## 11MA-9 (Mrs Benzies)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br><b>Algebra</b>                                   |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long

The assessments will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 4.

| Number and Proportion  | Algebra                                   | Geometry and Measure                         | Probability and Statistics   |
|--|---|--|--|
| Use primes, squares, cubes, roots, factors and<br>multiples            | Collect like terms                        | Basic angle rules                            | Correlation and scatter graphs   |
| Prime factorisation  | Substitute numbers into formulae          | Angle rules involving parallel lines         | Pie charts   |
| Converting between units   | Multiply out brackets (single and double) | Describe and construct the 4 transformations | Construct and interpret frequency tables, bar<br>charts and pictograms |
| Ratios – dividing, simplifying, links to fractions                     | Laws of indices                           | Pythagoras' Theorem                          | Find Mean, Median, Mode and Range from a list<br>or a frequency table  |
| Apply proportional reasoning (recipes, best<br>buys, conversions)      | Solve linear equations                    | Symmetry and rotational symmetry             | Frequency trees  |
| Add, Subtract, Multiply and Divide integers,<br>decimals and fractions | Describe term-to-term rules of sequences  | Circles definitions                          | Probability of events and expected outcomes                            |
| Percentages, including increase/decrease                               | Plot straight line graphs                 | 3D shape properties (faces, edges, vertices) | Systematic listing, two-way tables, sample<br>space diagrams           |
| Ordering numbers including negatives,<br>decimals, fractions           |   | Area and Perimeter of 2D shapes              | Venn Diagrams  |
| Order of operations  |   | Volume of prisms                             |  |
| Converting between fractions, decimals and<br>percentages              | ]   |  | -  |

# 11MA-8 (Mr Marsden)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long

The assessments will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 4.

| Number and Proportion  | Algebra                                   | Geometry and Measure                         | Probability and Statistics   |
|--|---|--|--|
| Use primes, squares, cubes, roots, factors and<br>multiples            | Collect like terms                        | Basic angle rules                            | Correlation and scatter graphs   |
| Prime factorisation  | Substitute numbers into formulae          | Angle rules involving parallel lines         | Pie charts   |
| Converting between units   | Multiply out brackets (single and double) | Describe and construct the 4 transformations | Construct and interpret frequency tables, bar<br>charts and pictograms |
| Ratios – dividing, simplifying, links to fractions                     | Laws of indices                           | Pythagoras' Theorem                          | Find Mean, Median, Mode and Range from a list<br>or a frequency table  |
| Apply proportional reasoning (recipes, best<br>buys, conversions)      | Solve linear equations                    | Symmetry and rotational symmetry             | Frequency trees  |
| Add, Subtract, Multiply and Divide integers,<br>decimals and fractions | Describe term-to-term rules of sequences  | Circles definitions                          | Probability of events and expected outcomes                            |
| Percentages, including increase/decrease                               | Plot straight line graphs                 | 3D shape properties (faces, edges, vertices) | Systematic listing, two-way tables, sample<br>space diagrams           |
| Ordering numbers including negatives,<br>decimals, fractions           |   | Area and Perimeter of 2D shapes              | Venn Diagrams  |
| Order of operations  |   | Volume of prisms                             |  |
| Converting between fractions, decimals and<br>percentages              |   |  | -  |

### 11MA-7 (Mr Squire)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long with an optional 10 minute extension assessment

The main assessment will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 4.

The extension will give students an opportunity to access Grade 5.

| Number and Proportion  | Algebra                                   | Geometry and Measure                         | Probability and Statistics   |
|--|---|--|--|
| Use primes, squares, cubes, roots, factors and<br>multiples            | Collect like terms                        | Basic angle rules                            | Correlation and scatter graphs   |
| Prime factorisation  | Substitute numbers into formulae          | Angle rules involving parallel lines         | Pie charts   |
| Converting between units   | Multiply out brackets (single and double) | Describe and construct the 4 transformations | Construct and interpret frequency tables, bar<br>charts and pictograms |
| Ratios – dividing, simplifying, links to fractions                     | Laws of indices                           | Pythagoras' Theorem                          | Find Mean, Median, Mode and Range from a list<br>or a frequency table  |
| Apply proportional reasoning (recipes, best<br>buys, conversions)      | Solve linear equations                    | Symmetry and rotational symmetry             | Frequency trees  |
| Add, Subtract, Multiply and Divide integers,<br>decimals and fractions | Describe term-to-term rules of sequences  | Circles definitions                          | Probability of events and expected outcomes                            |
| Percentages, including increase/decrease                               | Plot straight line graphs                 | 3D shape properties (faces, edges, vertices) | Systematic listing, two-way tables, sample<br>space diagrams           |
| Ordering numbers including negatives,<br>decimals, fractions           |   | Area and Perimeter of 2D shapes              | Venn Diagrams  |
| Order of operations  | ]   | Volume of prisms                             |  |
| Converting between fractions, decimals and<br>percentages              |   |  | -  |

## 11MA-6 (Ms Garbutt)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br><b>Algebra</b>                                   |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br><b>Mixed GCSE content</b>                        |

Each assessment is 30 minutes long with an optional 10 minute extension assessment

The main assessment will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 4.

The extension will give students an opportunity to access Grade 5.

| Number and Proportion  | Algebra                                   | Geometry and Measure                         | Probability and Statistics   |
|--|---|--|--|
| Use primes, squares, cubes, roots, factors and<br>multiples            | Collect like terms                        | Basic angle rules                            | Correlation and scatter graphs   |
| Prime factorisation  | Substitute numbers into formulae          | Angle rules involving parallel lines         | Pie charts   |
| Converting between units   | Multiply out brackets (single and double) | Describe and construct the 4 transformations | Construct and interpret frequency tables, bar<br>charts and pictograms |
| Ratios – dividing, simplifying, links to fractions                     | Laws of indices                           | Pythagoras' Theorem                          | Find Mean, Median, Mode and Range from a list<br>or a frequency table  |
| Apply proportional reasoning (recipes, best<br>buys, conversions)      | Solve linear equations                    | Symmetry and rotational symmetry             | Frequency trees  |
| Add, Subtract, Multiply and Divide integers,<br>decimals and fractions | Describe term-to-term rules of sequences  | Circles definitions                          | Probability of events and expected outcomes                            |
| Percentages, including increase/decrease                               | Plot straight line graphs                 | 3D shape properties (faces, edges, vertices) | Systematic listing, two-way tables, sample<br>space diagrams           |
| Ordering numbers including negatives,<br>decimals, fractions           |   | Area and Perimeter of 2D shapes              | Venn Diagrams  |
| Order of operations  | ]   | Volume of prisms                             |  |
| Converting between fractions, decimals and<br>percentages              |   |  | -  |

## 11MA-5 (Mr Griffiths)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long with an optional 10 minute extension assessment

The main assessment will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 5.

The extension will give students an opportunity to access up to Grade 7.

| Number and Proportion                              | Algebra  | Geometry and Measure                                    | Probability and Statistics                    |
|--|--|---|---|
| Use primes, squares, cubes, roots, factors and     | Describe term-to-term rules of sequences                       | Basic angle rules                                       | Construct and interpret frequency tables, bar |
| multiples  |  |   | charts and pictograms                         |
| Ordering numbers including negatives,              | Dist starisht line san she                                     |   | Find Mean, Median, Mode and Range from a lis  |
| decimals, fractions                                | Plot straight line graphs                                      | Symmetry and rotational symmetry                        | or a frequency table                          |
| Order of operations                                | Collect like terms   | Circles definitions                                     | Frequency trees                               |
| Converting between fractions, decimals and         | Substitute numbers into formulae                               | 3D shape properties (faces, edges, vertices)            | Probability of events and expected outcomes   |
| percentages  | Substitute numbers into formulae                               | SD shape properties (races, edges, vertices)            | Probability of events and expected outcomes   |
| Prime factorisation                                | Multiply out brackets (single and double)                      | Angle rules involving parallel lines                    | Systematic listing, two-way tables, sample    |
|  | wattiply out blackets (single and double)                      | Angre rules involving parallel lines                    | space diagrams                                |
| Converting between units                           | Laws of indices  | Bearings  | Correlation and scatter graphs                |
| Ratios – dividing, simplifying, links to fractions | Solve linear equations   | Describe and construct the 4 transformations            | Pie charts                                    |
| Apply proportional reasoning (recipes, best        | Factorise expressions using a common factor                    | Similar Triangles                                       | Venn Diagrams                                 |
| buys, conversions)                                 | ractorise expressions using a common factor                    |   |   |
| Add, Subtract, Multiply and Divide integers,       | Factorise quadratic expressions                                | Pythagoras' Theorem                                     | Grouped Frequency Tables                      |
| decimals and fractions                             | Pactorise quadratic expressions                                |   |   |
| Percentages, including increase/decrease           | Solve quadratic equations by factorising                       | Trigonometry SOH CAH TOA                                | Find inter-quartile range from a list         |
| Standard Form                                      | Find nth term of linear sequences                              | Area and Perimeter of 2D shapes                         | Box Plots                                     |
| Compound units (speed, density, pressure)          | Form equations from a context                                  | Volume of prisms  | Probability tree diagrams                     |
| Reverse Percentages                                | Solve linear simultaneous equations                            | Interior and exterior angles in polygons                |   |
| Compound interest and Depreciation                 | Rearrange formula including some that require<br>factorisation | Vectors notation  |   |
| Convert recurring decimals into fractions          | Use y=mx+c to identify parallel and<br>perpendicular lines     | Plans and Elevations                                    | ]   |
|  | Find the equation of a line using y=mx+c                       | Area and Circumference of circles, including<br>sectors | ]   |
|  | Identify turning points of curves                              | Error bound intervals                                   |   |

## 11MA-4 (Mrs Bullars)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long with an optional 10 minute extension assessment

The main assessment will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 7.

The extension will give students an opportunity to access up to Grade 9.

| Number and Proportion  | Algebra  | Geometry and Measure                                      | Probability and Statistics            |
|--|--|---|---------------------------------------|
| Converting between units   | Collect like terms   | Angle rules involving parallel lines                      | Correlation and scatter graphs        |
| Ratios – dividing, simplifying, links to fractions                     | Substitute numbers into formulae                               | Bearings  | Pie charts                            |
| Apply proportional reasoning (recipes, best<br>buys, conversions)      | Multiply out brackets (single and double)                      | Similar Triangles   | Grouped Frequency Tables              |
| Add, Subtract, Multiply and Divide integers,<br>decimals and fractions | Find nth term of linear sequences                              | Pythagoras' Theorem                                       | Venn Diagrams                         |
| Percentages, including increase/decrease                               | Laws of indices  | Trigonometry SOH CAH TOA                                  | Find inter-quartile range from a list |
| Prime factorisation  | Solve linear equations   | Area and Perimeter of 2D shapes                           | Box Plots                             |
| Negative and Fractional indices  | Multiply out triple brackets                                   | Plans and Elevations                                      | Histograms                            |
| Standard Form  | Factorise expressions using a common factor                    | Error bound intervals                                     | Cumulative Frequency Graphs           |
| Simplify surds   | Factorise quadratic expressions                                | Describe and construct the 4 transformations              | Probability tree diagrams             |
| Compound units (speed, density, pressure)                              | Solve quadratic equations by factorising                       | Volume of prisms  | Conditional Probability               |
| Direct and Inverse Proportion  | Solve quadratic equations by the quadratic<br>formula          | Interior and exterior angles in polygons                  | Product Rule for counting             |
| Reverse Percentages  | Find nth term of quadratic sequences                           | Circle Theorems problems and proofs                       | Capture-recapture                     |
| Compound interest and Depreciation                                     | Form equations from a context                                  | Vectors notation  |                                       |
| Convert recurring decimals into fractions                              | Solve linear simultaneous equations                            | Congruent triangle proof                                  |                                       |
|  | Rearrange formula including some that require<br>factorisation | Similarity involving area and volume                      |                                       |
|  | Function notation (inverses and composite<br>functions)        | Exact trig values for 00, 300, 450, 600 and 900           |                                       |
|  | Use y=mx+c to identify parallel and<br>perpendicular lines     | Sine and Cosine Rules                                     |                                       |
|  | Find the equation of a line using y=mx+c                       | Area=1/2 ab sin C formula                                 | ]                                     |
|  | Identify turning points of curves                              | Area and Circumference of circles, including<br>sectors   |                                       |
|  | Use graphs to find approximate solutions                       | Volume and surface area of spheres, pyramids<br>and cones | 1                                     |
|  | L  | Use upper and lower bounds – limits of                    | 1                                     |
|  |  | accuracy  |                                       |

## 11MA-3 (Miss Struttman)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long with an optional 10 minute extension assessment

The main assessment will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 7.

The extension will give students an opportunity to access up to Grade 9.

| Number and Proportion  | Algebra  | Geometry and Measure                                      | Probability and Statistics            |
|--|--|---|---------------------------------------|
| Converting between units   | Collect like terms   | Angle rules involving parallel lines                      | Correlation and scatter graphs        |
| Ratios – dividing, simplifying, links to fractions                     | Substitute numbers into formulae                               | Bearings  | Pie charts                            |
| Apply proportional reasoning (recipes, best<br>buys, conversions)      | Multiply out brackets (single and double)                      | Similar Triangles   | Grouped Frequency Tables              |
| Add, Subtract, Multiply and Divide integers,<br>decimals and fractions | Find nth term of linear sequences                              | Pythagoras' Theorem                                       | Venn Diagrams                         |
| Percentages, including increase/decrease                               | Laws of indices  | Trigonometry SOH CAH TOA                                  | Find inter-quartile range from a list |
| Prime factorisation  | Solve linear equations   | Area and Perimeter of 2D shapes                           | Box Plots                             |
| Negative and Fractional indices  | Multiply out triple brackets                                   | Plans and Elevations                                      | Histograms                            |
| Standard Form  | Factorise expressions using a common factor                    | Error bound intervals                                     | Cumulative Frequency Graphs           |
| Simplify surds   | Factorise quadratic expressions                                | Describe and construct the 4 transformations              | Probability tree diagrams             |
| Compound units (speed, density, pressure)                              | Solve quadratic equations by factorising                       | Volume of prisms  | Conditional Probability               |
| Direct and Inverse Proportion  | Solve quadratic equations by the quadratic<br>formula          | Interior and exterior angles in polygons                  | Product Rule for counting             |
| Reverse Percentages  | Find nth term of quadratic sequences                           | Circle Theorems problems and proofs                       | Capture-recapture                     |
| Compound interest and Depreciation                                     | Form equations from a context                                  | Vectors notation  |                                       |
| Convert recurring decimals into fractions                              | Solve linear simultaneous equations                            | Congruent triangle proof                                  |                                       |
|  | Rearrange formula including some that require<br>factorisation | Similarity involving area and volume                      |                                       |
|  | Function notation (inverses and composite<br>functions)        | Exact trig values for 00, 300, 450, 600 and 900           |                                       |
|  | Use y=mx+c to identify parallel and<br>perpendicular lines     | Sine and Cosine Rules                                     |                                       |
|  | Find the equation of a line using y=mx+c                       | Area=1/2 ab sin C formula                                 | ]                                     |
|  | Identify turning points of curves                              | Area and Circumference of circles, including<br>sectors   |                                       |
|  | Use graphs to find approximate solutions                       | Volume and surface area of spheres, pyramids<br>and cones | 1                                     |
|  | L  | Use upper and lower bounds – limits of                    | 1                                     |
|  |  | accuracy  |                                       |

## 11MA-2 (Mr Roden)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long

The assessments will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 9.

| Number and Proportion                     | Algebra  | Geometry and Measure                                      | Probability and Statistics            |
|---|--|---|---------------------------------------|
| Prime factorisation                       | Laws of indices  | Describe and construct the 4 transformations              | Venn Diagrams                         |
| Negative and Fractional indices           | Solve linear equations   | Volume of prisms  | Find inter-quartile range from a list |
| Standard Form                             | Factorise expressions using a common factor                    | Interior and exterior angles in polygons                  | Box Plots                             |
| Compound units (speed, density, pressure) | Factorise quadratic expressions                                | Vectors notation  | Probability tree diagrams             |
| Reverse Percentages                       | Solve quadratic equations by factorising                       | Exact trig values for 00, 300, 450, 600 and 900           | Histograms                            |
| Compound interest and Depreciation        | Form equations from a context                                  | Area and Circumference of circles, including<br>sectors   | Cumulative Frequency Graphs           |
| Convert recurring decimals into fractions | Solve linear simultaneous equations                            | Circle Theorems problems and proofs                       | Conditional Probability               |
| Simplify surds                            | Rearrange formula including some that require<br>factorisation | Geometric proofs with vectors                             | Product Rule for counting             |
| Rationalise the denominator               | Use y=mx+c to identify parallel and<br>perpendicular lines     | Congruent triangle proof                                  | Capture-recapture                     |
| Direct and Inverse Proportion             | Find the equation of a line using y=mx+c                       | Similarity involving area and volume                      |                                       |
|   | Identify turning points of curves                              | Pythagoras and Trig in 3D                                 |                                       |
|   | Use graphs to find approximate solutions                       | Sine and Cosine Rules                                     |                                       |
|   | Multiply out triple brackets                                   | Area=1/2 ab sin C formula                                 |                                       |
|   | Factorise quadratics where a>1                                 | Volume and surface area of spheres, pyramids<br>and cones |                                       |
|   | Solve quadratic equations by completing the                    | Use upper and lower bounds – limits of                    | 1                                     |
|   | square   | accuracy  |                                       |
|   | Solve quadratic equations by the quadratic<br>formula          |   |                                       |
|   | Find nth term of quadratic sequences                           |   |                                       |
|   | Use iteration to find approximate solutions                    | 1   |                                       |
|   | Solve quadratic inequalities                                   | 1   |                                       |
|   | Solve linear and quadratic simultaneous                        | 1   |                                       |
|   | equations  | ]   |                                       |
|   | Algebraic Fractions  | ]   |                                       |
|   | Function notation (inverses and composite                      | ]   |                                       |
|   | functions)   | ]   |                                       |
|   | Use Completing the Square to deduce turning                    | ]   |                                       |
|   | points   | ]   |                                       |
|   | Equations of circles   | ]   |                                       |
|   | Sketch a transformation of a graph                             | ]   |                                       |
|   | Formal algebraic proof   | ]   |                                       |

### 11MA-1 (Mrs Saxton)

| w/c 26 <sup>th</sup> April | Wed P3 | Non-Calculator Assessment<br>Number and Proportion                        |
|----------------------------|--------|---|
| w/c 3 <sup>rd</sup> May    | Wed P3 | Calculator Assessment<br>Algebra  |
| w/c 10 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Geometry, Measure,<br>Probability and Statistics |
| w/c 17 <sup>th</sup> May   | Wed P3 | Non-Calculator Assessment<br>Mixed GCSE content                           |
| w/c 24 <sup>th</sup> May   | Wed P3 | Calculator Assessment<br>Mixed GCSE content                               |

Each assessment is 30 minutes long

The assessments will enable students to demonstrate mathematical knowledge, skills and understanding up to Grade 9.

| Number and Proportion                     | Algebra  | Geometry and Measure                                      | Probability and Statistics            |
|---|--|---|---------------------------------------|
| Prime factorisation                       | Laws of indices  | Describe and construct the 4 transformations              | Venn Diagrams                         |
| Negative and Fractional indices           | Solve linear equations   | Volume of prisms  | Find inter-quartile range from a list |
| Standard Form                             | Factorise expressions using a common factor                    | Interior and exterior angles in polygons                  | Box Plots                             |
| Compound units (speed, density, pressure) | Factorise quadratic expressions                                | Vectors notation  | Probability tree diagrams             |
| Reverse Percentages                       | Solve quadratic equations by factorising                       | Exact trig values for 00, 300, 450, 600 and 900           | Histograms                            |
| Compound interest and Depreciation        | Form equations from a context                                  | Area and Circumference of circles, including<br>sectors   | Cumulative Frequency Graphs           |
| Convert recurring decimals into fractions | Solve linear simultaneous equations                            | Circle Theorems problems and proofs                       | Conditional Probability               |
| Simplify surds                            | Rearrange formula including some that require<br>factorisation | Geometric proofs with vectors                             | Product Rule for counting             |
| Rationalise the denominator               | Use y=mx+c to identify parallel and<br>perpendicular lines     | Congruent triangle proof                                  | Capture-recapture                     |
| Direct and Inverse Proportion             | Find the equation of a line using y=mx+c                       | Similarity involving area and volume                      |                                       |
|   | Identify turning points of curves                              | Pythagoras and Trig in 3D                                 | 1                                     |
|   | Use graphs to find approximate solutions                       | Sine and Cosine Rules                                     | 1                                     |
|   | Multiply out triple brackets                                   | Area=1/2 ab sin C formula                                 | 1                                     |
|   | Factorise quadratics where a>1                                 | Volume and surface area of spheres, pyramids<br>and cones |                                       |
|   | Solve quadratic equations by completing the                    | Use upper and lower bounds – limits of                    | -                                     |
|   | square   | accuracy  |                                       |
|   | Solve quadratic equations by the quadratic<br>formula          |   |                                       |
|   | Find nth term of guadratic sequences                           |   |                                       |
|   | Use iteration to find approximate solutions                    | 1   |                                       |
|   | Solve quadratic inequalities                                   | 1   |                                       |
|   | Solve linear and quadratic simultaneous                        | 1   |                                       |
|   | equations  | ]   |                                       |
|   | Algebraic Fractions  | ]   |                                       |
|   | Function notation (inverses and composite                      | ]   |                                       |
|   | functions)   | ]   |                                       |
|   | Use Completing the Square to deduce turning                    | ]   |                                       |
|   | points   | ]   |                                       |
|   | Equations of circles   | ]   |                                       |
|   | Sketch a transformation of a graph                             | ]   |                                       |
|   | Formal algebraic proof   | ]   |                                       |