Mathematics

Year Group 7

Half Term 1

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| --- | --- |
| Number of Hours | Topic |
| 8 | Number and Arithmetic |
| 4 | Rounding |
| 4 | Powers / Indices / Standard form |
| 4 | Multiples, Factors and Primes |
| 8 | Fractions and Percentages |
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| Reasons behind order of topic in this half term | |
| * The start of KS3 focusses on a recap and development of esstenial skills from KS2. Base line testing is also included in this time period. * Any gaps/misconceptions can be addressed immediately involving number and arithmetic skills * New material is gradually introduced building upon their previous knowledge from KS2. * The first half term topics are the foundation for the KS3 course. * Directed numbers need to be covered before the introduction of Algerbra next half term. | |

Mathematics

Year Group 7

Half Term 2

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| --- | --- |
| Number of Hours | Topic |
| 8 | Algebraic expressions |
| 8 | Equations |
| 4 | Formulae |
| 8 | Graphs and equations |
|  |  |
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| Reasons behind order of topic in this half term | |
| * At this stage students need to be introduced to key terminology for algerbra. * Simplification, expanding and factorising are all essential before solving equations. * Formula and substituion interlace with the introduction of algrebraic graphs and co-ordinate systems | |

Mathematics

Year Group 7

Half Term 3

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| --- | --- |
| Number of Hours | Topic |
| 8 | Sequences |
| 8 | Ratio and Proportion |
| 8 | Units, Time and Scales |
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| Reasons behind order of topic in this half term | |
| * Sequences have a direct link to linear and quadratic graphs, algeraic skills i.e. substution, understading function machines, are essential. * Units, Time and Scales are used through out the statistic topics and are a pre-requisit for the following half term | |

Mathematics

Year Group 7

Half Term 4

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| --- | --- |
| Number of Hours | Topic |
| 12 | Statistics |
| 8 | Probability |
| 4 | Angles and Shape |
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| Reasons behind order of topic in this half term | |
| * Once the statistics topic is delivered and a understanding of varing graphs and charts then proabability can be linked to the information preseted by them. * Angle and Shape are taught together as they are intertwined. The angle problems and shape properties can be delivered as both separate and combined topics.   This allows for an ideal opportunity for problem solving. | |

Mathematics

Year Group 7

Half Term 5

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 8 | Angles and Shape |
| 8 | Perimeter, Area and Volume |
| 8 | Transformations |
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| Reasons behind order of topic in this half term | |
| * Perimeter, area and volume are a natural progression from the Shape topic. Perimter, area and volume formulae can be directly using the skills and knowledge from previous topics. | |

Mathematics

Year Group 7

Half Term 6

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 8 | Constructions |
| 4 | Consolidation |
| 12 | Consolidation |
| 4 | Consolidation |
| 4 | Enrichment |
|  |  |
| Reasons behind order of topic in this half term | |
| * Constructions use knowledge gained from the previous topics throughout the year in order to increase the amount of challenge. * Topics can be revisited to further improve memory recall/mastery of topics in order to prepare for the following year. | |

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| Reasons behind order of topics in this Year |
| All of the topics in the maths scheme maths can be interwoven and linked in one way or another. The topics are in the current order to allow the students to build upon previous knowledge. Without the pre-requisit knowledge from the topic before, it is very difficult for students to attempt problems solving tasks or develop a mastery of the topic. |