**Mathematics Year 9 Delta Learning Journey 2022-2023**

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| **Week** | **Date** | **Key Constructs** | **Topic- please plan for pause/ RAP lessons**  | **Assessment** |
| **1(1/2)** | **05.09.22** | **Types of number****Place value and rounding** | * Reciprocals
* Indices
* Standard form
* STEM: Calculating with standard form
* Fractional indices
* Surds
 | **Unit 1 - Powers and roots** |
| **2** | **12.09.22** |
| **3** | **19.09.22** |
| **4** | **26.09.22** | **Sequences and functions****Equations****Algebraic Manipulation** | * Sequences
* Expanding
* Factorising
* Solving quadratic equations
 | **Unit 2 - Quadratics** |
| **5** | **03.10.22** |
| **6** | **10.10.22** |
| **7** | **17.10.22** |
| **Half term** |
| **8** | **31.10.22** | **Equations and Inequalities****Sequences and formula****Indices and standard form** | * Inequalities
* Using index laws
* Solving equations
* Changing the subject
* Algebraic fractions
 | **Unit 3 - Inequalities, equations and formulae** |
| **9** | **07.11.22** |
| **10** | **14.11.22** | **Data: analysing and representation****Data: collecting and organizing** | * STEM: Data collection
* Presenting and comparing data
* Estimating statistics
* Box plots
* Cumulative frequency graphs
* Histograms
 | **Unit 4 - Collecting and analysing data****(*not assessed*)** |
| **11** | **21.11.22** |
| **12** | **28.11.22** |
| **13** | **05.12.22** |  | Revision for End of Term AssessmentEnd of Term assessmentRAP and a Christmas Activity | **Units 1-4 End of Term Assessment** |
| **14**  | **12.12.22** |
| **CHRISTMAS** |
| **15(Wed)**  | **04.01.23** | **Proportional reasoning****Perimeter and area** | * Direct proportion
* Solving problems using direct proportion
* Non-linear proportion
* Arcs and sectors of circles
 | **Unit 5 - Multiplicative reasoning** |
| **16** | **09.01.23** |
| **17** | **16.01.23** |
| **18** | **23.01.23** | **Graphs** | * Graphs of quadratic functions
* Solving quadratic equations
* Graphs of cubic functions
* STEM: Graphs of reciprocal functions
 | **Unit 6 - Non-linear graphs** |
| **19** | **30.01.23** |
| **20** | **06.02.23** |
| **Half term** |
| **21** | **20.02.23** | **Measures****Place value and rounding** | * Rates of change
* Density and pressure
* Upper and lower bounds
* Calculating with bounds
* STEM: Accurate measures in real life
*
 | **Unit 7 - Accuracy and measures** |
| **22** | **27.02.23** |
| **23** | **06.03.23** |  |   Revision for Unit 5-7 Assessment Unit 5-7 assessment and RAP  | **Unit 5-7 Assessment** |
| **24** | **13.03.23** |
| **25** | **20.03.23** | **Equations and inequalities****Graphs** | * Simultaneous equations
* Using y = mx + c
* More simultaneous equations
* Graphs and simultaneous equations
* Solving inequalities
 | **Unit 8 - Graphical solutions** |
| **26**  | **27.03.23** |
| **EASTER** |
| **27** | **17.04.23** | **Pythagoras and trigonometry****Graphs** |  * The tangent ratio
* The sine ratio
* The cosine ratio
* Using trigonometry to find angles
* Solving problems using trigonometry
* Trigonometric graphs
 | **Unit 9 - Trigonometry** |
| **28** | **24.04.23** |
| **29 (BH)** | **02.05.23** |
| **30** | **08.05.23** | **Geometric Proof** | * Explain, show and justify
* Real-life situations
* Proof
* More proof
 | **Unit 10 Mathematical Reasoning** |
| **31** | **15.05.23** |
| **32** | **22.05.23** |
| **Half term** |
| **33** | **05.06.23** |  | **EOYE Prep****EOYE Prep****EOYE prep/** **EOYEs****EOYE Rap/addressing misconceptions** | **GCSE Paper** |
| **34** | **12.06.23** |
| **35** | **19.06.23** |
| **36** | **23.06.23** |
| **37** | **03.07.23** | **Data: analysing and representation****Data: collecting & organising** | **GCSE Unit 3*** Statistical diagrams
* Time series
* Scatter graphs
* Line of best fit
* Averages and range
 | **GCSE Unit 3 –Interpreting and representing data** |
| **38** | **10.07.23** |
| **39** | **17.07.22** |  | Activities week |  |  |

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| **Name:** | **Tutor:** | **Mathematics Year 9 Assessment Progress Tracker 2022-23****Key Constructs:** |
| **Subject Target** |  | **EOYE****Grade:** |
|  | **Flightpath** | **BFL** |
| **Autumn 1** |  |  |
| **Autumn 2** |  |  |
| **Spring 1** |  |  |
| **Spring 2** |  |  |
| **Summer 1** |  |  |
| **Summer 2** |  |  |

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| **Date** | **Assessment****T = teacher assessed** | **Flight Path****Grade** | **Action (s) to make progress** |
|  | **Unit 1 - Powers and roots** |  |  |
|  | **Unit 2 - Quadratics** |  |  |
|  | **Unit 3 - Inequalities, equations and formulae** |  |  |
|  | **End of Term Assessment****Units 1-4** |  |  |
|  | **Unit 5 - Multiplicative reasoning** |  |  |
|  | **Unit 6 - Non-linear graphs** |  |  |
|  | **Unit 5-7 Assessment** |  |  |
|  | **Unit 8 – Graphical Solution** |  |  |
|  | **Unit 9 - Trigonometry** |  |  |
|  | **Unit 10 – Mathematical Reasoning** |  |  |
|  | **EOYE** |  |  |