## Algebra Skills

Name: $\qquad$ 10.2

|  | Unistructural | Multistructural (ACHIEVED) | Relational (MERIT) | Extended Abstract (EXCELLENCE) |
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| LEVEL 3 |  |  |  |  |
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| LEVEL 4 |  |  |  |  |
| Algebraic Skills | I can ... <br> - understand the words equation, expression, variable, coefficient, constant | I can... <br> - add and subtract like terms <br> - multiply terms <br> - substitute values into simple expressions <br> - expand one bracket with clues <br> - factorise into one bracket with clues | I can... <br> - simplify with adding, subtracting and multiplying combined <br> - create and simplify expressions <br> - substitute values in expressions in context | I can... <br> - use skills to solve more complex problems <br> Nrich tasks <br> - Matchless <br> - Creating linear equations problems |
| Solving Equations | I can... <br> - recognise an equation and an expression | I can.. <br> - solve equations using trial and error <br> - solve equations using algebra methods | I can... <br> - solve linear word problems | Nrich tasks: <br> - Weighing Scales |
| LEVEL 5 |  |  |  |  |
| Algebraic Skills | I can... <br> - understand the term index (indices) | I can... <br> - simplify multiplication using indices <br> - adding and subtracting using indices <br> - simplify division <br> - substitute values into expressions including powers <br> - expand one bracket <br> - factorise into one bracket | I can ... <br> - multiplying algebraic fractions <br> - write and evaluate algebraic expressions <br> - use mixed algebra operations | Nrich tasks: <br> - Picture Story <br> - Pure Algebra |
| Solving <br> Equations |  | I can... <br> - solve equations with x on both sides <br> - solving simple quadratic equations | I can... <br> - solve further quadratic equations <br> - solve linear and quadratic ord problems | Nrich tasks: <br> - Equations and formula problems |
| LEVEL 6 |  |  |  |  |
| Algebraic Skills |  | I can ... <br> - use index laws for multiplication and | I can... <br> - add and subtract algebraic | Nrich tasks: <br> - Always Two |


|  | division <br> - multiply and divide algebraic fractions <br> - expand two brackets <br> - factorise into two brackets | fractions <br> - apply substitution in real context | - Always Perfect <br> - Creating linear equations problems |
| :---: | :---: | :---: | :---: |
| Solving Equations | I can... <br> - rearrange formula <br> - solve quadratic equations <br> - solve quadratic equations with $a>1$ <br> - solve exponential equations <br> - solve linear inequations | I can... <br> - form and solve linear equations <br> - form and solve quadratic equations <br> - solve exponential equations in context <br> - solve simultaneous equations | I can.. <br> - solve quadratic inequations <br> Nrich tasks: <br> - Equations and formula problems |

