

Learning Programme – Mathematics – 3rd Year – Set 1

Topic/ Content	Objectives/Skills (topic grade in brackets)	Homework	Assessment	Success Criteria (GCSE grades)	Stretch & Challenge (Thirst for Learning)
	Michaelmas First Half Term				
Algebraic Expressions	Being able to use algebraic notation (3). Distinguish the meaning of ‘expression’, ‘identify’, ‘equation’ and formula (3). Simplifying algebraic expressions (3), expanding single (3), double brackets (4) and factorising into a single bracket (4). Algebraic substitution (3/4).	Two to three teacher marked pieces of homework will be set each half-term.	Half Term Test (week before October half-term)	Mainly determined from Half-Term test, however, class work & homework may also be used. GCSE Grade boundaries dependent on difficulty of test.	Students will be challenged using extension questions on the topics they are studying, designed to develop their ability to solve multi-staged problems.
Multiples, factors and powers	Understand multiples, factors, primes, powers (3). Use prime factor decomposition (4). Find the HCF and LCM of numbers (5). Apply systematic listing strategies including use of the product rule for counting.				
Fractions	Finding a fraction of a quantity, ordering fractions and simplifying fractions (3). Adding, subtracting & multiplying fractions (4). Understanding reciprocals and dividing fractions (4).				
Fractions, decimals, percentages	Converting fractions, decimals, percentages (3). Ordering fractions, decimals, percentages (4). Converting recurring decimals to fractions (7).				
Mental and written calculations	Add, subtract, multiply and divide both integers and decimals. Add, subtract, multiply & divide negative numbers (3). Use a known calculation to work out related calculations, including inverse operations.				
Solving linear equations	Solving equations with unknowns on one side, unknowns on both sides (3), brackets (4) and fractions (5). Forming, then solving linear equations (4).				