

Using mathematics to support whole school SMSC

	Spiritual	Moral	Social	Cultural
S M S C	<p>Students can explore beliefs and experience; respect faiths, feelings and values; enjoy learning about oneself, others and the surrounding world; use imagination and creativity and reflect.</p>	<p>Students can recognise right and wrong; respect the law; understand consequences; investigate moral and ethical issues and offer reasoned views.</p>	<p>Students can use a range of social skills; participate in the local community; appreciate diverse viewpoints; participate, volunteer and cooperate and resolve conflict.</p>	<p>Students can appreciate cultural influences; appreciate the role of Britain's parliamentary system; participate in culture opportunities; understand, accept, respect and celebrate diversity.</p>
L I N K S	<p>Students can use mathematics to explain the world around them such as exploring mathematical patterns that occur in nature e.g. the symmetry of snowflake patterns or the stripes of a tiger.</p> <p>Students explore the wonder of patterns due to their heavy use and reverence of geometric patterns e.g. Islamic art</p> <p>Students can feel awe and wonder by exploring fascinating mathematical phenomenon e.g. the Fibonacci Sequence</p> <p>Students can also use mathematics to consider the idea of infinity.</p>	<p>Students can explore the use and interpretation of data that we are using more and more as a growing and changing population e.g. statistics looking at cost of immigration due to benefits and comparing with the amount immigrants contribute to the UK economy via taxation.</p> <p>Students can assess the use and misuse of data concerning moral issues e.g. unpicking crime statistics regarding increased policing</p> <p>Students can use percentages to evaluate loans, debts and investment returns e.g. to compare a range of real-life loans or to evaluate student loan debt in relation to average graduate incomes.</p> <p>Students use mathematical skills to create questionnaires exploring moral issues and analyse responses e.g. views towards current voting age, this could be further broken down by respondent age.</p>	<p>Students are encouraged to explain concepts to each other and support peers in their learning e.g. via the use of maths buddies/class experts</p> <p>Students are introduced to events and team maths challenges where collaboration is encouraged e.g. via the use of inter-house competitions</p> <p>Students can predict trends and consider how the government will plan for these changes by examining Census information in a range of formats e.g. analysing aging population trends and predicting welfare changes as a result.</p> <p>Students are engaged using a hook to show how maths is used in the real world.</p>	<p>Students celebrate the universal nature of mathematical language.</p> <p>Students are introduced to symmetry patterns, number systems and mathematical theory from a range of cultures e.g. Chinese lattice method and Napier's bones.</p> <p>Students explore the meaning behind common mathematical terms e.g. decimate 'kill one in every 10' (Roman) and enriching cultural mathematical differences e.g. Oksapmin counting</p> <p>Students can use exchange rates for foreign travel and can evaluate different exchange rates available e.g. comparing EU/pound exchange rates in the days leading up to an following the EU referendum.</p>
M O R E	<p>http://www.integralscience.org/sacredscience/SS_spiritual.html</p> <p>http://www.metanexus.net/mathematics-science-and-spirituality/</p> <p>http://news.wiley.com/VocMath_Popular</p> <p>http://mathcentral.uregina.ca/beyond/articles/Art/art1.html</p> <p>http://www.storyofmathematics.com/islamic.html</p>			