



The Trafalgar School
at Downton

SMSC in The Trafalgar School at Downton Mathematics Department

Spiritual education at The Trafalgar School at Downton involves introducing the awe and wonder of mathematics to children. Mathematics can be used to explain and make sense of the world from mathematical patterns occurring in nature, such as the symmetry of snowflake patterns or the sequence of buds growing on a tree. There is a sense of wonder in the exactness of mathematics as well as a sense of personal achievement in solving problems. Further, mathematics can also be used to consider the idea of infinity and appreciate the scale of the very large and the very small.

Moral education at The Trafalgar School at Downton concerns the use and interpretation of data that is becoming more prevalent in society. Students are given the opportunity to be aware of the use and misuse of data in all issues.

Social education at The Trafalgar School at Downton in mathematics concerns students being given the opportunity to work together. Experimental and investigative work provides an ideal opportunity for students to work collaboratively. Mathematics also allows children to apply their own intuitive feelings and check these against what they have learnt in order to make more sense of the world.

Cultural education at The Trafalgar School at Downton concerns the wealth of mathematics in all cultures and times. Students are given opportunities to explore aspects of personal culture and identity through mathematics. Recognition is given to symmetry patterns, number systems and mathematical thinking from other cultures.

Examples of Spiritual, Moral, Social and Cultural Education in Mathematics at The Trafalgar School at Downton include:

- Students using their understanding of probability to investigate games of chance and evaluate positive and negative aspects of gambling
- Students investigating different number sequences and where they occur in the real world
- Students considering the development of pattern in different cultures including work on tessellations
- Allowing discussion and debate on the use and abuse of statistics in the media
- Allowing discussion and insight into the cultural and historical roots of mathematics including among others, the use and understanding of imperial and metric units of measure
- Students discussing the use of mathematics in cultural symbols and patterns
- Students learning how mathematics is used in the world of finance including being able to appreciate the financial, social and moral impact of varying exchange rates or unmanageable interest rates.

Empowering students to be the source of their own success ...