



Year 8		Term 2		
Stage	Description			
	Section A Indices, Standard Form	Section B Ratio	Section C Proportional Reasoning	
Emerging	<ul style="list-style-type: none"> <li>Apply the correct order of operations.</li> <li>Use and apply square numbers in problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>Use ratio notation to describe a comparison of more than two measurements or objects.</li> <li>State a ratio of measurements in the same units.</li> <li>Simplify a ratio by cancelling common factors.</li> </ul>	<ul style="list-style-type: none"> <li>Can apply a ratio to solve a numerical problem.</li> <li>Can show using diagrams how a ratio is applied.</li> </ul>	
Developing	<ul style="list-style-type: none"> <li>Develop understanding of factors and multiples.</li> <li>Compare numbers written different notation.</li> </ul>	<ul style="list-style-type: none"> <li>Use common factors to scale up or down proportion contextual problems.</li> <li>Find a relevant multiplier in a situation involving proportion</li> <li>Apply ratio and scales to connect changes.</li> </ul>	<ul style="list-style-type: none"> <li>Understands how changes made can adapt the form of a ratio.</li> <li>Can give one amount as a proportion of another.</li> </ul>	
Secure	<ul style="list-style-type: none"> <li>Calculate with powers and roots</li> <li>Calculate exactly with surds</li> </ul>	<ul style="list-style-type: none"> <li>Express correctly the solution to a division in a ratio problem.</li> <li>Apply ratio rules to more complex problems.</li> </ul>	<ul style="list-style-type: none"> <li>Can make conclusions about proportion and justify response given.</li> </ul>	
Excellence	<ul style="list-style-type: none"> <li>Write a large (small) number in standard form</li> <li>Interpret a large (small) number written in standard form</li> </ul>	<ul style="list-style-type: none"> <li>Understands when something is directly proportional to another.</li> <li>Can calculate proportions when given a scale to use.</li> </ul>	<ul style="list-style-type: none"> <li>Can apply rules of direct proportion and use knowledge to form accurate calculations.</li> </ul>	