Cartmel Priory C of E School

‘I have come that you may have life and live it to the full’ John 10:10

Describing the intent, implementation and impact of the Maths curriculum at Cartmel Priory Church of England School.

Christian Value: Faith

Intent – Why teach what we teach?

To provide a well-rounded mathematical curriculum which enables students to perform to their potential with confidence.

To ensure all students are numerate and able to apply their mathematical skills to real life problem solving which enables them to meet employers’ needs and to function in everyday life.

To consistently achieve well above national average GCSE results as a faculty.

Implementation – How we teach?

The department has high expectations of all students at all levels of ability.

A shared pedagogy through the schemes of learning which enables teachers to deliver effective curriculum led by responsive teaching.

Weekly homework with emphasis on the importance of written calculations.

Training students to mark and correct accurately through peer and self-assessment during lessons.

Ensure students take ownership of their learning journey by recording their progress in lessons, homework and tests in the Attainment Log.

Regular teacher assessment which reflects recent teaching and recaps prior knowledge to encourage resilience during exams.

By promoting good revision techniques and preparation to build student's confidence to tackle exam papers where they will find unexpected knowledge and challenging problem solving in the final GCSE examinations.

We expect students to show pride in their work and demonstrate an increased maturity in attitude towards learning. This is demonstrated in the way they approach their studies and how they present their work.

The maths faculty support the school literacy policy through
spellings of key words required in the syllabus
Frayer models to develop understanding of concepts and address misconceptions

Impact – How do we judge the influence of our curriculum on students?

All students achieve their maximum potential in a GCSE grade or other appropriate qualification (Entry level) to allow students to move forward in their chosen 16 – 19 career path.

The faculty achieves well above national average GCSE results.

Spiritual, Moral, Social and Culture in Mathematics (SMSC)

As Billy Connolly says, “Why would I want to learn algebra? I never plan to visit there.” Mathematics is important because of its real-world context. Without context, it is often hard to identify with the beauty and power of mathematics.

Spiritual

Spiritual growth of students is promoted in mathematics through deep thinking and questioning the way in which the world works. In maths lessons students gain an appreciation of the richness and power of mathematics in their everyday lives.
We seek to enable students to make sense of data, sequences and patterns and to use maths as a tool to explore the world around us.
Many mathematicians are philosophers. The study of mathematics, according to Plato, is a prerequisite to a life of philosophy, which helps to develop the power of abstract thought and for Plato, is an essential spiritual practice.

Moral

Moral development underpins the entire maths syllabus. Students are taught to recognise use and misuse of data and to challenge assumptions.
There is a strong element of trust that students work independently with integrity to develop their understanding of maths knowledge and skills. Students should not rely on a calculator to derive answers.

Social

Students experience social development in maths lessons through shared problem solving, discussions, and learning to explain and present ideas. Students are encouraged to develop mathematical reasoning skills by explaining concepts to each other. Self and peer review are key features of maths lessons enabling students to gain an accurate understanding of their progress and what they need to do to improve.

Cultural

Mathematics is a universal language with historical roots in many cultures.
For example, Pythagoras’ theorem, the Fibonacci sequence and plotting coordinates (developed by René Descartes).
Students acquire the skills and knowledge to use mathematics in a variety of cultural contexts such as exchange rates, interpreting data relating to different climates and populations of countries.

British Values

Each student is treated equally and encouraged to participate fully in maths lessons. Lessons are well planned and carefully structured to allow students to develop resilience and to build self-esteem as they accumulate mathematical skills and knowledge. Students take responsibility for their own learning through self-evaluation and target setting which is recorded in their Maths Attainment Logs.