



The  
**Appleton**  
School

# KS4 MATHEMATICS

Edexcel

**FOUNDATION:  
NON CALCULATOR**

**PERSONAL LEARNING  
CHECKLISTS**

**2022**

## Mathematics - Foundation: Non Calculator

RAG Rate each section in the first column

Red = Not at all confident – needs major revision focus, Amber = requires more revision until confident. Green = Confident.

Use remaining columns to colour code when you have revised and tested your knowledge and understanding over several weeks.

Key Idea	Key Knowledge to understand	Hegarty Maths Clip Number	RAG					
<b>Number</b>								
Arithmetic	Money	743 – 754						
	Negative number	37 – 44						
Fractions	Order fractions, decimals, percentages	52, 55, 73 – 76, 82, 83, 149						
	Fraction of an amount	77						
	Fraction arithmetic	65 – 70, 80						
Properties	Place value	13, 45						
	Product of prime factors	29, 30, 32, 35						
Standard form	Conversion	122, 123, 124						
	Calculation	125, 126, 127						
Approximation and Estimation	Estimation	131						
<b>Algebra</b>								
Manipulation	Simplification	156 – 159, 173, 174						
	Substitute values	155, 278, 780 – 783						
Equations and inequalities	Linear inequality	265 – 272						
	Quadratic equation	230, 234						
Graphs	Quadratic graph	251 – 255						

Sequences	Linear sequence	196, 197, 198							
<b>Ratio, proportion, and rates of change</b>									
Conversion	Length	692, 693, 694, 705, 706							
Percentages	Percentage of an amount	84, 85, 86							
	Percentage increase	88, 91, 92, 94, 97, 98							
Ratio	Write as a ratio	328, 329							
	Share in a ratio	332 – 335							
Proportion	Direct proportion	339, 340, 341, 343, 344, 345, 348, 739 – 742							
Compound Measures	Speed	716 – 724							
	Density	725 – 729, 731							
<b>Geometry and measures</b>									
Shape	Reflection	639, 640, 641							
	Plan and elevation	837 – 844							
Angles	Angles in a polygon	560 – 565							
Length, area, and volume	Volume of a cube	568, 569							
	Volume of a cylinder	572, 573, 574							
Pythagoras's Theorem and Trigonometry	Exact trigonometric values	845							
<b>Probability</b>									
Probability	Probability	349 – 363							
	Frequency tree	368, 369							
<b>Statistics</b>									
Diagrams	Pictogram	426							
	Bar chart	425							
	Stem and leaf diagram	430 – 433							