Level 6 – ‘I Can’ Statements

Attainment target 1: Using and applying Maths [Level 6](http://www.ncaction.org.uk/search/results.htm?subject_id=Ma&keystage=&target_id=Ma1&level=6&Submit=go):

* I can carry through difficult tasks and solve quite complex problems by breaking them down into smaller tasks on my own.
* I can interpret, discuss and synthesise information presented in a different mathematical forms.
* My writing explains and informs my use of diagrams.
* I am beginning to give mathematical justifications.

Attainment target 2: Number and algebra [Level 6](http://www.ncaction.org.uk/search/results.htm?subject_id=Ma&keystage=&target_id=Ma2&level=6&Submit=go):

* I can order and approximate decimals when solving numerical problems and equations such as x3 + x = 20, using trial-and-improvement methods.
* I know which number to consider as 100 per cent, or a whole, in problems involving comparisons, and can use this to evaluate one number as a fraction or percentage of another.
* I understand and can use the equivalences between fractions, decimals and percentages, and calculate using ratios in situations.
* I can add and subtract fractions by writing them with a common denominator.
* When exploring number sequences, I can find and describe in words the rule for the next term or nth term of a sequence where the rule is linear.
* I can formulate and solve linear equations with whole-number coefficients.
* I can represent mappings expressed algebraically, and use Cartesian coordinates for graphical representation interpreting general features.

Attainment target 3: Shape, space and measures [Level 6](http://www.ncaction.org.uk/search/results.htm?subject_id=Ma&keystage=&target_id=Ma3&level=6&Submit=go):

* I can recognise and use common 2-D representations of 3-D objects.
* I know and can use the properties of quadrilaterals in classifying different types of quadrilateral.
* I can solve problems using angle and symmetry properties of polygons and angle properties of intersecting and parallel lines, and explain these properties.
* I can devise instructions for a computer to generate and transform shapes and paths.
* I understand and can use appropriate formulae for finding circumferences and areas of circles, areas of plane rectilinear figures and volumes of cuboids when solving problems.
* I can enlarge shapes by a positive whole-number scale factor.

Attainment target 4: Handling data [Level 6](http://www.ncaction.org.uk/search/results.htm?subject_id=Ma&keystage=&target_id=Ma4&level=6&Submit=go):

* I can collect and record continuous data, choosing appropriate equal class intervals over a sensible range to create frequency tables.
* I can construct and interpret frequency diagrams.
* I can construct pie charts.
* I can draw conclusions from scatter diagrams, and have a basic understanding of correlation.
* When dealing with a combination of two experiments, I can identify all the outcomes, using diagrammatic, tabular or other forms of communication.
* In solving problems, I can use my knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1.