


| Learning Plan 3 | Subject/Pwnc: Mathemateg | Year/Blwyddyn: 10 (A) |  <p data-bbox="1697 544 2033 619">CHRIST THE WORD CATHOLIC SCHOOL CRIST Y GAIR</p> |
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| <p data-bbox="107 140 591 165"><u>The Four Purposes in Maths and Numeracy:</u></p> <p data-bbox="107 172 1554 293">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 data-bbox="107 320 1541 403">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 data-bbox="107 443 360 469">Ethical, informed citizens</p> <p data-bbox="107 509 936 563">Healthy, confident individuals who: face and overcome challenge; have the skills and knowledge to manage everyday life</p> | | | |
| <p data-bbox="107 571 456 596">Knowledge focus/what matters:</p> <p data-bbox="107 632 927 657"><i>Algebra uses symbol systems to express the structure of mathematical relationships.</i></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 | |
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| <p data-bbox="116 804 275 916">Week 1: Feedback and review of mock exam</p> | <ul data-bbox="353 804 898 922" style="list-style-type: none"> Respond to feedback from mock exam Make corrections to mock exam paper Identify areas to improve Make an improved attempt at an exam style paper | <p data-bbox="1059 804 1451 826">Recall and use mathematical knowledge</p> <p data-bbox="1059 863 1451 885">Select and apply mathematical methods</p> <p data-bbox="1059 922 1509 1034">Demonstrate strategic competence by making connections between different aspects of mathematics and using mathematical skills in unfamiliar contexts</p> | <p data-bbox="1608 831 1682 853">Week 1</p> | <p data-bbox="1854 804 1973 948">HW: Set: 23/2/26 Due: 2/3/26</p> |
| <p data-bbox="116 1070 271 1214">Week 2: Understanding linear and quadratic sequences</p> | <ul data-bbox="353 1070 999 1257" style="list-style-type: none"> Generate linear and non-linear sequences given the nth term rule Find the nth term of a sequence, given numerically or diagrammatically, where the rule is linear Find the nth term of a sequence, given numerically or diagrammatically, where the rule is quadratic | <p data-bbox="1059 1070 1576 1214">Understanding: I can explain how algebraic rules and sequences represent patterns and relationships in different ways. I can choose the most effective representation to understand or explore an algebraic idea.</p> <p data-bbox="1059 1246 1576 1329">Communicating & Skills: I can present clear, accurate algebraic work using correct notation and structured steps.</p> <p data-bbox="1059 1361 1525 1444">Fluency: I can work confidently with sequences, applying methods accurately. I can simplify expressions and algebraic fractions reliably.</p> | <p data-bbox="1608 1070 1682 1093">Week 2</p> | <p data-bbox="1854 1070 1973 1214">HW: Set: 2/3/26 Due: 9/3/26</p> |

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| | | <p>Reasoning: I can explain why a rule or algebraic method works using clear, logical steps. I can compare different approaches and justify which method is most efficient or appropriate.</p> <p>Problem Solving: I can link ideas from sequences, algebra and number to solve unfamiliar problems independently. I can test strategies, refine my approach and apply what I know to new contexts, including real-world situations.</p> | | |
| Week 3: Exam preparation | <ul style="list-style-type: none"> Independently attempt the first half of a Unit 2 style paper Identify areas for improvement Read and respond to whole-class feedback on Unit 2 Topic specific focus informed by areas requiring improvement in Unit 2 | <p>Recall and use mathematical knowledge (AO1)</p> <p>Select and apply mathematical methods (AO2)</p> <p>Demonstrate strategic competence by making connections between different aspects of mathematics and using mathematical skills in unfamiliar contexts (AO3)</p> | Week 3 | <p>HW:</p> <p>Set: 9/3/26 Due: 16/3/26</p> |
| Weeks 4-5: Working with complex equations and expressions | <ul style="list-style-type: none"> Simplify algebraic fractions, including the addition and subtraction of fractions with constant terms as the denominators or with linear expressions as denominators Factorise quadratic expressions of the form $x^2 + ax + b$ and $ax^2 + bx + c$, including the difference of two squares Change the subject of a formula when the subject appears in one term or in more than one term Form, manipulate and solve linear equations, including equations with more than one fractional term Form, manipulate and solve linear inequalities where the variable appears on both sides of the inequality or where two separate inequalities are written as a double inequality Form, manipulate and solve by factorisation, quadratic equations of the form $x^2 + bx + c = 0$ or $ax^2 + bx + c = 0$ Form, manipulate and solve two simultaneous linear equations with whole number coefficients by algebraic methods Solve equations involving fractions with linear denominators leading to quadratic or linear equations | <p>Understanding: I can choose the most effective representation to understand or explore an algebraic idea.</p> <p>Communicating & Skills: I can present clear, accurate algebraic work using correct notation and structured steps. I can use algebraic multiplication/division or addition/subtraction to present expressions in their simplest form.</p> <p>Fluency: I can work confidently with equations and inequalities, applying methods accurately. I can simplify expressions and algebraic fractions reliably.</p> <p>Reasoning: I can explain why an algebraic method works using clear, logical steps. I can compare different approaches and justify which method is most efficient or appropriate.</p> <p>Problem Solving: I can link ideas from algebra and graphs to solve unfamiliar problems independently. I can test strategies, refine my approach and apply what I know to new contexts, including real-world situations.</p> | <p>Week 4</p> <p>Week 5</p> | <p>HW:</p> <p>Set: 16/3/26 Due: 23/3/26</p> <p>HW:</p> <p>Set: 23/3/26 Due: 14/4/26</p> |
| <p><i>Show your learning in weeks 4/5 using the above success criteria – S.C. to also be shared by class teacher</i></p> | | | | |