Highsted Grammar School
Spiritual, Moral, Social & Cultural Mapping

Subject: Mathematics Year: 12

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, quadratics, simultaneous equations and inequalities. Statistical sampling, measures of location and spread.*	*Graphs and transformations, algebraic fractions, proof. Representations of data, correlation and probability.*	*Coordinate geometry (straight lines and circles). Statistical distributions, hypothesis testing.*	*Sequences and series, trigonometry. Kinematics, forces and Newton's law.*	*Differentiation (calculus), exponentials and logarithms.*	*Vectors, integration. Kinematics with variable acceleration.*
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, quadratics, simultaneous equations and inequalities. Statistical sampling, measures of location and spread.*	*Graphs and transformations, algebraic fractions, proof. Representations of data, correlation and probability.*	*Coordinate geometry (straight lines and circles). Statistical distributions, hypothesis testing.*	*Sequences and series, trigonometry. Kinematics, forces and Newton's laws.*	*Differentiation (calculus), exponentials and logarithms.*	*Vectors, integration. Kinematics with variable acceleration.*
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, quadratics, simultaneous equations and inequalities. Statistical sampling, measures of location and spread.*	*Graphs and transformations, algebraic fractions, proof. Representations of data, correlation and probability.*	*Coordinate geometry (straight lines and circles). Statistical distributions, hypothesis testing.*	*Sequences and series, trigonometry. Kinematics, forces and Newton's laws.*	*Differentiation (calculus), exponentials and logarithms.*	*Vectors, integration. Kinematics with variable acceleration.*

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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, quadratics, simultaneous equations and inequalities.* *Statistical sampling, measures of location and spread.*	*Graphs and transformations, algebraic fractions, proof.* *Representations of data, correlation and probability.*	*Coordinate geometry (straight lines and circles).* *Statistical distributions, hypothesis testing.*	*Sequences and series, trigonometry. Kinematics, forces and Newton's laws..*	*Differentiation (calculus), exponentials and logarithms.*	*Vectors, integration.* *Kinematics with variable acceleration.*

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'

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Spiritual, Moral, Social & Cultural Mapping

Subject: Mathematics Year: 13

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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	*Partial fractions, differentiation, trigonometry.* *Regression and correlation.*	*Trigonometry, integration.* *Probability and Normal distribution.*	*Functions and modulus function, sequence and series,* *Forces at angles, kinematics, projectiles, forces and Newton's laws.*	*Coordinate geometry (parametric equations), differential equations, modelling with trigonometry, vectors.* *Moments.*	*Numerical methods, proofs.* *Further kinematics (vectors and variable acceleration).*	*Exams*
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	*Partial fractions, differentiation, trigonometry.* *Regression and correlation.*	*Trigonometry, integration.* *Probability and Normal distribution.*	*Functions and modulus function, sequence and series,* *Forces at angles, kinematics, projectiles, forces and Newton's laws.*	*Coordinate geometry (parametric equations), differential equations, modelling with trigonometry, vectors.* *Moments.*	*Numerical methods, proofs.* *Further kinematics (vectors and variable acceleration).*	*Exams*
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	*Partial fractions, differentiation, trigonometry.* *Regression and correlation.*	*Trigonometry, integration.* *Probability and Normal distribution.*	*Functions and modulus function, sequence and series,* *Forces at angles, kinematics, projectiles, forces and Newton's laws.*	*Coordinate geometry (parametric equations), differential equations, modelling with trigonometry, vectors.* *Moments.*	*Numerical methods, proofs.* *Further kinematics (vectors and variable acceleration).*	*Exams*

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