**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.
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| **Key Vocabulary****New Vocabulary:**formulaeequationunknownvariable | **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**  |