



- ✓ Pupils understand that one of the key purposes of maths is the pursuit of truth, and recognise that it is crucial for all other subjects across the curriculum.
- ✓ Exploring different data, numbers, patterns, formulae and the impact that they have (links to musical patterns).
- ✓ Awe and wonder at the beauty Maths (e.g. of patterns and order and symmetry within the natural world).
- ✓ Identifying naturally occurring mathematical forms.
- ✓ Time to investigate mathematical problems and observe patterns, rules coming to personal conclusions.
- ✓ Develop problem-solving skills, perseverance, resilience and strategic thinking to resolve mathematical problems.
- ✓ Exploring the concept of infinity (link to belief in eternity).
- ✓ Having the opportunity to explore measurement of time (links can be made here to transcendence / God's existence outside of time).



Moral



- ✓ Explore ethical issues relating to statistics and their use/mis-use and manipulation for different purposes (in advertising, propaganda).
- ✓ Research inspirational mathematicians such as Fibonacci, Archimedes, Pythagoras, Goldbach.
- Investigate and evaluate ethical issues regarding money and wealth (impact on world poverty, Fairtrade, developed and less economically developed countries).
- Debate issues relating to the economy, nationally and globally.



Social



- ✓ Developing independence skills and responsibility to prepare them for adult life and financial responsibility.
- ✓ Considering different approaches to collecting data within society (links to ethical issues as well here).
- Recognising the connection between maths skills and life within society.
- Consider the laws of nature and mathematical connections (Fibonacci sequence, symmetry of a butterfly).
- ✓ Links with Maths and global issues (Fairtrade investigation).
- ✓ Analysis of information revealed in census data and insights into society. This can be linked to RE, Citizenship, History, Geography (e.g. multi-cultural/multifaith population).



Cultural



- ✓ Considering different approaches to collecting data within society and ethical issues regarding how it is collected and used.
- ✓ Consider the different uses numbers have within different cultures.
- ✓ Establishing links with pattern found in artwork from different cultures (block printing, mosaics, African patterns, Aztec designs...).
- Exploring the role of maths in architecture (Eden project, Pyramids, Parthenon etc).
- ✓ Investigating historical Maths (Egyptian fractions).
- ✓ Explore the use of symbols within different cultures.