** Mathematics Faculty**

**Year 8 Spring Term 1 – Theta Scheme**

**Unit 6 Overview - Equations and Sequences**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Equations and Sequences** | I can construct and use function machines. |  |  |  |
| I can solve equations including those with brackets. |  |  |  |
| I can generate and describe linear and pattern sequences. |  |  |  |
| I can recognise and continue special sequences. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Constructing and using function machines and their inverses (CM clip 386) | 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. | function, construct, input, output, add, subtract, multiply, divide, inverse |
| **2** | **Solving** one **and two-step equations** (CM clip 110) | equation, inverse, balance, solve, linear, coefficient |
| **3** | Solving equations involving a bracket (CM clips 13 & 110) | equation, inverse, balance, bracket, expand, solve, linear, coefficient |
| **4** | Generating and describing linear sequences using a term-to-term rule and finding missing terms of a linear sequence (CM clips 286 & 287) | term, generate, describe, sequence, linear, rule |
| **5** | **Generating and describing pattern sequences** (CM clip 290) | term, generate, describe, sequence, pattern, rule |
| **6** | Recognising and continuing special sequences e.g. square, triangular, Fibonacci, geometric (CM clips 226, 229 & 278a) | term, generate, describe, sequence, rule, square, triangular, Fibonacci, geometric |