EMMAUS CATHOLIC MAC
Our journey with Christ

THE MATHS LEARNING JOURNEY

HAGLEY CATHOLIC HIGH SCHOOL
SEMPER FIDELIS

Learners who are rich in mathematical knowledge and who have the skills to comprehend and solve complex mathematical problems

YEAR 11

Vector arithmetic
Similarity
Enlargement
Reflection and rotation
N
Straight line graphs & Pythagoras
Scale diagrams and bearings
Trigonometry
Tree diagrams
Venn diagrams
Construction and loci
Expected outcomes and sample spaces
Recap Pythagoras
Simultaneous equations
Sequences
Basic functions
Congruency
Translation using vectors

YEAR 10

Exact calculations
Plans and elevations
Standard form
Indices laws including negative powers
Scatter graphs
Solve equations and inequalities
Recognising Y = mx + c
Inverse proportion
Angles in polygons
Charts with discrete and continuous data
Surface area of prisms
Area of circles and complex compound shapes
Rounding for approximations
Algebra substitution into complex formulae
Decimal calculations with and without a calculator
Algebra factorising
Highest common factors & lowest common multiples
Ratio multiplier
Angles in parallel lines and tangents
Quadratic graphs
Compound percentage
Direct proportion
Pythagoras' theorem
Mean from a table
Volume of prisms
Perimeter
Compound measures
Algebra expansion

Students may change to Higher pathway

YEAR 9

Circles circumference
Volume of cuboids
Real life graphs
Two-way tables
Trial and improvement with decimals
Equations
Angles on parallel lines
Reciprocal
Algebraic expressions with index notation
Order of operations including negatives
Fraction problems
Prime factors
Fractions and decimals conversion
Ratio and proportion problems
Construction
Construct expressions
Area of quadrilaterals, triangles, and compound shapes
Transformations
Probability with mutually exclusive events
Bearings
Expanding brackets and factorising
Angles and bearings
Mode, median, mean, range
Rotation and translation
Quadrilaterals
Coordinates in all quadrants
Ratio
Algebraic manipulation
Maps and scale drawings
Prime numbers
Area of compound shapes
Sequences
Form formulae & use substitution
Measurements
Pie charts
Probability
Cuboids & prisms
Linear graphs
Construct triangles
Equations

Students may change to Higher pathway

YEAR 8

Measurements
Proportion
Money problems
Basic function machines
Factors and multiples
Rounding
Using a calculator
Angles
Coordinates & direction
Time
Area of a rectangle and triangle
Reflection
Trial and improvement
Sequences
Substitution into formulae
Speed
Cubes and index notation
Time problems
Percentage problems
Fraction and decimal arithmetic
Negative numbers

YEAR 7

Mean and range
Equivalence of fractions, decimals, percentage
Percentages of a quantity
Squares and square roots
Problem solving using bar lines and negatives
Frequency tables and diagrams
Ordering decimals
Probability
Powers of ten
Written methods of arithmetic

WELCOME

Hebrews 13:8 'Jesus Christ is the same yesterday, today and forever'