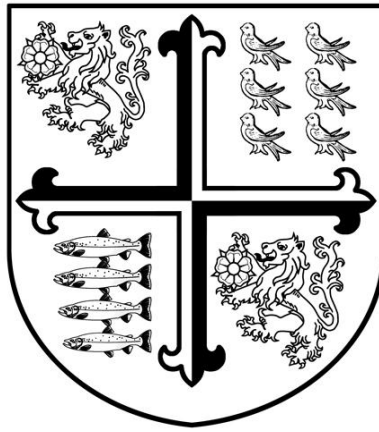




GCSE Mathematics Exam Preparation

Exam Board: Pearson Edexcel

Specification: 1MA1

Specification: Level 1/2 GCSE (9-1) in Mathematics

Contact details:

Mr J Nichols – jnichols@bournemouth-school.org

Year 11 Mathematics: Units and Assessment Criteria

Unit and Duration	Criteria for Success	Assessment Information
Unit 17 – More Algebra 5 weeks Rearranging formulae, algebraic fractions, more surds, algebraic proof, functions	To achieve highly in this unit, you must be able to apply all skills to problem solving and GCSE style questions. - You will be able to change the subject of a formula involving powers, roots and fractions - You will be able to change the subject of a formula when the subject appears twice - You will be able to add, subtract, multiply and divide simple algebraic fractions - You will be able to use a factorised form of algebraic fractions to simplify algebraic fractions - You will be able to use a factorised form of algebraic fractions to find a LCM for addition/subtraction, or to cross-cancel prior to multiplying - You will be able to use algebra to prove identities and statements - You will be able to prove a statement is not true using counter-examples - You will be able to expand and simplify more complex expressions involving surds - You will be able to rationalise more complex denominators - You will be able to solve equations involving algebraic fractions - You will be able to use function notation - You will be able to find and use composite and inverse functions	In class test (~70% skills, ~30% problem solving): w/c 12th October Do Now and in class monitoring Homework – Dr Frost tasks Reported: Christmas
Unit 18 – Vectors and Geometric Proof 4 weeks Combined events, mutually exclusive events, independent and conditional probability, tree and Venn diagrams	To achieve highly in this unit, you must be able to apply all skills to problem solving and GCSE style questions. - You will be able to understand and use vector notation - You will be able to find the magnitude of a vector - You will be able to use vector arithmetic of non-parallel vectors and scalar multiples of parallel vectors - You will be able to use the Triangle law for vector addition - You will be able to solve problems using vectors - You will be able to use the resultant of two vectors - You will be able to use position and displacement vectors to prove collinearity - You will be able to use ratio and fraction in geometric problems	In class test (~70% skills, ~30% problem solving): w/c 9th November Do Now and in class monitoring Homework – Dr Frost tasks Reported: Christmas
Revision and Mock Exams – 4 weeks	To achieve highly in this unit, you must be able to apply all skills to problem solving and GCSE style questions.	w/c 30th November Non-Calculator and Calculator papers

	You must revise for this, using past papers (available on Teams, MathsGenie, PhysicsAndMathsTutor)	
Unit 19 – Proportion and Graphs 5 weeks Proportion, percentages, graphs, non-linear distance and speed time graphs, graphical transformations	To achieve highly in this unit, you must be able to apply all skills to problem solving and GCSE style questions. • You will be able to write and use equations to solve problems involving direct proportion • You will be able to write and use equations to solve problems involving inverse proportion • You will be able to solve proportionality problems involving powers and roots • You will be able to recognise and sketch graphs showing proportional relationships • You will be able to recognise and sketch graphs of exponential functions (growth and decay) • You will be able to estimate the gradient of non-linear graphs using a tangent • You will be able to estimate the area under a non-linear graph using trapeziums • You will be able to interpret the gradient and area of non-linear graphs in context • You will be able to translate and reflect the graphs of functions	In class test (~70% skills, ~30% problem solving): w/c 25th January Do Now and in class monitoring Homework – Dr Frost tasks Reported: Easter