

Secondary Maths Curriculum Map

FURTHER STUDY

• all college courses involve use and application of maths especially business, science, engineering, catering, construction, hair & beauty

CAREER PATHS

Mechanic, Beautician, Hairdresser, Secretary, IT, Engineer, Builder, in fact nearly all careers involve some use of maths

SKILLS

Problem solving, logical thought, calculating, reasoning

INTEREST

A continued passion and love of learning about maths will appeal to those who love rules, organisation and logical thought. Maths is a key factor in computer games and construction.

Gradients and lines, Non-linear graphs, using graphs

Algebra
Expressions, formulas and equations
Using and problem solving

Application of Number
Problem solving, money and real life applications

Revision and Assessment Preparation

Qualifications

- Entry Level Certificate
- Functional Skills L1
- GCSE

Multiplicative reasoning
Solving problems with scales and proportions

YEAR 11

Angles and Bearings
Problem solving and practical applications

Congruence, similarity, enlargement

Probability
Outcomes. Application of fractions, percentages and decimals

% and interest

Ratio and fractions
Unitary values
Sharing in proportions

Entry Level Certificate Assignments completed at appropriate points during year 10 and 11. Those who exceed requirements complete exam style questions for FS L1 and/or GCSE to demonstrate progress

Reasoning with Number
Percentages
Money
Applied number problem solving

Geometry
Transforming shapes
Pythagoras

Ratio & Proportion
Scale
Proportion
Rates of Change

Consolidation - End of year assessments

YEAR 10

Properties of Number
Types
Sequences and patterns

Non-calculator methods
4 operations, use of numbers to solve problems in the real world.

Vocational Students have discrete subject lessons. Maths continues with developing core skills through the stages before commencing the external qualification criteria, as well as using and applying skills in Science, Construction, Hair & Beauty, DT, Art and IT

Construction in 2 and 3 dimensions

Algebraic Reasoning
Linear graphs
Form & solve equations

Stage 9

Reasoning with Data
Data handling cycle

Developing Geometry
Angles, Shapes & Symmetry

Developing Number
Standard Form, Fractions & Percentages

Algebraic Techniques
Manipulating expressions
Indices
Number patterns

Directed Number
Calculations

Lines and Angles
Notation, labelling and reasoning

Reasoning and Number
Sets, probability, primes and proof

Stage 8

Proportional Reasoning
Ratio, scale, fraction calculations

Representing Data
Graphs, tables, probable outcomes

Fraction addition & subtraction

Applications of Number
Four operations
Calculating with percentages and decimals

Place Value and Proportion
Ordering and comparing fractions, decimals and percentages

Algebraic Thinking
number patterns
Equality, equivalence
Algebraic notation

Stage 7

Transition students continue with maths through Project Based Learning working on Maths Skills from primary stages 1-6 and moving through stages 7,8 and 9 when appropriate.

Number

Algebra

Ratio & Proportion

Geometry & Measures

Probability

Statistics