Highsted Grammar School

Spiritual, Moral, Social & Cultural Mapping

Subject: Mathematics Year: 10

Strand	Explanation of provision	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Spiritual	• ability to be reflective about their own beliefs (religious or otherwise) and perspective on life • knowledge of, and respect for, different people's faiths, feelings and values • sense of enjoyment and fascination in learning about themselves, others and the world around them • use of imagination and creativity in their learning • willingness to reflect on their experiences	*Indices, Rational & Irrational Numbers – explore infinity in relation to recurring decimals*	*Brackets, Equations & Formulae, Coordinate Geometry, Measures, Perimeter, Area & Volume – explore ideas in shape – how can we be sure?*	*Estimation, rounding, approximation & bounds, quadratics – explore ideas in number – how can we be sure when we round?*	*Sequences, Constructions, Angles, Lines & Planes, Transformations – explore architecture around us & how constructions are used for this*	*Similar Shapes, Statistics, Number, Percentage & Compound Measure – connections with numeracy, importance in our lives*	*Pythagoras & Trigonometry, Circle Theorems – explore ideas in shape – how can we be sure? The idea of a proof.*
Moral	• ability to recognise the difference between right and wrong and to readily apply this understanding in their own lives, and to recognise legal boundaries and, in doing so, respect the civil and criminal law of England • understanding of the consequences of their behaviour and actions • interest in investigating and offering reasoned views about moral and ethical issues and ability to understand and appreciate the viewpoints of others on these issues	*Indices, Rational & Irrational Numbers – problem solving choices*	*Brackets, Equations & Formulae, Coordinate Geometry, Measures, Perimeter, Area & Volume – explore choices for measurements and the impact on a building.*	*Estimation, rounding, approximation & bounds, quadratics – explore the idea of a bound and the impact that rounding can have a calculation when making a real life choice*	*Sequences, Constructions, Angles, Lines & Planes, Transformations Theorems – explore choices for measurements and the impact on a building.*	*Similar Shapes, Statistics, Number, Percentage & Compound Measure – explore impact of misleading statistics – what can we believe?*	*Pythagoras & Trigonometry, Circle Theorems – explore choices for measurements and the impact on a building.*
Social	• use of a range of social skills in different contexts, for example working and socialising with other pupils, including those from different religious, ethnic and socio-economic backgrounds • willingness to participate in a variety of communities and social settings, including by volunteering, cooperating well with others and being able to resolve conflicts effectively • acceptance of and engagement with the fundamental British values of democracy, the rule of law, individual liberty and mutual respect and tolerance of those with different faiths and beliefs. They will develop and demonstrate skills and attitudes that will allow them to participate fully in and contribute positively to life in modern Britain	*Indices, Rational & Irrational Numbers – problem solving teamwork*	*Brackets, Equations & Formulae, Coordinate Geometry, Measures, Perimeter, Area & Volume – problem solving teamwork*	*Estimation, rounding, approximation & bounds, quadratics – problem solving teamwork*	*Sequences, Constructions, Angles, Lines & Planes, Transformations – problem solving teamwork*	*Similar Shapes, Statistics, Number, Percentage & Compound Measure – problem solving teamwork*	*Pythagoras & Trigonometry, Circle Theorems – problem solving teamwork*

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Spiritual, Moral, Social & Cultural Mapping

Strand	Explanation of provision	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cultural	• understanding and appreciation of the wide range of cultural influences that have shaped their own heritage and that of others • understanding and appreciation of the range of different cultures in the school and further afield as an essential element of their preparation for life in modern Britain • ability to recognise, and value, the things we share in common across cultural, religious, ethnic and socio-economic communities • knowledge of Britain's democratic parliamentary system and its central role in shaping our history and values, and in continuing to develop Britain • willingness to participate in and respond positively to artistic, musical, sporting and cultural opportunities • interest in exploring, improving understanding of and showing respect for different faiths and cultural diversity and the extent to which they understand, accept, respect and celebrate diversity. This is shown by their respect and attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities	*Indices, Rational & Irrational Numbers – historical influence in our number system*	*Brackets, Equations & Formulae, Coordinate Geometry, Measures, Perimeter, Area & Volume – explore Maths as a universal language, linking with graphs*	*Estimation, rounding, approximation & bounds, quadratics – explore Maths as a universal language, linking with graphs*	*Sequences, Constructions, Angles, Lines & Planes, Transformations – explore the history of geometry*	*Similar Shapes, Statistics, Number, Percentage & Compound Measure – explore Maths as a universal language,*	*Pythagoras & Trigonometry, Circle Theorems – explore the history of Pythagoras and Trigonometry*

NOTES

Spiritual

Maths encourages pupils to develop a logical approach and the ability recall and reason along with questioning the way our world works and this promotes spiritual growth. Through the study of sequences students can discover naturally occurring patterns in nature and consider complex ideas like the idea of infinity and what happens as we tend towards this.

Moral

Moral development is through the use of real life problems where students are encouraged to make decisions based on the information that they are presented with. Particular branches of Maths where this is most important would be percentages and statistics. Students have the opportunity to consider appropriate techniques and question misleading information.

Social

Studying Maths involves problem solving and students have an opportunity to work as part of a team to do this. Students are also able to enjoy their successes and support each other when things do not goas well.

Cultural

Maths is a language of its own which is universal and students develop their skills of communication but using Mathematical notation. Students have an opportunity to discuss where concepts come from and learn about the origins of things such as 'Pythagoras Theorem'

Highsted Grammar School

Spiritual, Moral, Social & Cultural Mapping

Subject: Mathematics Year: 11

Strand	Explanation of provision	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Spiritual	• ability to be reflective about their own beliefs (religious or otherwise) and perspective on life • knowledge of, and respect for, different people's faiths, feelings and values • sense of enjoyment and fascination in learning about themselves, others and the world around them • use of imagination and creativity in their learning • willingness to reflect on their experiences	*Ratio & Proportion, Algebraic Fractions, Statistics – link to golden ration appearing in nature*	*Probability, Quadratic Inequalities, Functions – explore connections with numeracy*	*Curved Graphs & their Transformations, Proofs, Congruency, Vectors – explore ideas in shape – how can we be sure?*	*Revision & Exam Preparation*	*Revision & Exam Preparation*	
Moral	• ability to recognise the difference between right and wrong and to readily apply this understanding in their own lives, and to recognise legal boundaries and, in doing so, respect the civil and criminal law of England • understanding of the consequences of their behaviour and actions • interest in investigating and offering reasoned views about moral and ethical issues and ability to understand and appreciate the viewpoints of others on these issues	*Ratio & Proportion, Algebraic Fractions, Statistics – explore impact of misleading statistics – what can we believe?*	*Probability, Quadratic Inequalities, Functions – explores choices made based on probability*	*Curved Graphs & their Transformations, Proofs, Congruency, Vectors – explore choices for measurements and the impact on a building.*	*Revision & Exam Preparation*	*Revision & Exam Preparation*	
Social	• use of a range of social skills in different contexts, for example working and socialising with other pupils, including those from different religious, ethnic and socio-economic backgrounds • willingness to participate in a variety of communities and social settings, including by volunteering, cooperating well with others and being able to resolve conflicts effectively • acceptance of and engagement with the fundamental British values of democracy, the rule of law, individual liberty and mutual respect and tolerance of those with different faiths and beliefs. They will develop and demonstrate skills and attitudes that will allow them to participate fully in and contribute positively to life in modern Britain	*Ratio & Proportion, Algebraic Fractions, Statistics – problem solving teamwork*	*Probability, Quadratic Inequalities, Functions – problem solving teamwork*	*Curved Graphs & their Transformations, Proofs, Congruency, Vectors – problem solving teamwork*	*Revision & Exam Preparation*	*Revision & Exam Preparation*	

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NOTES

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Moral

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Social

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Cultural

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