



# Spiritual, Moral, Social and Cultural learning in Mathematics

## Spiritual development

Developing deep thinking and questioning the way in which the world works promotes the spiritual growth of students. In Maths lessons pupils are always encouraged to delve deeper into their understanding of Mathematics and how it relates to the world around them. The skills of analysing data are taught from Year 9 to Year 11 to enable students to make sense of vast amounts of data available in the modern world around them. Sequences, patterns, measures and ultimately the entire study of Mathematics was created to make more sense of the world around us and we enable each of our students to use Maths as a tool to explore it more fully.

### **Examples of Spiritual lessons in maths:**

1. Pupils considering the development of pattern in different cultures including work on tessellations.
2. Fibonacci pattern

## Moral development

The moral development of pupils is an important thread running through the entire mathematics syllabus. Pupils are taught to be aware of the use and misuse of data.

### **Examples of Moral lessons in maths:**

1. Pupils conducting an opinion survey on a moral issue.
2. Learning about world trade during Maths Week.

## Social development

Problem solving skills and teamwork are fundamental to Mathematics, through creative thinking, discussion, explaining and presenting ideas. Students are always encouraged to develop their Mathematical reasoning skills, communicating with others and explaining concepts to each other. Self and peer reviewing are very important to enable pupils to have an accurate grasp of where they are and how they need to improve. Working together in pairs or groups and supporting others is a key part of Maths lessons.

### **Examples of Social lessons in maths:**

1. Allowing discussion and debate on the use and abuse of statistics in the media

2. Investigation when teaching questionnaires
3. Collaborative real life learning through Maths Week projects across KS3

## Cultural development

Mathematics is a universal language with a myriad of cultural inputs throughout the ages. At Stonehenge we encourage the teaching of various approaches to Mathematics including the Chinese lattice method for multiplication. The ability to use exchange rates for foreign travel are also important life skills students will learn.

### **Examples of Cultural lessons in maths:**

1. Pupils investigating different number sequences and where they occur in the real world
2. Allowing discussion on the cultural and historical roots of mathematics, such as Pythagoras' theorem
3. Pupils discussing the use of mathematics in cultural symbols and patterns
4. Mathematics is a universal language
5. Use of the Chinese lattice method when teaching multiplication
6. Pupils to have the ability to use exchange rates for foreign travel