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**Mathematics Faculty**

**Year 8 Autumn Term 1 – Delta Scheme**

**Unit 2 Overview - Manipulating Expressions**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Manipulating Expressions** | I can understand and use algebraic notation & terminology. |  |  |  |
| I can simplify algebraic expressions. |  |  |  |
| I can expand a single bracket. |  |  |  |
| I can expand and simplify two single brackets. |  |  |  |
| I can factorise one bracket. |  |  |  |
| I can expand double brackets. |  |  |  |
| I can rearrange simple formulae to change the subject. |  |  |  |
| I can substitute positive and negative values into expressions and formulae. |  |  |  |
| I can construct formulae. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Understanding and using correct algebraic notation and terminology (CM clip 19) | 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 and Corbettmaths.  Finally, units are assessed through skills checks and half termly assessments, as part of our Assessment Calendar in Mathematics. | notation, term, expression, coefficient |
| **2** | Collecting like terms involving different lettered (including powers) and numerical terms (CM clip 9) | term, like term, expression, simplify, coefficient, positive, negative, add, subtract |
| **3** | Simplifying expressions by multiplying and dividing terms (CM clips 11 & 18) | term, expression, simplify, multiply, divide |
| **4** | Expanding a single bracket (CM clip 13) | term, expression, bracket, expand, multiply |
| **5** | **Expanding and simplifying two single brackets** (CM clips 13 & 9) | term, expression, bracket, expand, multiply, simplify |
| **6** | Factorising single brackets (CM clip 117) | factorise, factor, common, HCF |
| **7** | Expanding double brackets (CM clip 14) | term, expression, bracket, expand, multiply, simplify |
| **8** | Rearranging simple formulae to change the subject (CM clip 7) | rearrange, inverse, subject, formula |
| **9** | **Substituting** positive and **negative integers into expressions and formulae** (CM clip 20) | term, expression, substitute, positive, negative |
| **10** | Constructing formulae (CM clip 16) | formula, construct, term, value, variable |