Year 7 Long Term Planning 2020/21

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| Subject:Year 7 (Delta) | * Number Skills
* Analysing and Displaying Data
 | * Equations, Functions and Formulae
* Sequences and Graphs
* Fractions, Decimals and Percentages
 | * Fractions, Decimals and Percentages (cont.)
* Angles and Shapes
 | * Perimeter, Area and Volume
* Transformations
 | * Probability
* Ratio and Proportion
* Loci and Construction
 | * Real-life Graphs
* Revision and End of Year Exam
* Construction and Loci Project
* Begin Year 8 SOW
 |
| Assessment Objectives | AO4AO2 | AO1AO4 | AO3AO4 | AO3 | AO2AO4AO3 | AO2AO3 |
| Subject:Year 7 (Theta) | * Number Skills
* Analysing and Displaying Data
 | * Expressions, Functions and Formulae
* Sequences and Graphs
* Fractions and decimals
 | * Fractions and Decimals (cont.)
* Lines and Angles
 | * Lines and Angles (cont.)
* Transformations
 | * Probability
* Ratio, Proportion and Percentages
 | * Revision and End of Year Exam
* Construction and Loci Project
* Begin Year 8 SOW
 |
| Assessment Objectives | AO4AO2 | AO1AO4 | AO4AO3 | AO3 | AO2AO4 | AO3 |
| Subject:Year 7 (Pi) | * Number Skills (Calculating)
* Analysing and Displaying Data
 | * Equations, Functions and Formulae
* Fractions and Decimals
 | * Fractions and Decimals (cont.)
* Angles and Lines
 | * Area and Perimeter
* Transformations
 | * Probability
* Ratio, Proportion and Percentages
 | * Revision and End of Year Exam
* Construction and Loci Project
* Begin Year 8 SOW
 |
| Assessment Objectives | AO4AO2 | AO1AO4 | AO4AO3 | AO3 | AO2AO4 | AO3 |

Outline of Assessment Objectives:

AO1 – Algebra AO3 – Measure, Shape and Space

AO2 – Data Handling AO4 – Number

Year 8 Long Term Planning 2020/21

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| Subject:Year 8 (Delta) | * Factors, Powers and Roots
* Collecting and Analysing Data
 | * Expressions, Equations and Inequalities
* Decimals, Percentages and Proportion
 | * Circles, Sectors and Arcs
* Accuracy and Measure
 | * Mathematical Reasoning
* Non-linear graphs
 | * Pythagoras and Trigonometry
* Probability
 | * Graphical Solutions
* Revision End of Year Exam
* Constructions and Loci Project
 |
| Assessment Objectives | AO4AO2 | AO1AO4 | AO3AO4 | AO1 | AO3AO2 | AO1 |
| Subject:Year 8 (Theta) | * Factors and Powers
* Statistics, graphs and charts
 | * Expression, Formulae and Equations
* Decimals, Ratio and Percentages
 | * Area and Volume
* Fractions
 | - Fractions (cont.)-Real life Graphs | - Lines, Angles, Scale Drawings and Measures- Probability | - Straight Line Graphs - Revision End of Year Exam - Constructions and Loci Project |
| Assessment Objectives | AO4AO2 | AO1AO4 | AO3AO4 | AO4AO2 | AO3AO2 | AO1 |
| Subject:Year 8 (Pi) | * Factors and Powers
* Statistics
 | * Expressions, Functions and Equations
* Ratio and Decimals
 | * Shape and Measure in 3D
* Fractions and Percentages
 | * Fractions and Percentages (cont.)
* Real life and Algebra graphs
 | * Angles
* Probability
 | * Sequences
* Constructions and Loci Project
* Revision End of Year Exam
 |
| Assessment Objectives | AO4AO2 | AO1AO4 | AO3AO4 | AO4AO2 | AO3AO2 | AO1 |

Outline of Assessment Objectives:

AO1 – Algebra AO3 – Measure, Shape and Space

AO2 – Data Handling AO4 – Number

Year 9 Long Term Planning 2020/21

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| Subject:Year 9(Foundation) | * Number
 | * Algebra
 | * Graphs, Tables & Charts
* Fractions and Percentages
 | * Fractions and Percentages
* Equations, Inequalities & Sequences
 | * Angles
* Averages & Range
 | * Averages & Range
* Perimeter, Area & Volume
 |
| Assessment Objectives | AO1 | AO3 | AO4AO1 | AO1AO3 | AO5AO4 | AO4AO5 |
| Subject:Year 9 (Higher) | * Number
 | * Algebra
 | * Interpreting & Representing Data
* Fractions, Ratio & Percentages
 | * Fractions, Ratio & Percentages
* Angles & Trigonometry
 | * Graphs
* Area & Volume
 | * Area & Volume
* Transformations & Constructions
 |
| Assessment Objectives | AO1 | AO3 | AO4AO1AO2 | AO1AO2AO5 | AO3AO5 | AO5 |

Outline of Assessment Objectives:

AO1 – Number AO3 – Algebra AO5 – Geometry & Measures

AO2 – Ratio, Proportion and Rates of Change AO4 – Statistics & Probability

Year 10 Long Term Planning 2020/2021

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| Subject:Year 10(Foundation) | * Graphs
* Transformations
 | * Transformations
* Ratio and proportion
 | * Right-angled Triangles
* Probability
 | * Probability
* Multiplicative Reasoning
 | * Constructions, Loci & Bearings
* Quadratic Equations and Graphs
 | * Quadratic Equations and Graphs
* Perimeter Area & Volume 2
 |
| Assessment Objectives | * AO2
* AO3
* AO4
* AO5
 | * AO2
* AO5
 | * AO1
* AO4
* AO5
 | * AO1
* AO2
* AO4
 | * AO3
* AO5
 | * AO3
* AO5
 |
| Subject:Year 10 (Higher) | * Equations and Inequalities
* Probability
 | * Probability
* Multiplicative Reasoning
 | * Similarity and Congruence
* More Trigonometry
 | * More Trigonometry
* Further Statistics
 | * Equations and Graphs
* Circle Theorems
 | * Circle Theorems
* More Algebra
 |
| Assessment Objectives | * AO3
* AO4
 | * AO1
* AO2
* AO4
 | * AO3
* AO5
 | * AO3
* AO4
 | * AO3
* AO5
 | * AO3
* AO5
 |

Outline of Assessment Objectives:

AO1 – Number AO3 – Algebra AO5 – Geometry & Measures

AO2 – Ratio, Proportion and Rates of Change AO4 – Statistics & Probability

Year 11 Long Term Planning 2020/2021

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| Subject:Year 11(Foundation) | * Fractions, indices and standard form
 | * Congruence, similarity and vectors
* More Algebra
 | * Revision
	+ Number
	+ Algebra
	+ Shape
 | * Revision
	+ Data
	+ Statistics
	+ Ratio
 | * Exam preparation
 | * Exam preparation
 |
| Assessment Objectives | * AO1
* AO3
 | * AO2
* AO3
 | * AO1
* AO3
* AO5
 | * AO2
* AO4
* AO5
 | * AO1
* AO2
* AO3
* AO4
* AO5
 | * AO1
* AO2
* AO3
* AO4
* AO5
 |
| Subject:Year 11 (Higher) | * Vectors
* Geometric Proof
 | * Proportion and graphs
 | * Revision
	+ Number
	+ Algebra
	+ Shape
 | * Revision
	+ Data
	+ Statistics
	+ Ratio
 | * Exam preparation
 | * Exam preparation
 |
| Assessment Objectives | * AO2
* AO3
* AO5
 | * AO1
* AO2
 | * AO1
* AO3
* AO5
 | * AO2
* AO4
* AO5
 | * AO1
* AO2
* AO3
* AO4
* AO5
 | * AO1
* AO2
* AO3
* AO4
* AO5
 |

Outline of Assessment Objectives:

AO1 – Number AO3 – Algebra AO5 – Geometry & Measures

AO2 – Ratio, Proportion and Rates of Change AO4 – Statistics & Probability

Further Mathematics Long Term Planning 2020/2021

Selected learners from 10D will work through the scheme of learning at an accelerated rate and begin the AQA Level 2 Further Mathematics course in the summer term of year 10 and continue through this course into year 11. The course will build upon learners GCSE knowledge, provide appropriate stretch and challenge and offer them the opportunity to gain an extra qualification whilst giving learners a strong foundation for their A-Level studies.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| Subject:Year 10Further Maths |  |  |  |  | * Number and Algebra 1
* Algebra 2
 | * Geometry 1
 |
| Assessment Objectives |  |  |  |  | AO1 + AO2 | AO1 + AO2 |
| Subject:Year 11 Further Maths | * Algebra 3
* Co-ordinate Geometry
 | * Algebra 4
* Geometry 2
 | * Calculus
* Matrices
 | * GCSE Revision
* FM Revision
 | * Exam Preparation
 | * Exam Preparation
 |
| Assessment Objectives | AO1 + AO2 | AO1 + AO2 | AO1 + AO2 | AO1 + AO2 | AO1 + AO2 | AO1 + AO2 |

Outline of Assessment Objectives:

AO1 - Recall and use knowledge of the prescribed content for routine and multi-step procedures

AO2 - Apply mathematical reasoning, skills and knowledge to solve mathematical problems including rigorous justification and formal proof.

The specification content is set out in six distinct topic areas although questions will be asked that range across these topics.

1 Number

2 Algebra

3 Coordinate Geometry (2 dimensions only)

4 Calculus

5 Matrix Transformations

6 Geometry