

## Year 7, 8 and 9 Progression Statements (Autumn & Summer)

### Year 7 – Autumn Term

Topics: Calculations with fractions and decimals, negative number calculations, prime factors, HCF, LCM, equations, functions and formulae

| Level             | Knowledge Progression                                                                                                                                                                                                                                                                                                                                                                      | Skills Progression                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Strong</b>     | Shows sophisticated understanding of Calculations with integers, fractions and decimals. Explains underlying ideas confidently in Fractions. Demonstrates deep conceptual grasp of Decimals. Explains underlying ideas confidently in Number Skills. Demonstrates deep conceptual grasp of Decimals & Percentages. Shows sophisticated understanding of Equations, Functions and Formulae. | Applies strategies effectively in Calculations with integers, fractions and decimals. Uses methods fluently and flexibly in Fractions. Selects efficient approaches when working with Decimals. Uses methods fluently and flexibly in Number Skills. Applies strategies effectively in Decimals & Percentages. Selects efficient approaches when working with Equations, Functions and Formulae. |
| <b>Confident</b>  | Demonstrates secure knowledge of Calculations with integers, fractions and decimals. Shows clear understanding of Fractions. Understands key concepts in Decimals. Shows clear understanding of Number Skills. Understands key concepts in Decimals & Percentages. Understands key concepts in Equations, Functions and Formulae.                                                          | Applies skills reliably in Calculations with integers, fractions and decimals. Applies skills reliably in Fractions. Uses correct methods independently in Decimals. Applies skills reliably in Number Skills. Uses correct methods independently in Decimals & Percentages. Shows generally accurate technique in Equations, Functions and Formulae.                                            |
| <b>Developing</b> | Shows partial but developing understanding of Calculations with integers, fractions and decimals. Demonstrates some awareness of Fractions. Is beginning to understand Decimals. Shows partial but                                                                                                                                                                                         | Can follow steps with guidance in Calculations with integers, fractions and decimals. Attempts methods with some support in Fractions. Shows developing procedural skills in Decimals. Can follow steps with guidance in Number Skills. Can                                                                                                                                                      |

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|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | developing understanding of Number Skills. Is beginning to understand Decimals & Percentages. Is beginning to understand Equations, Functions and Formulae.                                                                                                                                                                           | follow steps with guidance in Decimals & Percentages. Shows developing procedural skills in Equations, Functions and Formulae.                                                                                                                                                                                                                                             |
| Emerging | Shows limited understanding of Calculations with integers, fractions and decimals. Shows limited understanding of Fractions. Shows limited understanding of Decimals. Shows limited understanding of Number Skills. Has initial familiarity with Decimals & Percentages. Has emerging awareness of Equations, Functions and Formulae. | Struggles to apply skills in Calculations with integers, fractions and decimals. Needs structured guidance to work with Fractions. Requires significant support when using Decimals. Needs structured guidance to work with Number Skills. Struggles to apply skills in Decimals & Percentages. Requires significant support when using Equations, Functions and Formulae. |

### Year 7 – Summer Term

Topics: Equations, Angles & Shapes, Pythagoras, Data, Probability, Sequences & Graphs, Ratio, Measures, Area & Volume, Constructions

| Level  | Knowledge Progression                                                                                                                                                                                                                                                                                                                                     | Skills Progression                                                                                                                                                                                                                                    |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strong | Shows sophisticated understanding of Equations, Sequences and Graphs, Multiplicative Reasoning and Probability. Explains underlying ideas confidently in Angles, Shapes, and Perimeter, Area and Volume. Demonstrates deep conceptual grasp of Pythagoras' Theorem and Constructions. Shows sophisticated understanding of Analysing and Displaying Data. | Applies strategies effectively in Equations, Sequences and Graphs, Data and Probability. Selects efficient approaches when working with Angles, Shapes, and Area and Volume. Applies strategies effectively in Pythagoras' Theorem and Constructions. |

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|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Confident</b>  | Demonstrates secure knowledge of Equations, Sequences and Graphs, Multiplicative Reasoning and Probability. Shows clear understanding of Angles and Shapes and Data. Understands key concepts in Pythagoras' Theorem and Area and Volume. Shows clear understanding of Constructions. | Applies skills reliably in Equations, Sequences and Graphs and Data. Uses correct methods independently in Angles and Shapes and Multiplicative Reasoning. Shows generally accurate technique in Pythagoras' Theorem and Area and Volume. Applies skills reliably in Constructions and Probability.                |
| <b>Developing</b> | Shows partial but developing understanding of Equations, Sequences and Graphs, Multiplicative Reasoning and Probability. Is beginning to understand Angles and Shapes, Area and Volume, and Constructions. Demonstrates some awareness of Pythagoras' Theorem and Data.               | Can follow steps with guidance in Equations, Sequences and Graphs and Probability. Shows developing procedural skills in Angles and Shapes and Area and Volume. Attempts methods with some support in Multiplicative Reasoning and Data. Can follow steps with guidance in Pythagoras' Theorem and Constructions.  |
| <b>Emerging</b>   | Shows limited understanding of Equations, Sequences and Graphs, Multiplicative Reasoning and Probability. Has emerging awareness of Angles and Shapes and Data. Has initial familiarity with Pythagoras' Theorem and Area and Volume. Shows limited understanding of Constructions.   | Requires significant support when using Equations, Sequences and Graphs, Area and Volume and Probability. Needs structured guidance to work with Multiplicative Reasoning and Data. Struggles to apply skills in Angles and Shapes and Constructions. Requires significant support when using Pythagoras' Theorem. |

### Year 8 – Autumn Term

Topics: Indices and standard form, angles and shapes, algebra: simplifying and solving equations, analysing and displaying data.

| Level         | Knowledge Progression                          | Skills Progression                                                 |
|---------------|------------------------------------------------|--------------------------------------------------------------------|
| <b>Strong</b> | Shows sophisticated understanding of Indices & | Applies strategies effectively in Indices & Standard Form. Selects |

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|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | Standard Form. Shows sophisticated understanding of Angles and Shapes. Explains underlying ideas confidently in Algebra - simplifying expressions/solving equations. Shows sophisticated understanding of Analysing and displaying data.                               | efficient approaches when working with Angles and Shapes. Applies strategies effectively in Algebra - simplifying expressions/solving equations. Applies strategies effectively in Analysing and displaying data.                                                                   |
| Confident  | Shows clear understanding of Indices & Standard Form. Demonstrates secure knowledge of Angles and Shapes. Understands key concepts in Algebra - simplifying expressions/solving equations. Shows clear understanding of Analysing and displaying data.                 | Uses correct methods independently in Indices & Standard Form. Applies skills reliably in Angles and Shapes. Shows generally accurate technique in Algebra - simplifying expressions/solving equations. Applies skills reliably in Analysing and displaying data.                   |
| Developing | Shows partial but developing understanding of Indices & Standard Form. Is beginning to understand Angles and Shapes. Demonstrates some awareness of Algebra - simplifying expressions/solving equations. Demonstrates some awareness of Analysing and displaying data. | Can follow steps with guidance in Indices & Standard Form. Shows developing procedural skills in Angles and Shapes. Can follow steps with guidance in Algebra - simplifying expressions/solving equations. Attempts methods with some support in Analysing and displaying data.     |
| Emerging   | Has emerging awareness of Indices & Standard Form. Shows limited understanding of Angles and Shapes. Has initial familiarity with Algebra - simplifying expressions/solving equations. Has emerging awareness of Analysing and displaying data.                        | Requires significant support when using Indices & Standard Form. Struggles to apply skills in Angles and Shapes. Requires significant support when using Algebra - simplifying expressions/solving equations. Needs structured guidance to work with Analysing and displaying data. |

## Year 8 – Summer Term

Topics: Fractions, Decimals & Percentages, Real-life Graphs, Transformations, 2D & 3D Geometry, Graphs, Probability, Congruency & Similar Shapes

| Level      | Knowledge Progression                                                                                                                                                                                                                                                                                               | Skills Progression                                                                                                                                                                                                                      |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strong     | Shows sophisticated understanding of Fractions, Decimals and Percentages, Graphs and Probability. Explains underlying ideas confidently in Real-life Graphs and Congruency and Similar Shapes. Demonstrates deep conceptual grasp of Transformations. Shows sophisticated understanding of 2D Shapes and 3D Solids. | Applies strategies effectively in FDP, Graphs and Probability. Selects efficient approaches when working with Real-life Graphs and Similarity and Congruency. Applies strategies effectively in Transformations and 2D and 3D Geometry. |
| Confident  | Demonstrates secure knowledge of Fractions, Decimals and Percentages, Graphs and Probability. Shows clear understanding of Real-life Graphs and key concepts in Congruency and Similar Shapes. Understands key concepts in Transformations. Shows clear understanding of 2D and 3D Shapes.                          | Applies skills reliably in FDP, Graphs and Geometry. Uses correct methods independently in Real-life Graphs and Probability. Shows generally accurate technique in Transformations and Similar Shapes.                                  |
| Developing | Shows partial but developing understanding of Fractions, Decimals and Percentages, Graphs and Probability. Demonstrates some awareness of Real-life Graphs. Is beginning to understand Transformations, Congruency and Similar Shapes.                                                                              | Can follow steps with guidance in FDP, Graphs and Geometry. Attempts methods with some support in Graphs and Probability. Shows developing procedural skills in Transformations and Similar Shapes.                                     |

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|          | Demonstrates some awareness of 2D and 3D Shapes.                                                                                                                                                                                                                         |                                                                                                                                                                                                                |
| Emerging | Shows limited understanding of Fractions, Decimals and Percentages, Graphs and Probability. Has emerging awareness of Real-life Graphs. Has initial familiarity with Transformations and Congruency and Similar Shapes. Shows limited understanding of 2D and 3D Shapes. | Requires significant support when using FDP, Graphs, Probability and Transformations. Needs structured guidance to work with Graphs and Probability. Struggles to apply skills in Geometry and Similar Shapes. |

### Year 9 – Autumn Term

Topics: Fractional and negative indices, expanding and factorizing quadratics, solving equations in context, displaying data, averages, ratios and surds.

| Level     | Knowledge Progression                                                                                                                                                                                                                                                                                                        | Skills Progression                                                                                                                                                                                                                                                                       |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strong    | Shows sophisticated understanding of Indices and Powers. Explains underlying ideas confidently in Algebraic manipulation and equations. Demonstrates deep conceptual grasp of Data representation. Shows sophisticated understanding of Ratio and Proportion. Demonstrates deep conceptual grasp of Standard Form and Surds. | Applies strategies effectively in Indices and Powers. Uses algebraic methods fluently and flexibly. Selects efficient approaches when working with Data. Applies strategies effectively in Ratio and Proportion. Selects efficient approaches when working with Standard Form and Surds. |
| Confident | Demonstrates secure knowledge of Indices and Powers. Shows clear understanding of Algebra. Understands key concepts in Data representation. Shows clear understanding of Ratio and Proportion. Understands key concepts in Standard Form and Surds.                                                                          | Applies skills reliably in Indices and Powers. Uses correct methods independently in Algebra. Applies skills reliably in Data. Uses correct methods independently in Ratio and Proportion. Shows generally accurate technique in Standard Form and Surds.                                |

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|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Developing | Shows partial but developing understanding of Indices and Powers. Demonstrates some awareness of Algebra. Is beginning to understand Data representation. Shows partial but developing understanding of Ratio and Proportion. Is beginning to understand Standard Form and Surds. | Can follow steps with guidance in Indices and Powers. Attempts methods with some support in Algebra. Shows developing procedural skills in Data. Can follow steps with guidance in Ratio and Proportion. Shows developing procedural skills in Standard Form and Surds.      |
| Emerging   | Shows limited understanding of Indices and Powers. Has initial familiarity with Algebra. Shows limited understanding of Data. Has emerging awareness of Ratio and Proportion. Shows limited understanding of Standard Form and Surds.                                             | Requires significant support when using Indices and Powers. Needs structured guidance to work with Algebra. Struggles to apply skills in Data. Needs structured guidance to work with Ratio and Proportion. Requires significant support when using Standard Form and Surds. |

### Year 9 – Summer Term

Topics: Rearranging formulae, Pythagoras, Trigonometry, sequences, linear graphs, 3D shapes surface area and volume, Negative enlargements and constructions.

| Level  | Knowledge Progression                                                                                                                                                                                                                                                                                                                                               | Skills Progression                                                                                                                                                                                                                                                                                                                                                                       |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strong | Shows sophisticated understanding of Sequences and Formulae. Explains underlying ideas confidently in Fractions, Decimals and Percentages. Demonstrates deep conceptual grasp of Pythagoras and Trigonometry. Shows sophisticated understanding of Graphs. Explains underlying ideas confidently in Area, Volume and Circles. Demonstrates deep conceptual grasp of | Applies strategies effectively in Sequences and Formulae. Uses methods fluently and flexibly in Percentages and FDP. Selects efficient approaches when working with Pythagoras and Trigonometry. Applies strategies effectively in Graphs. Selects efficient approaches when working with Area, Volume and Circles. Applies strategies effectively in Transformations and Constructions. |

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|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | Transformations and Constructions.                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                   |
| Confident  | Demonstrates secure knowledge of Sequences and Formulae. Shows clear understanding of Fractions, Decimals and Percentages. Understands key concepts in Pythagoras and Trigonometry. Shows clear understanding of Graphs. Understands key concepts in Area, Volume and Circles. Shows clear understanding of Transformations and Constructions.                                 | Applies skills reliably in Sequences and Formulae. Uses correct methods independently in FDP. Shows generally accurate technique in Pythagoras and Trigonometry. Applies skills reliably in Graphs. Uses correct methods independently in Area, Volume and Circles. Applies skills reliably in Transformations and Constructions.                 |
| Developing | Shows partial but developing understanding of Sequences and Formulae. Demonstrates some awareness of Fractions, Decimals and Percentages. Is beginning to understand Pythagoras and Trigonometry. Shows partial but developing understanding of Graphs. Demonstrates some awareness of Area, Volume and Circles. Is beginning to understand Transformations and Constructions. | Can follow steps with guidance in Sequences and Formulae. Attempts methods with some support in FDP. Shows developing procedural skills in Pythagoras and Trigonometry. Can follow steps with guidance in Graphs. Attempts methods with some support in Area and Volume. Shows developing procedural skills in Transformations and Constructions. |
| Emerging   | Shows limited understanding of Sequences and Formulae. Has initial familiarity with Fractions, Decimals and Percentages. Shows limited understanding of Pythagoras and Trigonometry. Shows limited understanding of Graphs. Has emerging awareness of Area, Volume and Circles. Shows limited understanding of                                                                 | Requires significant support when using Sequences and Formulae. Needs structured guidance to work with FDP. Struggles to apply skills in Pythagoras and Trigonometry. Requires significant support when using Graphs. Needs structured guidance to work with Area and Volume. Struggles to apply skills in Transformations and Constructions.     |

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|  | Transformations and<br>Constructions. |  |
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