

Curriculum Map	Subject: Mathematics		
Theme / Area Covered	Unit 1 Number and the Number System		
	Age Related Targets – Year 7	Age Related Targets – Year 8	Age Related Targets – Year 9
Key Objectives / Learning Pathway Emerging	<p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.</p> <p>Use negative numbers in context and calculates intervals across zero</p> <p>Count forwards and backwards in steps of powers of 10 for any number up to 10,000,000</p> <p>Multiply and divide any number by 10,100 and 1000.</p>	<p>Multiply and divide by powers of ten (e.g. 100), including multiplying and dividing decimals by positive powers of ten.</p> <p>Identify factor pairs of numbers</p> <p>Find prime factors of numbers. List factors and multiples of a number.</p> <p>Find squares and cubes.</p>	<p>Explain the link between the power of ten and the shift in the digits. Express 10s as powers of ten e.g. $100 = 10^2$.</p> <p>Put large numbers into and out of standard form.</p> <p>Find prime factors.</p> <p>Write a number as a product of its prime factors.</p> <p>Use listing methods to find HCF and LCM. State and use the multiplicative and division indices rule, when bases are common.</p>
Key Objectives / Learning Pathway Developing	<p>Multiply and divide by powers of ten (e.g. 100), including multiplying and dividing decimals by positive powers of ten.</p> <p>Identify factor pairs of numbers.</p> <p>Find prime factors of numbers.</p> <p>List factors and multiples of a number.</p> <p>Find squares and cubes.</p>	<p>Explain the link between the power of ten and the shift in the digits. Express 10s as powers of ten e.g. $100 = 10^2$.</p> <p>Put large numbers into and out of standard form.</p> <p>Find prime factors.</p> <p>Write a number as a product of its prime factors.</p> <p>Use listing methods to find HCF and LCM. State and use the multiplicative and division indices rule, when bases are common.</p>	<p>Describe the relationship between negative indices and decimals with regards to powers of ten.</p> <p>Express place value in powers of ten.</p> <p>Put large and small numbers in standard form and do multiplication and division with them.</p> <p>Use prime decomposition to determine if a number is a square.</p> <p>Use prime factors to find HCF and LCM (Using Venn diagrams). Know exceptions to multiplicative and division indices rules.</p> <p>Use the indices rule for indices with brackets.</p>
Key Objectives / Learning Pathway Securing	<p>Explain the link between the power of ten and the shift in the digits. Express 10s as powers of ten e.g. $100 = 10^2$.</p> <p>Put large numbers into and out of standard form.</p> <p>Find prime factors.</p> <p>Write a number as a product of its prime factors.</p> <p>Use listing methods to find HCF and LCM. State and use the multiplicative and division indices rule, when bases are common.</p>	<p>Describe the relationship between negative indices and decimals with regards to powers of ten.</p> <p>Express place value in powers of ten.</p> <p>Put large and small numbers in standard form and do multiplication and division with them.</p> <p>Use prime decomposition to determine if a number is a square.</p> <p>Use prime factors to find HCF and LCM (Using Venn diagrams). Know exceptions to multiplicative and division indices rules.</p> <p>Use the indices rule for indices with brackets.</p>	<p>Able to use standard form in context.</p> <p>Can use addition and subtraction with standard form.</p> <p>Use prime factor decomposition to solve problems, such as finding square or cube roots, or to ascertain divisibility or find other factors.</p> <p>Able to prove indices rules</p>
Key Objectives / Learning Pathway	Describe the relationship between negative indices and decimals with regards to	<p>Able to use standard form in context.</p> <p>Can use addition and subtraction with</p>	

Excelling	<p>powers of ten. Express place value in powers of ten. Put large and small numbers in standard form and do multiplication and division with them. Use prime decomposition to determine if a number is a square. Use prime factors to find HCF and LCM. Know exceptions to multiplicative and division indices rules. Use the indices rule for indices with brackets.</p>	<p>standard form. Use prime factor decomposition to solve problems, such as finding square or cube roots, or to ascertain divisibility or find other factors. Able to prove indices rules</p>	
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