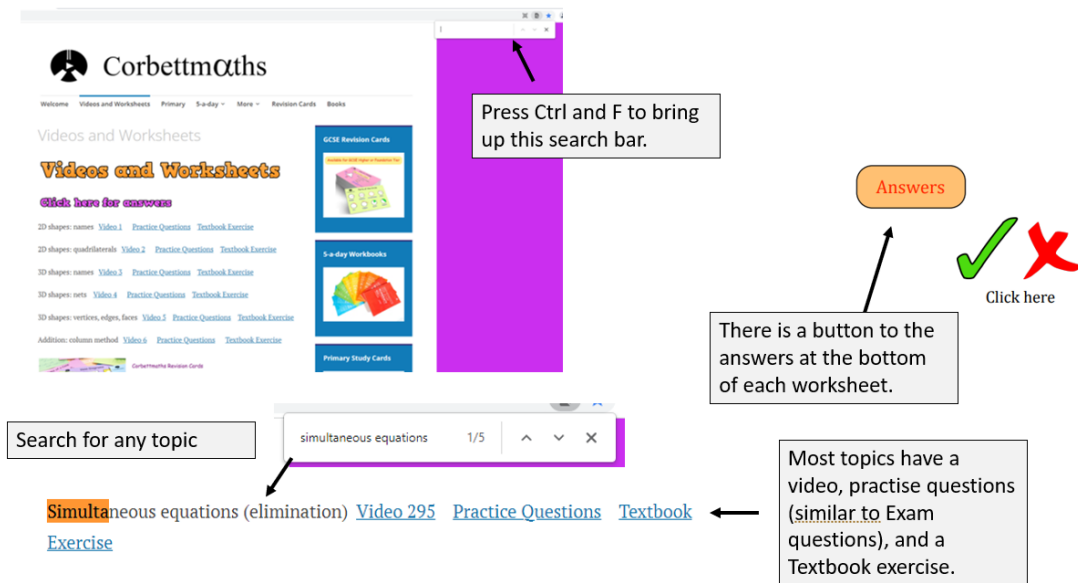
It is essential that you bring your calculator to paper 2 as we are unable to lend out any equipment.

### Grades

- At Foundation, you can achieve 5 – 1
- At Higher, you can achieve 9 – 4
- Grade 5 is a strong pass and grade 4 is a standard pass. There is a 40% overlap between the two tiers.
- We always work towards moving you up to the next grade.
- To remain on higher, you will need to secure a minimum of a secure grade 4 in the November mock exam.

## Revision

- Corbett Maths - <https://corbettmaths.com>



Press Ctrl and F to bring up this search bar.

Answers

Click here

There is a button to the answers at the bottom of each worksheet.

Most topics have a video, practise questions (similar to Exam questions), and a Textbook exercise.



**Address:** Beckfoot School, Wagon Lane, Bingley BD16 1EE  
**Email:** [admin@beckfoot.org](mailto:admin@beckfoot.org) **Tel:** 01274 771444

**Beckfoot Trust** - an exempt charitable company limited by guarantee  
**Company Number:** 08155088 England and Wales

- Mathswatch – <https://vle.mathswatch.co.uk/vle>



Click on Videos

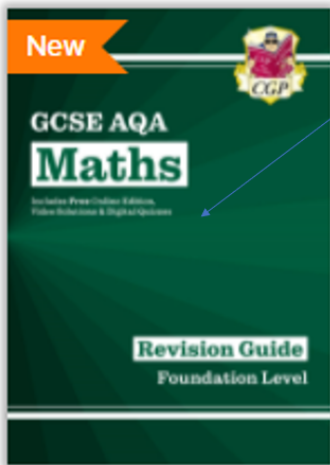


Search any topic.



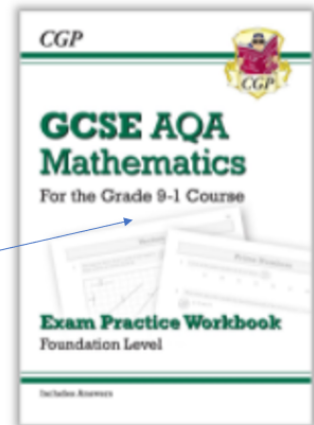
Every topic has a one-minute video, interactive questions (like the ones you get for Homework) and a worksheet.

- CGP Revision Guides



Look in the contents page for the topic you need. Read the page, make notes and revision cards.

Find the same page with your topic in Your workbook and try the questions



- Past Papers: <https://www.mathsgenie.co.uk/AQApapers.html>

It's a good idea to try a past paper before the mock exam. Why not try some practice papers?

Centre number       Candidate number

Surname \_\_\_\_\_

Forename(s) \_\_\_\_\_

Candidate signature \_\_\_\_\_

# GCSE MATHEMATICS

# F

Foundation Tier Paper 1 Non-Calculator

Don't forget to check your answers. Tick if right, correct if not and circle if unsure – seek support when back in school for the ones you are unsure about.

---

### Next Assessments

- You will sit one assessment per half term in year 11. These will feed into your report and help you prepare for the real exams.
    - **June** – Retrieval Assessment
    - **September** – Retrieval Assessment
    - **November** – Mock Exam Paper 1 and 2
    - **December** – Paper 3
    - **February** – Mock Exam Paper 1 and 2
- 

### Final Exam

- The final exam consists of three exam papers at the end of year 11

Paper 1: Non-Calculator	Paper 2: Calculator	Paper 3: Calculator
Content from any part of the course may be assessed	Content from any part of the course may be assessed	Content from any part of the course may be assessed
1 hour 30 Written Exam 80 Marks $33\frac{1}{3}\%$	1 hour 30 Written Exam 80 Marks $33\frac{1}{3}\%$	1 hour 30 Written Exam 80 Marks $33\frac{1}{3}\%$

- Assessment structure is the same at both Higher and Foundation
-

## FOUNDATION

### Maths – Exam Preparation

8300/IF – Paper 1 Non Calculator

Topic	Detail	Corbett Maths Link
<b>Number</b>		
<b>Arithmetic</b>	Four Operations	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2013/12/19/addition-video-6/">https://corbettmaths.com/2013/12/19/addition-video-6/</a></li> <li>• <a href="https://corbettmaths.com/2013/12/19/subtraction-video-304/">https://corbettmaths.com/2013/12/19/subtraction-video-304/</a></li> <li>• <a href="https://corbettmaths.com/2013/02/15/multiplication-traditional/">https://corbettmaths.com/2013/02/15/multiplication-traditional/</a></li> <li>• <a href="https://corbettmaths.com/2013/12/28/division-video-98/">https://corbettmaths.com/2013/12/28/division-video-98/</a></li> </ul>
	Negative Numbers	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2013/06/08/negatives-addition-and-subtraction-2/">https://corbettmaths.com/2013/06/08/negatives-addition-and-subtraction-2/</a></li> <li>• <a href="https://corbettmaths.com/2012/08/20/multiplying-negative-numbers/">https://corbettmaths.com/2012/08/20/multiplying-negative-numbers/</a></li> <li>• <a href="https://corbettmaths.com/2012/08/20/dividing-involving-negatives/">https://corbettmaths.com/2012/08/20/dividing-involving-negatives/</a></li> <li>• <a href="https://corbettmaths.com/2013/06/06/ordering-numbers-including-negatives/">https://corbettmaths.com/2013/06/06/ordering-numbers-including-negatives/</a></li> </ul>
	Order of Operations	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2013/06/08/order-of-operations/">https://corbettmaths.com/2013/06/08/order-of-operations/</a></li> </ul>
<b>Indices</b>	Laws of Indices	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2013/03/13/laws-of-indices-algebra/">https://corbettmaths.com/2013/03/13/laws-of-indices-algebra/</a></li> </ul>
<b>Fractions</b>	Arithmetic	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2012/08/21/fractions-addition-and-subtraction/">https://corbettmaths.com/2012/08/21/fractions-addition-and-subtraction/</a></li> </ul>
		<ul style="list-style-type: none"> <li>• Multiplying Fractions pdf (corbettmaths.com)</li> </ul>
	Fraction of a number	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2012/08/20/fractions-of-amounts/">https://corbettmaths.com/2012/08/20/fractions-of-amounts/</a></li> </ul>
	Conversions	<ul style="list-style-type: none"> <li>• Percentages to Decimals (corbettmaths.com)</li> <li>• Percentages to Fractions (corbettmaths.com)</li> <li>• Decimals to Fractions pdf (corbettmaths.com)</li> <li>• Decimals to Fractions pdf (corbettmaths.com)</li> <li>• Decimals to Percentages worksheet (corbettmaths.com)</li> <li>• Fractions to Percentages pdf (corbettmaths.com)</li> <li>• Fractions to Decimals pdf (corbettmaths.com)</li> </ul>
	Improper fractions	<ul style="list-style-type: none"> <li>• Improper Fractions and Mixed Numbers (corbettmaths.com)</li> </ul>
<b>Types of Number</b>	Multiples	<ul style="list-style-type: none"> <li>• Multiples Exercise 220 pdf (corbettmaths.com)</li> </ul>
<b>Algebra</b>		
<b>Types of Graph</b>	Recognise	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2016/08/07/cubic-graphs/">https://corbettmaths.com/2016/08/07/cubic-graphs/</a></li> <li>• <a href="https://corbettmaths.com/2013/10/24/reciprocal-graphs/">https://corbettmaths.com/2013/10/24/reciprocal-graphs/</a></li> </ul>
<b>Reasoning</b>	Formula	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2012/08/20/substitution-into-expressions/">https://corbettmaths.com/2012/08/20/substitution-into-expressions/</a></li> </ul>

<b>Manipulation</b>	Expand Brackets	<ul style="list-style-type: none"> <li>Expanding Brackets (corbettmaths.com)</li> </ul>
<b>Formulae</b>	Substitution	<ul style="list-style-type: none"> <li>Substitution (corbettmaths.com)</li> </ul>
<b>Ratio</b>		
<b>Percentages</b>	Increase	<ul style="list-style-type: none"> <li>Increasing/Decreasing by a Percentage Textbook Exercise – Corbettmaths</li> </ul>
	Sharing	<ul style="list-style-type: none"> <li>Ratio sharing the total (corbettmaths.com)</li> </ul>
<b>Compound Measures</b>	Speed	<ul style="list-style-type: none"> <li>Speed Distance Time (corbettmaths.com)</li> </ul>
<b>Geometry and Measures</b>		
<b>Area and Volume</b>	Perimeter	<ul style="list-style-type: none"> <li><a href="https://corbettmaths.com/2012/08/02/perimeter/">https://corbettmaths.com/2012/08/02/perimeter/</a></li> </ul>
	Area	<ul style="list-style-type: none"> <li>Area of a Rectangle (corbettmaths.com)</li> <li>Area of Compound Shapes (corbettmaths.com)</li> </ul>
<b>Angles</b>	On a line	<ul style="list-style-type: none"> <li>Angle Facts (corbettmaths.com)</li> </ul>
<b>Measures</b>	Angles	<ul style="list-style-type: none"> <li>Measuring angles Exercise 31 (corbettmaths.com)</li> </ul>
	Lines	<ul style="list-style-type: none"> <li>Measuring and Drawing Lines Practice Questions – Corbettmaths</li> </ul>
<b>Statistics</b>		
<b>Averages problem</b>		<ul style="list-style-type: none"> <li><a href="https://corbettmaths.com/2012/08/02/the-mean/">https://corbettmaths.com/2012/08/02/the-mean/</a></li> </ul>
<b>Pictogram</b>		<ul style="list-style-type: none"> <li>Pictograms pdf (corbettmaths.com)</li> </ul>
<b>Bar Charts</b>		<ul style="list-style-type: none"> <li>Reading Bar Charts (corbettmaths.com)</li> </ul>
<b>Scatter Graphs</b>		<ul style="list-style-type: none"> <li>Scatter Graphs (corbettmaths.com)</li> </ul>

## FOUNDATION

### Maths – Exam Preparation

8300/2F – Paper 2 Calculator

Topic	Detail	Corbett Maths Link
<b>Number</b>		
<b>Properties</b>	Number line decimal	<ul style="list-style-type: none"> <li>Ordering Decimals Video – Corbettmaths</li> </ul>
	Number Problem	<ul style="list-style-type: none"> <li>Ordering Numbers Video – Corbettmaths</li> </ul>
	Prime Number	<ul style="list-style-type: none"> <li>Prime Numbers Video – Corbettmaths</li> </ul>
	Factors	<ul style="list-style-type: none"> <li>Factors 216 pdf (corbettmaths.com)</li> </ul>
<b>Fractions</b>	Fraction of a number	<ul style="list-style-type: none"> <li>Fractions of Amounts Video – Corbettmaths</li> </ul>
<b>Decimals</b>	Error Intervals	<ul style="list-style-type: none"> <li>Error Intervals Textbook Exercise – Corbettmaths</li> </ul>
<b>Other</b>	Time and Money	<ul style="list-style-type: none"> <li>Proportion Time Problems Video – Corbettmaths</li> <li>Regular Payments Practice Questions – Corbettmaths</li> </ul>
<b>Algebra</b>		
<b>Manipulation</b>	Equivalent Expressions	<ul style="list-style-type: none"> <li><a href="https://corbettmaths.com/2013/03/12/forming-algebraic-notation/">https://corbettmaths.com/2013/03/12/forming-algebraic-notation/</a></li> </ul>

	Factorise	<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2013/02/06/factorisation/">https://corbettmaths.com/2013/02/06/factorisation/</a></li> </ul>
<b>Inequalities</b>	Solving	<ul style="list-style-type: none"> <li>• Solving Inequalities (corbettmaths.com)</li> </ul>
<b>Sequences</b>	Nth term	<ul style="list-style-type: none"> <li>• Sequences: nth term Textbook Exercise – Corbettmaths</li> </ul>
<b>Ratio</b>		
<b>Percentages</b>	Percentage scores	<ul style="list-style-type: none"> <li>• Expressing as a Percentage (corbettmaths.com)</li> </ul>
	Percentage increase/decrease	<ul style="list-style-type: none"> <li>• Ratio Simplifying Textbook Exercise – Corbettmaths</li> </ul>
<b>Ratio</b>	As a fraction	<ul style="list-style-type: none"> <li>• Expressing a ratio as a fraction or percentage pdf (corbettmaths.com)</li> </ul>
	Equivalent	<ul style="list-style-type: none"> <li>• Ratio Simplifying Textbook Exercise – Corbettmaths</li> </ul>
<b>Geometry and Measures</b>		
<b>Area and Volume</b>	Compound shape	<ul style="list-style-type: none"> <li>• Area of Compound Shapes Video – Corbettmaths</li> </ul>
<b>Shape</b>	Volume	<ul style="list-style-type: none"> <li>• Volume of a Prism (corbettmaths.com)</li> </ul>
	Congruency	<ul style="list-style-type: none"> <li>• Congruent Shapes Textbook (corbettmaths.com)</li> </ul>
	Similarity	<ul style="list-style-type: none"> <li>• Similar Shapes: Finding Sides Textbook Exercise – Corbettmaths</li> </ul>
	Coordinates	<ul style="list-style-type: none"> <li>• Coordinates (corbettmaths.com)</li> </ul>
<b>Angles</b>	Polygons	<ul style="list-style-type: none"> <li>• Angles in polygons (corbettmaths.com)</li> </ul>
<b>Transformations</b>	Translation	<ul style="list-style-type: none"> <li>• Translations (corbettmaths.com)</li> </ul>
	Reflection	<ul style="list-style-type: none"> <li>• Reflections (corbettmaths.com)</li> </ul>
<b>Statistics</b>		
Frequency Tree		<ul style="list-style-type: none"> <li>• Frequency Trees Textbook pdf (corbettmaths.com)</li> </ul>
<b>Probability</b>		
Relative Frequency		<ul style="list-style-type: none"> <li>• <a href="https://corbettmaths.com/2013/06/20/relative-frequency/">https://corbettmaths.com/2013/06/20/relative-frequency/</a></li> </ul>
Expected Value		<ul style="list-style-type: none"> <li>• Probability Videos – Corbettmaths</li> </ul>
Venn diagram		<ul style="list-style-type: none"> <li>• Venn Diagrams Video – Corbettmaths</li> </ul>
Sample space		<ul style="list-style-type: none"> <li>• Sample Spaces (corbettmaths.com)</li> </ul>

## HIGHER

### Maths – Exam Preparation

8300/1H – Paper 1 Non Calculator

Topic	Detail	Corbett Maths
<b>Number</b>		
<b>Arithmetic</b>	Decimal	<ul style="list-style-type: none"><li>• Adding Decimals Video – Corbettmaths</li></ul>
<b>Fractions</b>	Arithmetic	<ul style="list-style-type: none"><li>• Fractions: Addition and Subtraction Video – Corbettmaths</li></ul>
<b>Decimals</b>	Recurring Decimals	<ul style="list-style-type: none"><li>• Recurring Decimals pdf (corbettmaths.com)</li></ul>
<b>Indices</b>	Laws of indices	<ul style="list-style-type: none"><li>• Laws of Indices – Algebra Video – Corbettmaths</li></ul>
<b>Standard Form</b>	Conversion	<ul style="list-style-type: none"><li>• Standard Form Video – Corbettmaths</li></ul>
	Calculation	<ul style="list-style-type: none"><li>• Standard Form: Multiplication Video – Corbettmaths</li></ul>
<b>Algebra</b>		
<b>Equations</b>	Simultaneous	<ul style="list-style-type: none"><li>• Simultaneous Equations (corbettmaths.com)</li></ul>
<b>Functions</b>	Substitution	<ul style="list-style-type: none"><li>• Substitution (corbettmaths.com)</li></ul>
<b>Inequalities</b>	Solving	<ul style="list-style-type: none"><li>• Solving Inequalities (corbettmaths.com)</li></ul>
<b>Manipulation</b>	Identity	<ul style="list-style-type: none"><li>• Identities Video – Corbettmaths</li></ul>
	Simplification of algebraic fraction	<ul style="list-style-type: none"><li>• Simplifying algebraic fractions Video – Corbettmaths</li></ul>
	Simplification	<ul style="list-style-type: none"><li>• Forming Algebraic Expressions Video – Corbettmaths</li></ul>
	Expanding Brackets	<ul style="list-style-type: none"><li>• Expanding Brackets (corbettmaths.com)</li></ul>
	Completing the square	<ul style="list-style-type: none"><li>• Completing the square (corbettmaths.com)</li></ul>
<b>Graphs</b>	Recognise	<ul style="list-style-type: none"><li>• Cubic Graphs Video – Corbettmaths</li><li>• Exponential Graphs Video – Corbettmaths</li><li>• Reciprocal Graphs Video – Corbettmaths</li></ul>
	Linear Graphs	<ul style="list-style-type: none"><li>• Equation of a Line (corbettmaths.com)</li><li>• Parallel and Perpendicular Graphs (corbettmaths.com)</li></ul>
<b>Ratio</b>		
<b>Ratio</b>	Simplest form	<ul style="list-style-type: none"><li>• Simplifying Ratio Video – Corbettmaths</li></ul>
	Proportion problem	<ul style="list-style-type: none"><li>• Unitary Method Video – Corbettmaths</li></ul>
	Problems solving	<ul style="list-style-type: none"><li>• Ratio Solving Problems 1 (corbettmaths.com)</li></ul>
<b>Compound measures</b>	Average speed	<ul style="list-style-type: none"><li>• Speed Distance Time (corbettmaths.com)</li></ul>
<b>Geometry and Measures</b>		
<b>Shape</b>	Congruence	<ul style="list-style-type: none"><li>• Congruent and Similar Shapes Video – Corbettmaths</li></ul>
	Similarity	<ul style="list-style-type: none"><li>• Similar Shapes: Finding Sides Textbook Exercise – Corbettmaths</li></ul>

	Exact trig values	<ul style="list-style-type: none"> <li>Exact Trigonometric Values Video – Corbettmaths</li> </ul>
<b>Area and Volume</b>	Sphere	<ul style="list-style-type: none"> <li>Volume of a Sphere Exercise 361 (corbettmaths.com)</li> <li>Surface Area of a Sphere (corbettmaths.com)</li> </ul>
	Cylinder	<ul style="list-style-type: none"> <li>Surface Area of a Cylinder (corbettmaths.com)</li> <li>Volume of a Cylinder (corbettmaths.com)</li> </ul>
	Circles	<ul style="list-style-type: none"> <li>Circumference (corbettmaths.com)</li> </ul>
<b>Angles</b>	Straight line	<ul style="list-style-type: none"> <li>Angle Facts (corbettmaths.com)</li> </ul>
<b>Statistics</b>		
Average problems		<ul style="list-style-type: none"> <li>Averages and range (corbettmaths.com)</li> </ul>
<b>Probability</b>		
Venn Diagram		<ul style="list-style-type: none"> <li>Venn Diagrams Video – Corbettmaths</li> </ul>

## HIGHER

### Maths – Exam Preparation

8300/2H – Paper 2 Calculator

Topic	Detail	Corbett Maths
<b>Number</b>		
<b>Properties of Number</b>	Triangular number	<ul style="list-style-type: none"> <li>Triangular Numbers Video – Corbettmaths</li> </ul>
	Reciprocal	<ul style="list-style-type: none"> <li>Reciprocals Video – Corbettmaths</li> </ul>
	Bounds	<ul style="list-style-type: none"> <li>Lower and Upper Bounds Video – Corbettmaths</li> <li>Limits of accuracy – problems Video – Corbettmaths</li> </ul>
<b>Money</b>	Problem solving	<ul style="list-style-type: none"> <li>Regular Payments Practice Questions – Corbettmaths</li> </ul>
<b>Algebra</b>		
<b>Manipulation</b>	Multiply out	<ul style="list-style-type: none"> <li>Expanding Brackets Video – Corbettmaths</li> <li>Expanding Two Brackets Video – Corbettmaths</li> <li>Expanding Three Brackets Video – Corbettmaths</li> <li>Surds – Expanding Brackets Video – Corbettmaths</li> </ul>
	Identities	<ul style="list-style-type: none"> <li>Equating Coefficients Practice Questions - Corbettmaths</li> </ul>
	Algebraic Fractions	<ul style="list-style-type: none"> <li>Simplifying Algebraic Fractions (corbettmaths.com)</li> </ul>
	Rearrange formulae	<ul style="list-style-type: none"> <li>Changing the Subject (corbettmaths.com)</li> <li>Changing the Subject Advanced (corbettmaths.com)</li> </ul>
<b>Sequences</b>	Quadratic	<ul style="list-style-type: none"> <li>Quadratic nth Term (corbettmaths.com)</li> </ul>
	Iteration	<ul style="list-style-type: none"> <li>Iteration (corbettmaths.com)</li> </ul>
<b>Graphs</b>	Coordinate problem	<ul style="list-style-type: none"> <li>Coordinates Video – Corbettmaths</li> </ul>



	Gradients	<ul style="list-style-type: none"> <li>Equation of a Line (corbettmaths.com)</li> </ul>
	Turning point	<ul style="list-style-type: none"> <li>Finding Turning Points Video – Corbettmaths</li> <li>Quadratic Graphs: Completing the Square Video – Corbettmaths</li> </ul>
	Transformations	<ul style="list-style-type: none"> <li>Transformations of Graphs (corbettmaths.com)</li> </ul>
<b>Ratio</b>		
<b>Ratio</b>	1:n	<ul style="list-style-type: none"> <li>Ratio Simplifying Textbook Exercise – Corbettmaths</li> </ul>
<b>Applications and Percentages</b>	Rate of output	<ul style="list-style-type: none"> <li><a href="#">Rates of Change Videos – Corbettmaths</a></li> </ul>
	Reverse Percentage	<ul style="list-style-type: none"> <li>Reverse Percentages Textbook Exercise – Corbettmaths</li> </ul>
	Compound interest	<ul style="list-style-type: none"> <li>Compound Interest pdf (corbettmaths.com)</li> </ul>
	Problem Solving	<ul style="list-style-type: none"> <li>Ratio Solving Problems 1 (corbettmaths.com)</li> </ul>
<b>Geometry and Measures</b>		
<b>Area and Volume</b>	Hemisphere	<ul style="list-style-type: none"> <li>Volume of a Sphere Video – Corbettmaths</li> <li>Surface area of a Sphere Video – Corbettmaths</li> </ul>
<b>Shape</b>	Similarity	<ul style="list-style-type: none"> <li>Similar Shapes: Finding Sides Textbook Exercise – Corbettmaths</li> </ul>
<b>Angles</b>	Polygons	<ul style="list-style-type: none"> <li>Angles in polygons (corbettmaths.com)</li> </ul>
	Angle facts	<ul style="list-style-type: none"> <li>Angle Facts (corbettmaths.com)</li> </ul>
<b>Transformation</b>	Translation	<ul style="list-style-type: none"> <li>Translations (corbettmaths.com)</li> </ul>
<b>Statistics</b>		
Mean		<ul style="list-style-type: none"> <li>The Mean Video – Corbettmaths</li> <li>Means from Frequency Tables Video – Corbettmaths</li> <li>Combined Mean Video – Corbettmaths</li> </ul>
<b>Probability</b>		
Relative Frequency		<ul style="list-style-type: none"> <li>Relative Frequency Video – Corbettmaths</li> </ul>
Expected value		<ul style="list-style-type: none"> <li>Probability Video – Corbettmaths</li> </ul>
Notation		<ul style="list-style-type: none"> <li>Probability Video – Corbettmaths</li> </ul>
Sample space		<ul style="list-style-type: none"> <li>Sample Spaces (corbettmaths.com)</li> </ul>
Problems		<ul style="list-style-type: none"> <li>Independent Events (corbettmaths.com)</li> </ul>