



Go to university to enhance your studies and get a degree



Christ the King College

MATHEMATICS LEARNING JOURNEY



Mathematics is a facilitating subject

Start a degree level apprenticeship

External A2 Mathematics Exams:
 Paper 1: Pure 33.3%
 Paper 2: Pure 33.3%
 Paper 3: Statistics & Mechanics

A2 Mechanics Year 2:
 Moments, Friction, Projectile Motion, Applications of Forces, Further Kinematics.

A2 Statistics Year 2: Regression, Correlation & Hypothesis Testing, Conditional Probability, Normal Distribution.



Derivative
 $\frac{d}{dx} f(x)$

The derivative of the function $f(x)$ evaluated at $x=a$ gives the slope of the curve at $x=a$.

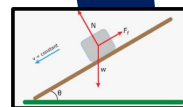
Integral
 $\int f(x) dx$

The integral of the function $f(x)$ over the range a to b gives the area under the curve between those points.

A2 Exam Strategies & techniques.

YEAR 13

A2 Pure Maths Year 2: Algebra, Functions, Sequences & Series, Binomial Expansion, Radians, Trigonometric Functions & Modelling, Parametric Equations, Differentiation, Numerical Methods, Integration & Vectors.



A2 Mathematics or A2 Mathematics + *Further Mathematics Pathways.

*Further Maths – detailed on separate learning journey

End September
 Suitability Assessment

A2 Mechanics Year 1:
 Introduction, Constant Acceleration, Forces & Motion, variable Acceleration.

YEAR 12

Mathematical argument, language and proof. Problem Solving. Modelling.

External GCSE Exams
 Paper 1 (Non-Calc)
 Paper 2 & 3 (Calc)



A2 Pure Maths Year 1: Algebra, Algebraic Methods, Graphs & Transformations, Straight Line Graphs, Circles, Binomial Expansion, Trigonometric identities & Equations, Vectors, Differentiation, Integration, Exponentials & Logarithms.

A2 Statistics Year 1: Data Collection, Measures of Location & Spread, Representations, Correlation, Probability, Distributions, Hypothesis Testing.

Assessment for Learning
 Key outstanding topics. Reasoning. Revision & communication.

End of Year 10 Assessment
 GCSE Paper

Summer Term 1: Unit 6
 Types of numbers & sequences. Indices & roots. Manipulating expressions.

Spring Term 2: Unit 4
 Ratios & fractions. Percentages & interest. Probability.

March Mock Exams

January Mock Exams

GCSE Exam practice

November Mock Exams

YEAR 11

GCSE Exam Strategies & techniques

Spring Term 1: Unit 3
 Numbers. Using percentages. Maths & money.

Summer Term 1: Unit 5: Enlargement & similarity. Solving ratio & proportion problems. Rates.

Edexcel GCSE Course Builds on Key Stage 3: Higher / Foundation

Summer Term 1: Unit 5
 Collecting, representing & interpreting data. Non-calculator methods.

Spring Term 1: Unit 3
 Angles & bearings. Circles. Vectors.



Autumn Term 2: Unit 2
 Three dimensional shapes. Constructions & congruency.

Fluency.

Reasoning.

Problem Solving

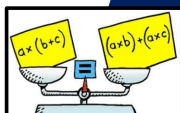
YEAR 10

Autumn Term 1: Unit 1
 Congruence, similarity & enlargement. Trigonometry.

Spring Term 2: Unit 4
 Deduction. Rotation & Translation. Pythagoras' theorem.

Summer Term 2: Unit 6
 Probability. Algebraic Representation. Revision.

Autumn Term 2: Unit 2
 Representing solutions of equations & inequalities. Simultaneous equations.



Summer Term 1: Unit 5
 Angles in parallel lines & polygons. Area of trapezia & circles. Line symmetry & reflection.

Spring Term 1: Unit 3
 Brackets, equations & inequalities. Sequences. Indices.

Autumn Term 1: Unit 1
 Ratio & scale. Multiplicative change. Multiplying & dividing fractions.

YEAR 9

Problem Solving.

Reasoning.

Fluency

YEAR 8

Autumn Term 1: Unit 1
 Straight line graphs. Forming & solving equations. Testing conjectures.

Summer Term 1: Unit 6
 Data handling cycle. Measures of location.

Spring Term 2: Unit 4
 Fractions & percentages. Standard index form. Number Sense.

Autumn Term 2: Unit 2
 Working in the Cartesian plane. Representing data. Tables & Probability.

Spring Term 1: Unit 3
 Problem solving with addition, subtraction, multiplication & division. Fractions and % of amounts.

Summer Term 1: Unit 5
 Constructing, measuring & using geometric notation. Develop geometric reasoning.



Autumn Term 1: Unit 1
 Sequences. Algebraic notation. Equality & equivalence.

Fluency.

Reasoning.

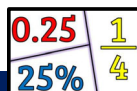
Problem Solving

YEAR 7

Autumn Term 2: Unit 2:
 Place Value & ordering integers & decimals. Fraction, decimal & percentage equivalence.

Spring Term 2: UNIT 4
 Operations & equations with directed number. Addition & subtraction of fractions.

Summer Term 2: Unit 6
 Developing number sense. Sets & probability. Prime numbers & proof.



PRIMARY SCHOOL

Forge and develop friendships



CTKC Transition Programme. Visit the school and meet your form tutor



Sit SATS in Year 6

Build a solid foundation in education



Develop a lifelong love of learning

