## Test Overview: Year 6+

## STUDENT PROFILE

Name: $\qquad$ Class: $\qquad$ Year: $\qquad$

| Test Question | AC Strand/Sub-strand/Content description/Code | Relates to Units |
| :---: | :---: | :---: |
| Q1 | Number and Algebra <br> Number and place value <br> Investigate index notation and represent whole numbers as products of powers of prime numbers (ACMNA149) <br> Investigate and use square roots of perfect square numbers (ACMNA150) | Unit 1 <br> Powers and Square Numbers |
| Q2 | Number and Algebra <br> Number and place value <br> Investigate index notation and represent whole numbers as products of powers of prime numbers (ACMNA149) <br> Investigate and use square roots of perfect square numbers (ACMNA150) | Unit 1 <br> Powers and Square Numbers |
| Q3 | Number and Algebra <br> Number and place value <br> Apply the associative, commutative and distributive laws to aid mental and written computation (ACMNA151) | Unit 2 <br> Place Value and Laws of Computation |
| Q4 | Number and Algebra <br> Number and place value <br> Apply the associative, commutative and distributive laws to aid mental and written computation (ACMNA151) | Unit 2 <br> Place Value and Laws of Computation |
| Q5 | Measurement and Geometry <br> Using units of measurement <br> Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving (ACMMG159) <br> Calculate volumes of rectangular prisms (ACMMG160) | Unit 3 <br> Measurement (Area and Volume) |
| Q6 | Measurement and Geometry <br> Using units of measurement <br> Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving (ACMMG159) <br> Calculate volumes of rectangular prisms (ACMMG160) | Unit 3 <br> Measurement (Area and Volume) |
| Q7 | Number and Algebra <br> Real numbers <br> Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line (ACMNA152) <br> Solve problems involving addition and subtraction of fractions, including those with unrelated denominators (ACMNA153) <br> Multiply and divide fractions and decimals using efficient written strategies and digital technologies (ACMNA154) <br> Express one quantity as a fraction of another, with and without the use of digital technologies (ACMNA155) | Unit 4 Fractions |

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| :---: | :---: | :---: |
| Q8 | Number and Algebra <br> Real numbers <br> Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line (ACMNA152) <br> Solve problems involving addition and subtraction of fractions, including those with unrelated denominators (ACMNA153) <br> Multiply and divide fractions and decimals using efficient written strategies and digital technologies (ACMNA154) <br> Express one quantity as a fraction of another, with and without the use of digital technologies (ACMNA155) | Unit 4 Fractions |
| Q9 | Number and Algebra <br> Real numbers <br> Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157) | Unit 5 <br> Decimals, Fractions and Percentages |
| Q10 | Number and Algebra <br> Real numbers <br> Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157) | Unit 5 <br> Decimals, Fractions and Percentages |
| Q11 | Number and Algebra <br> Patterns and algebra <br> Introduce the concept of variables as a way of representing numbers using letters (ACMNA175) <br> Create algebraic expressions and evaluate them by substituting a given value for each variable (ACMNA176) <br> Extend and apply the laws and properties of arithmetic to algebraic terms and expressions (ACMNA177) | Unit 6 <br> Patterns and Algebra |
| Q12 | Number and Algebra <br> Patterns and algebra <br> Introduce the concept of variables as a way of representing numbers using letters (ACMNA175) <br> Create algebraic expressions and evaluate them by substituting a given value for each variable (ACMNA176) <br> Extend and apply the laws and properties of arithmetic to algebraic terms and expressions (ACMNA177) | Unit 6 <br> Patterns and Algebra |
| Q13 | Statistics and Probability <br> Data representation and interpretation <br> Identify and investigate issues involving numerical data collected from primary and secondary sources (ACMSP169) <br> Construct and compare a range of data displays including stem-and-leaf plots and dot plots (ACMSP170) | Unit 7 <br> Data Representation |
| Q14 | Statistics and Probability <br> Data representation and interpretation Identify and investigate issues involving numerical data collected from primary and secondary sources (ACMSP169) <br> Construct and compare a range of data displays including stem-and-leaf plots and dot plots (ACMSP170) | Unit 7 <br> Data Representation |

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| Test |  |  |
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| Question | AC Strand/Sub-strand/Content description/Code | Relates to Units |
| Q15 | Number and Algebra <br> Real numbers <br> Find percentages of quantities and express one quantity as a percentage <br> of another, with and without digital technologies (ACMNA158) <br> Recognise and solve problems involving simple ratios (ACMNA173) | Unit 8 <br> Percentages |
| Q16 | Number and Algebra <br> Real numbers <br> Find percentages of quantities and express one quantity as a percentage <br> of another, with and without digital technologies (ACMNA158) <br> Recognise and solve problems involving simple ratios (ACMNA173) | AC |

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| :---: | :---: | :---: |
| Q24 | Statistics and Probability <br> Chance <br> Construct sample spaces for single-step experiments with equally likely outcomes (ACMSP167) <br> Assign probabilities to the outcomes of events and determine probabilities for events (ACMSP168) | Unit 12 Chance |
| Q25 | Measurement and Geometry <br> Geometric reasoning <br> Identify corresponding, alternate and co-interior angles when two straight lines are crossed by a transversal (ACMMG163) <br> Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning (ACMMG164) | Unit 13 <br> Angles and Parallel Lines |
| Q26 | Measurement and Geometry <br> Geometric reasoning <br> Identify corresponding, alternate and co-interior angles when two straight lines are crossed by a transversal (ACMMG163) <br> Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning (ACMMG164) | Unit 13 <br> Angles and Parallel Lines |
| Q27 | Measurement and Geometry <br> Geometric reasoning <br> Demonstrate that the angle sum of a triangle is $180^{\circ}$ and use this to find the angle sum of a quadrilateral (ACMMG166) <br> Classify triangles according to their side and angle properties and describe quadrilaterals (ACMMG165) | Unit 14 Triangles and Angles |
| Q28 | Measurement and Geometry <br> Geometric reasoning <br> Demonstrate that the angle sum of a triangle is $180^{\circ}$ and use this to find the angle sum of a quadrilateral (ACMMG166) <br> Classify triangles according to their side and angle properties and describe quadrilaterals (ACMMG165) | Unit 14 Triangles and Angles |
| Q29 | Statistics and Probability <br> Data representation and interpretation <br> Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data (ACMSP171) <br> Describe and interpret data displays using median, mean and range (ACMSP172) | Unit 15 <br> Mean, Median and Mode |
| Q30 | Statistics and Probability <br> Data representation and interpretation <br> Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data (ACMSP171) <br> Describe and interpret data displays using median, mean and range (ACMSP172) | Unit 15 <br> Mean, Median and Mode |


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