

EMMANUEL COLLEGE  
THE MATHS DEPARTMENT  
Philosophical Statement



Our curriculum aims for the students to:

Gain a deep understanding and appreciation of mathematical principles in number, shape, algebra and data handling. Pupils should build upon their knowledge and be encouraged to make connections across mathematical ideas so that they are able to develop fluency, reasoning and competency. Mathematical knowledge can then be applied by students, not only in other subjects (for example, science), but also in their day-to-day lives (for example, deciding upon best value products).

Develop their procedural fluency which is underpinned by deep conceptual understanding. We want them to have strategies for investigation and problem-solving, and an ability to conjecture, explore, reason, explain and justify their mathematical thought. We teach children how to think and how to be active, rather than passive, recipients of information. Used properly, these principles will help students to identify what is true, good and of value.

Develop some of the key skills of a mathematician, resilience and creativity, that allow them to confidently tackle and solve unfamiliar problems. We want all students to become numerate individuals who can interact on a practical basis with the complex world in which we live. This is largely a financial issue (tax, interest, loans, mortgages, budgeting, charitable giving, etc.) but also includes the ability to recognise a poor use of data, plan a journey, make contingency plans, do calculations during a DIY project, etc. We want our students to become algebraically confident. This leads to useful skills for the workplace (coding, Excel, etc.), but also to transferable skills such as logical thinking with a care for detail, being able to apply their knowledge to both familiar and unfamiliar problems.

In summary, through the joy of studying maths, we want our students to grow into people who face challenges with resilience and use their knowledge and creativity with logical thinking to make sense of the world around them.