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**Mathematics Faculty**

**Year 10 Unit 5 Overview**

**Equations & Sequences**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Equations & Sequences** | I can change the subject of formula |  |  |  |
| I can solve equations including brackets and unknowns on both sides |  |  |  |
| I can write down whole numbers that satisfy an inequality and represent inequalities using a number line |  |  |  |
| I can solve inequalities including unknowns on both sides |  |  |  |
| I can generate & describe sequences using term-to-term and position-to-term rules |  |  |  |
| I can generate & describe sequences using the nth term |  |  |  |
| I can generate sequences using quadratic expressions |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Understanding the use of inverse equations and solving simple equations  (MW 136) | 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 which alternate between Basic Skills Checks one week and then a more individual ILO the following set through Mathswatch and Corbettmaths clips  Finally every unit is assessed half termly as part of our Assessment Calendar in mathematics | Equation, formula, rearrange, inverse, operation, subject |
| **2** | Solving two step equations by using inverse operations and balancing both sides of an equation.  (CM 110, 113)(MW A17) | Equation, coefficient, solve, inverse, operation, balance |
| **3** | Solving more complex equations involving brackets and unknowns on both sides by using inverse operations and balancing both sides of an equation.  (CM110,113, 13,14) (MW A18) | Equation, coefficient, solve, inverse, operation, balance |
| **4** | Understanding the notation to represent inequalities; writing down whole numbers that satisfy an inequality and represent inequalities using a number line.  (CM 114-117) (MW A20a/b) | Solve, inequality, number line, greater than or equal to, less than or equal to |
| **5** | Solving two sided linear inequalities and more complex inequalities with unknowns on both sides  (CM114-117) (MW A20a/b) | Solve, inequality, number line, greater than or equal to, less than or equal to |
| **6** | Substituting values into formulae; change the subject of a formula and recognise expressions, equations and identitites  (MWA17) | Substitution, formula, subject, expression, equation, identities |
| **7** | Generating & describe sequences using term-to-term rules, including special sequences such as Fibonacci or patterns.  (CM 286, 287,290) (MW A 11a/b) | Equation, coefficient, solve, inverse, operation, balance |
| **8** | Using position-to-term rules to generate, describe and find the nth term. (CM 288) (MW A11c) | Equation, coefficient, solve, inverse, operation, balance |