Mathematics in Context (Level 3 Core Maths)

Course Description:

The Pearson Edexcel Level 3 Certificate in Mathematics in Context builds on GCSE Mathematics and develops the skills needed to use maths confidently in everyday situations. Students learn to interpret data, assess risk, make financial decisions and solve practical problems. Lessons use real-life examples and give students opportunities to discuss their reasoning and compare different approaches.

The course covers four areas: applications of statistics, probability, linear programming, and sequences and growth. Students learn to analyse information, make predictions, find efficient solutions and understand patterns of change, including compound interest. Core Mathematics supports subjects such as Biology, Psychology, Geography, Business Studies and Economics, but can be combined with a wide range of Level 3 courses.

Qualifications Required:

Minimum entry requirements apply. Grade 5 in GCSE Mathematics. Students should enjoy mathematics and be reasonably confident with the problem-solving aspects of GCSE. **This is a one-year course taken in addition to three other A Level subjects.**

Aims of the Course:

- To develop confidence in using mathematics to solve practical and real-world problems.
- To improve the ability to interpret and analyse statistical information, including graphs, tables and data.
- To develop logical reasoning, problem-solving and decision-making skills.
- To understand how probability and mathematical models can be used to assess risk and make predictions.
- To apply mathematical techniques to financial situations, including interest and growth.
- To strengthen the mathematical skills needed for further study, employment and everyday life.
- To communicate mathematical reasoning clearly and evaluate the reliability of conclusions.

Core Mathematics:
Pearson Edexcel Mathematics in Context

Future Prospects:
Core Mathematics is useful preparation for degrees, apprenticeships and careers that involve data, numerical reasoning or problem-solving, including health sciences, psychology, business, geography and accountancy.

Student Feedback:
Core Mathematics has been offered at the school since September 2018. Students find its practical, real-world focus useful.

Features of the Course:
- Interpret information from graphs, tables, reports and real data
- Apply mathematics to practical financial and planning decisions
- Work through multi-stage problems and explain methods clearly
- Evaluate results, consider assumptions and justify conclusions

Course Content	Examples of Topics
Applications of Statistics	Presenting and interpreting data; averages and spread; correlation and regression.
Probability	Combined and conditional probabilities; analysing chance and risk.
Linear Programming	Using equations, graphs and inequalities to find the best solution to a problem.
Sequences and Growth	Sequences and series; compound interest; growth, decay and rates of change.

Methods of Assessment:
The qualification is assessed through two written examinations, both taken at the end of the course:

- **Paper 1 – Comprehension (40%):** Interpret and analyse information from real-life contexts using a source booklet.
- **Paper 2 – Applications (60%):** Apply mathematical methods to solve practical problems and justify decisions.

Both examinations last 1 hour and 40 minutes. Calculators are permitted, and the qualification is graded from A to E.