## **GCSE to A Level Mathematics Transition Work Summer 2024**

- You need to complete the compulsory sections of this workbook before you start in September. The other sections are optional.
- You should complete all of your work on lined paper. This should include titles for each of the 6 sections and subheadings for each task completed.
- You must show full working out for each question.
- There are no answers provided as we will mark this in September. So if you get stuck you should follow the guidance in the table below which has recommended videos.
- If you get really stuck on a question, or questions, please do not worry about it. Watch the videos and try again. If you still need help, we will be able to support you in September.

Task	Compulsory?	Stuck? Try these Corbett Maths videos https://corbettmaths.com/contents/	Completed? ✔ X
Indices 1	Yes	<ul> <li>17 - algebraic indices</li> <li>172 - numerical indices</li> <li>173 - fractional indices</li> <li>174 - laws of indices</li> <li>175 - negative indices</li> </ul>	
Indices 2	Yes		
Roots and indices maze			
Matching pairs			
Where does it belong?			
Surds 1	Yes	305 - intro, rules, simplifying 306 - addition/subtraction 307 - rationalising denominators 308 - expanding brackets	
Surds 2	Yes		
Another brick in the wall			
True or false			
The wheel of Theodorus			
Further factorising 1	Yes	<ul> <li>118 - factorise quadratics</li> <li>119 - factorise quadratics harder</li> <li>119a - splitting the middle (when the number in front of the squared term is greater than 1)</li> <li>120 - difference of 2 squares</li> </ul>	
Further factorising 2	Yes		
Difference of two squares	Yes		
ax² + bx + c	Yes		

Trickier quadratics	Yes		
Further factorising problems			
Factorising challenge			
Completing the square 1	Yes	10 - completing the square	
Completing the square 2	Yes		
Different forms			
Further factorising 1	Yes	7 - changing the subject 8 - changing the subject advanced	
Further factorising 2	Yes		
Equivalent quadratics			
The quadratic formula			
Solving quadratics 1	Yes	<ul> <li>266 - quadratics: solving (factorising)</li> <li>267a - quadratics: solving (completing the square)</li> <li>267 - quadratics: formula</li> </ul>	
Solving quadratics 2	Yes		
Quadthagoras			
Up in the air!	Yes		
Quadratics challenge			

