Watling Academy - Maths - Learning Journey

A-Level

Revision and recap
Preparation for GCSE's

Revision and recap
Preparation for GCSE's

Transformations recap
Transformation of functions
Ethos: STEM
Habits: Making links and applying knowledge, imagining, innovating and creating

Iterations
Proof
Constructions and loci
Vectors
Ethos: STEM, Sustainability
Habits: Making judgements, problem-solving

Quadratic graphs
Simultaneous Equations
Direct and Inverse Proportion
Curves and graphs
Equation of a circle
Ethos: STEM
Habits: Concentrating, making links, perseverance

Indices, surds and exact calculations
Brackets
Angle rules and circle theorems
Solving equations and inequalities
Ethos: STEM
Habits: making links, resilience, communication

GCSE Year 11

GCSE Year 10

Indices and standard form
Brackets
Angles and bearings
Rounding, estimation and bounds
Ethos: STEM
Habits: resilience, making link, communicating,

Solving equations
Rearranging equations
Fractions, decimals and ratio
Percentages, growth and decay
Ethos: STEM, Milton Keynes
Habits: problem-solving, creating, imagining and

Area, surface area and volume
Compound units and real life graphs
Plans, elevations, reflections and rotations
Ethos: STEM
Habits: Problem-solving, making links, resilience

Similar shapes
Enlargements
Pythagoras
Trigonometry
Ethos: STEM
Habits: Problem-solving, noticing, making links

Sequences
Linear graphs
Functions
Ethos: STEM, Milton Keynes
Habits: Making links and applying knowledge, noticing

Charts and graphs
Probability and probability diagrams
Systematic listing and the product rule
Statistical measures and averages
Ethos: STEM, Sustainability, Milton Keynes
Habits: collecting, using and distilling data, reasoning

KS3 Year 9

Transformations
Surface area, plans and elevations
Loci and constructions
Charts and graphs
Ethos: Sustainability, Milton Keynes
Habits: Creating, imagining and innovating, noticing

Angles
Similar shapes
Pythagoras and Trigonometry
Ethos: STEM
Habits: Making links, resilience, problem solving

Solving equations, inequalities and changing the subject
Area and Volume
Percentages
Ethos: STEM, Sustainability, Milton Keynes
Habits: Problem solving, making links and applying knowledge

Fractions
Ratio Notation
Probability
Ethos: STEM
Habits: noticing, problem solving, making links, thinking

Properties of number
Rounding, estimation and bounds
Averages
Directed Numbers
Standard form
Ethos: STEM, Milton Keynes
Habits: collecting and using data, resilience, communication

Algebraic notation
Sequences
Graphs (linear and quadratic)
Compound units and measures
Ethos: STEM, Milton Keynes
Habits: resilience, making links, noticing

KS3 Year 8

Directed numbers
Algebraic notation (brackets)
Sequences
Coordinates and linear graphs
Ethos: STEM
Habits: resilience, making links, questioning, noticing

Properties of Number
Rounding and estimation
Measures
Area
Solving Equations
Ethos: STEM
Habits: Noticing, questioning, making links, problem solving

Calculations involving fractions
Probability
Ratio Notation
Transformations
Ethos: Milton Keynes
Habits: Creating, reasoning, problem solving

Percentages
Plans, elevations and surface area
Properties of shape
Ethos: STEM, Sustainability
Habits: Making links, thinking, creating

Angles
Volume
Scatter graphs
Ethos: STEM, Sustainability
Habits: Problem solving, making judgements,

Charts and graphs
Averages
Ethos: STEM, Milton Keynes, Sustainability
Habits: Collecting, using and distilling data

KS3 Year 7

Properties of shape
Angles
Charts and graphs
Ethos: STEM, Sustainability
Habits: Reasoning, analysis, research

Calculations involving fractions
Ratio Notation
Probability
Ethos: STEM, Milton Keynes
Habits: Thinking, reasoning, problem solving

Averages
Sequences
Coordinates and linear graphs
Fractions, decimals and percentages
Ethos: STEM, Sustainability, Milton Keynes
Habits: Reasoning, communication, noticing, listening

Properties of number
4 operations
Measures and scale factors
Area
Ethos: STEM, Milton Keynes
Habits: Problem solving, reasoning, communication

Directed Numbers
Perimeter
Place Value
Introduction to algebraic notation
Solving equations
Ethos: STEM
Habits: problem solving, perseverance, noticing, making links

Project: How to make a profit running a shop in Centre MK
Ethos: Sustainability, Milton Keynes
Habits: Problem solving, research, planning and organisation