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 **Mathematics Faculty**

 **Year 9 Autumn Term 1 – Alpha Scheme**

 **Unit 2 Overview – Manipulating Expressions**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Manipulating Expressions** | I can expand double brackets with a coefficient of x greater than one. |  |  |  |
| I can expand triple brackets. |  |  |  |
| I can factorise quadratic expressions. |  |  |  |
| I can rearrange formulae to change the subject. |  |  |  |
| I can substitute positive and negative values into expressions and formulae involving powers and where the unknown appears more than once. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | **Expanding double brackets with a coefficient of x greater than one** (CM clip 14) | 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. | term, coefficient, expression, bracket, expand, multiply, simplify  |
| **2** | Expanding triple brackets (CM clip 15) | term, coefficient, expression, bracket, expand, multiply, simplify  |
| **3** | **Factorising quadratic expressions** **and finding the difference of two squares** (CM clips 118 & 120) | factorise, quadratic, sum, product, difference, square |
| **4** | Rearranging formulae to change the subject – 2 step (CM clip 7)  | rearrange, inverse, subject, formula  |
| **5** | Substituting positive and negative values into expressions and formulae involving powers and where the unknown appears more than once (CM clip 20) | term, expression, substitute, positive, negative, power, unknown |