**Maths Medium Term Planning**

**Year Six**

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| **WR Block: Algebra** | | **Spring Term** | |
| **National Curriculum Objectives** | **Small Steps** | **Prior Learning** | **Future Progression** |
| * Use simple formulae. * Generate and describe linear number sequences. * Express missing number problems algebraically. * Find pairs of numbers that satisfy an equation with two unknowns. * Enumerate possibilities of combinations of two variables. | * 1-step function machines * 2-step function machines * Form expressions * Substitution * Formulae * Form equations * Solve 1-step equations * Solve 2-step equations * Find pairs of values * Solve problems with two unknowns | **Y5:**  Algebra is new learning in year 6. However, work around number in Y5 will find into this unit. | **KS3:**   * Use and interpret algebraic notation, including: ab in place of a × b, 3y in place of y + y + y and 3 × y, a2 in place of a × a, a3 in place of a × a × a; a2 b in place of a × a × b, b a in place of a ÷ b, coefficients written as fractions rather than as decimals, brackets. * Substitute numerical values into formulae and expressions, including scientific formulae. * Understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors. * Simplify and manipulate algebraic expressions to maintain equivalence by: collecting like terms, multiplying a single term over a bracket, taking out common factors, expanding products of two or more binomials. * Understand and use standard mathematical formulae; rearrange formulae to change the subject. * Interpret mathematical relationships both algebraically and graphically. |
| **Key Vocabulary**  **New Vocabulary:**  formulae  equation  unknown  variable | **Key Vocabulary:**  **Previous Year Group:**  New unit to Y6 | **Stem Sentences**  If the input is \_\_\_, the output is \_\_\_.  If I know the output, I need to \_\_\_\_  If the input is \_\_\_ and the output is \_\_\_, then the function is \_\_\_.  \_\_\_\_ more than *x* can be written as \_\_\_.  IfI have \_\_\_x and I add/ subtract \_\_\_x, then I have \_\_\_x altogether. | |
| **Concrete, Pictorial, Abstract Models/ Calculations** | | | |