


Learning Plan 5		Subject/Pwnc: Mathemateg	Year/Blwyddyn: 8
<p><u>The Four Purposes in Maths and Numeracy:</u></p> <p>Ambitious, capable learners who: set themselves high standards; seek and enjoy challenge; are increasingly knowledgeable and skilful; are questioning; enjoy solving problems; can communicate effectively; can explain the ideas and concepts; can use number effectively; understand how to interpret data and apply mathematical concepts</p> <p>Enterprising, creative contributors who: connect and apply their knowledge and skills to create ideas; think creatively to reframe and solve problems; identify and grasp opportunities; take measured risks</p> <p>Ethical, informed citizens</p> <p>Healthy, confident individuals who: face and overcome challenge; have the skills and knowledge to manage everyday life</p> <p>Knowledge focus/what matters:</p> <p>Basic conventions of algebra: <i>Algebra</i> uses symbol systems to express the structure of mathematical relationships. Ratio: <i>The number system</i> is used to represent and compare relationships between numbers and quantities.</p>			 <p>CHRIST THE WORD CATHOLIC SCHOOL CRIST Y GAIR</p>
Learning objective/key question	What will I know and be able to do? I can...	How will I develop my skills? (Success Criteria)	Homework/Gwaith cartref to support progress
<p>Week 1-4:</p> <p>Understand and use the basic conventions of algebra</p>	<p>recall and use the basic conventions of algebra</p> <p>substitute positive and negative whole numbers, fractions and decimals into simple formulae expressed in words or in symbols</p> <p>explain the difference between equations, expressions, identities and formulae</p> <p>form and simplify expressions</p> <p>collect like terms</p>	<p>Understanding: I can explain and use the basic conventions of algebra</p> <p>Communicating and skills: I can communicate accurately with symbols, letters and numbers, by forming and simplifying expressions</p> <p>Fluency: I can fluently substitute different values into expressions</p> <p>Logical reasoning: I can reason and justify whether something is a formula, expression, equation or identity</p> <p>Problem solving: I can strategically solve problems in a variety of contexts by forming or using expressions</p>	<p>Wk 1-2</p> <p>Mathswatch homework</p> <p>Set:</p> <p>Due:</p>

<p>Week 4: SYL</p>	<p>Demonstrate an understanding of the basic conventions of algebra</p>	<p>I can use the basic conventions of algebra</p> <p>I can form expressions</p> <p>I can simplify expressions</p> <p>I can substitute positive values into expressions</p> <p>I can substitute negative values into expressions</p> <p>I can categorise formulae, expressions, equations and identities</p> <p>I can model real-world problems by forming or using expressions</p>	<p>Wk 3-4</p>	<p>Mathswatch homework</p> <p>Set:</p> <p>Due:</p>
<p>Week 5-6: What are ratios and why are they useful?</p>	<p>understand what the parts of a ratio represent</p> <p>simplify ratios</p> <p>share quantities into ratios</p> <p>find total amounts when given a ratio and one of the shares</p> <p>find the difference between two shares</p> <p>convert between ratios and proportions (fractions)</p> <p>solve problems involving ratios in different contexts</p>	<p>Understanding: I can explain what the parts of a ratio represent</p> <p>Communicating: I can communicate accurately with symbols and numbers, by forming and simplifying ratios</p> <p>Fluency: I can fluently work with ratios in a variety of contexts</p> <p>Logical reasoning: I can reason in the context of ratios and multiplicative relationships I can use logical reasoning to solve unfamiliar problems I can explain why my solution works in a clear and structured way</p> <p>Problem solving: I can strategically solve problems in a variety of contexts by applying knowledge and understanding of ratios I can explain how maths helps us understand and solve real-world problems</p>	<p>Wk 5-6</p>	<p>Mathswatch homework</p> <p>Set:</p> <p>Due:</p>