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**Mathematics Faculty**

**Year 10 Foundation – Autumn Term 1**

**Unit 1 Overview – Calculations**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Calculations** | I can use the four operations with decimals. |  |  |  |
| I can use the index laws. |  |  |  |
| I can calculate with positive integer powers. |  |  |  |
| I can write and order numbers in standard form. |  |  |  |
| I can use the four operations with numbers written in standard form. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Adding, subtracting, multiplying and dividing decimals (CM clips 90 – 94 & 98 – 103) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc.  Assessment is also supported with our use of ILOs, set through Century Learning, Corbettmaths, Dr Frost Maths and Justmaths.  Finally, units are assessed through skills checks and half termly assessments, as part of our Assessment Calendar in Mathematics. | add, total, sum, subtract, difference, multiply, product, divide, share, quotient, decimal, place value |
| **2** | Solving multi-step problems involving the four operations and decimals (CM clips 90 – 94 & 98 – 103) | add, total, sum, subtract, difference, multiply, product, divide, share, quotient, decimal, place value |
| **3** | **Using the index laws for multiplication and division of integer powers (CM clip 174)** | index, law, base, positive, negative, multiplication, division, bracket |
| **4** | Calculating with positive integer indices (CM clip 172) | index, power, positive, square, cube |
| **5** | **Writing an ordinary number in standard form and a number in standard form as an ordinary number (CM clip 300)** | standard form, index, ordinary number, place value |
| **6** | **Ordering numbers written in standard form (CM clip 300)** | standard form, index, ordinary number, order, ascending, descending |
| **7** | **Using the four operations with numbers written in standard form (CM clips 301 – 303)** | standard form, index, addition, subtraction, multiplication, division |
| **8** | Solving standard form problems with and without a calculator (CM clips 301 - 303) | standard form, index, addition, subtraction, multiplication, division |