Learning Plan 1	Subject/Pwnc: Mathemateg	Year/Blwyddyn: 10 (B)	

The Four Purposes in Maths and Numeracy:

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

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

Ethical, informed citizens

Healthy, confident individuals who:

face and overcome challenge; have the skills and knowledge to manage everyday life

Knowledge focus/what matters:

Rounding and estimating, indices, equivalence, fractions and percentages:
The number system is used to represent and compare relationships between numbers and quantities.

Equations, inequalities and formulae:
Algebra uses symbol systems to express the structure of mathematical relationships.

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	
Weeks 1-2: Rounding and estimating	- Round whole numbers to the nearest 10, 100, 1000, etc; to the nearest whole number; to a given number of decimal places - Round numbers to a given number of significant figures - Estimate solutions to numerical calculations by approximating the numbers in the calculations	I have a thorough understanding of rounding and estimation, that I can apply to strategically solve problems in different contexts. I can develop appropriate methods for estimation, by applying my prior knowledge and understanding. I can answer questions by summarising my findings or ideas, and I can evaluate answers, finding ways to improve upon them. I can produce accurate and concise verbal and written responses or justifications, explaining my reasoning clearly.	Wk 2	Mathswatch homework Set: 12/9/25 Due: 19/9/25
Assessment at the end of week 2				
Week 3-4: What are indices? EDU/AMA	- Recall and use the terms square, square root, cube and cube root. - Express numbers as the product of their prime factors in index form	I have a detailed understanding of indices and their laws. I can apply my prior knowledge and understanding (of positive integer indices) to investigate index laws, and use this to form my own ideas and methods.	Wk 3	Mathswatch homework Set: 19/9/25 Due: 26/9/25

	• Use prime factor decomposition to help solve other numerical problems, including links to square numbers • Use index notation and the rules of indices to perform calculations with numbers written in index form for positive integral indices	I can evaluate mathematical information to identify the problem, and independently generate, and justify, a clear and concise solution. I evaluate my learning, mistakes and misconceptions, identifying areas for development. I am curious and inquisitive about mathematical concepts.		
Weeks 3-4: Find and use equivalences RDR	• Recall equivalences between fractions, decimals and percentages • Convert numbers from one form into another • Order and compare whole numbers, decimals, fractions and percentages • Recall that recurring decimals are exact fractions, and that some exact fractions are recurring decimals	I understand the concepts of equivalence, fractions and percentages. I can recall and apply relevant prior knowledge and use it to develop new ideas and methods. I can evaluate information, evidence and situations to identify the problem, and independently generate, and justify, a clear and concise solution. I can evaluate answers, finding ways to improve upon them.	Wk 4	Mathswatch homework Set: 26/9/25 Due: 3/10/25
Weeks 5-8: Understand and use fractions and percentages RDR	• Find equivalent fractions • Simplify fractions • Express one number as a fraction or percentage of another • Find a fraction or percentage of a quantity	I can communicate effectively and concisely, using both mathematical notation and written English accurately. I can recall and make links to my own experience of percentages and fractions in other contexts, using these links to make sense of new knowledge in mathematical contexts.	Wk 5	Mathswatch homework Set: 3/10/25 Due: 10/10/25
			Wk 6	Mathswatch homework Set: 10/10/25 Due: 17/10/25
Weeks 5-8: Working with equations, expressions, inequalities and formulae EDU/AMA	• Recognise the definitions of the terms equation, expression, inequality and formula and be able to distinguish between them. • Understand and use number operations and the relationships between them (inverse operations and the hierarchy of operations) • Form, manipulate and solve linear and other simple equations with whole number and fractional coefficients • Form, manipulate and solve simple linear inequalities with whole number and fractional coefficients • Change the subject of a formula when the subject appears in one term	I have a thorough understanding of equations, formulae and inequalities, that I can apply in different contexts. I can independently generate ideas, explanations and solutions. I can choose appropriate methods to check the accuracy of my own solutions and improve upon them. I can use and explain the vocabulary of algebra. I can communicate effectively using symbols and/or appropriate algebraic notation. I can make links and connections with my prior knowledge (of expressions, equations and inverse operations) and use these to develop methods for solving more complex equations and inequalities.	Wk 7	Mathswatch homework Set: 17/10/25 Due: 24/10/25
			Wk 8	Mathswatch homework Set: 24/10/25 Due: 7/11/25
Assessment at the end of week 8				