## Australian Curriculum Version 9: Mathematics Year 4 — Example Year level plan

The <u>K-12 Curriculum, assessment and reporting framework</u> (K-12 Framework) requires schools to document, retain, and monitor or review their three levels of planning. The Example planning shows effective coverage of the <u>AC V9 Mathematics</u>. <u>Year and Band planning templates</u> are available to support schools if they choose to adapt the Example planning to suit their local context.

| Sequence of units                   |   | Seme   | ster 1  | Semester 2   |  |  |
|-------------------------------------|---|--|---|--|--|--|
|                                     |   | Unit 1   | Unit 2  | Unit 3   | Unit 4   |  |
| Unit topics                         |   | Number, Space, Statistics  | Number, Algebra, Measurement  | Number, Space, Measurement   | Number, Algebra, Probability   |  |
| Unit description                    |   | students further develop proficiency and positive dispositions towards athematics and its use as they: build understanding of number facts, fractions and decimals to deepen an appreciation of how numbers work together using materials and digital tools to recognise line and rotational symmetry and create symmetrical patterns and pictures create and interpret grid reference systems and directions on a map to locate and describe positions of locations of interest develop and use surveys and digital tools to generate data and conduct a statistical investigation.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:  build understanding of odd and even numbers, number facts, addition and subtraction, fractions and decimals to deepen an appreciation of how numbers work together  use a range of physical or virtual materials to show the multiplicative relationship between place values  use a range of physical or virtual materials to show the multiplicative relationship between place values  use strategies for multiplication and division based on the inverse relationship between them context  choose and use efficient strategies when modelling financial and practical problems, communicating solutions within the context  solve everyday problems involving duration of time using relationships between units.  become aware of the importance of category proficiency with number facts, fractions and decimals to deepen an appreciation of how numbers work together  charactery or proficiency with number facts, fractions and decimals to deepen an appreciation of how numbers work together  use a range of physical or virtual materials to show the multiplication and division based on the inverse relationship between them  choose and use as they:  charactery or proficiency with number facts, fractions and decimals to deepen an appreciation of how numbers work together  charactery or proficiency with number facts, fractions and decimals to develop mathematics and its use as they:  charac |   | and positive dispositions towards mathematics and its use as they:  • build fluency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently  • use algorithms to generate sets on numbers, recognising and describing any patterns that emerge  • develop and use strategies for multiplicative thinking such as creating an algorithm that will generate number sequences involving multiples  • draw on reasoning skills to analyse, categorise and order chance events and identify independent and dependent events when conducting a chance experiment  • investigate variability by conducting repeated chance experiments, observing and communicating results. |  |  |
| Assessment                          |   | Unit 1   | Unit 2  | Unit 3   | Unit 4   |  |
|                                     |   | Assessment task 1.1 — Space  | Assessment task 2.1 — Number and Mathematical modelling   | Assessment task 3.1 — Number and Mathematical modelling  | Assessment task 4.1 — Number, Algebra and Computational thinking   |  |
| Assessable elements                 |   | Understanding and Fluency  | Understanding and Fluency,<br>Problem solving   | Understanding and Fluency,<br>Problem solving  | Understanding and Fluency  |  |
| รูเล                                | Technique   | Short response   | Short response<br>Project   | Short response<br>Project  | Test/Examination   |  |
|                                     | Mode  | ⊠ Written  | ⊠ Written   | ⊠ Written  | ⊠ Written  |  |
|                                     | Conditions  | <ul><li>☑ Access to resources</li><li>☑ Individual task</li></ul>  | <ul><li>☑ Access to resources</li><li>☑ Individual task</li></ul>   | <ul><li>☑ Access to resources</li><li>☑ Individual task</li></ul>  | <ul><li>☑ Access to resources</li><li>☑ Individual task</li></ul>  |  |
|                                     | Schools consider and identify conditions that enable equitable access for all students. | Have you considered:  ☐ Time considerations ☐ Word length ☐ Accessibility for all students   | Have you considered:  ☐ Time considerations ☐ Word length ☐ Accessibility for all students  | Have you considered:  ☐ Time considerations ☐ Word length ☐ Accessibility for all students   | Have you considered:  ☐ Time considerations ☐ Word length ☐ Accessibility for all students   |  |
| Assessment                          |   | Unit 1   | Unit 2  | Unit 3   | Unit 4   |  |
|                                     |   | Assessment task 1.2 — Statistics and Statistical investigations  | Assessment task 2.2 —  Measurement  | Assessment task 3.2 —  Measurement   | Assessment task 4.2 — Probability and Probability experiments and simulations  |  |
| Assessable elements                 |   | Problem solving and Reasoning  | Understanding and Fluency   | Understanding and Fluency  | Problem solving and Reasoni  |  |
| assessment conventions <sup>1</sup> | Technique   | Statistical investigation  | Test/Examination  | Test/Examination   | Probability experiment and simulation  |  |
|                                     | Mode  | ⊠ Multimodal   | ⊠ Written   | <ul><li>☑ Written</li><li>☑ Practical</li></ul>  | <ul> <li>☑ Written</li> <li>☑ Practical</li> <li>☑ Access to resources</li> <li>☑ Individual task</li> <li>Have you considered:</li> <li>☐ Time considerations</li> <li>☐ Word length</li> </ul> |  |
|                                     | Conditions  Schools consider and identify conditions                                    | <ul> <li>✓ Access to resources</li> <li>✓ Individual task</li> <li>Have you considered:</li> <li>☐ Time considerations</li> </ul>  | <ul> <li>✓ Access to resources</li> <li>✓ Individual task</li> <li>Have you considered:</li> <li>☐ Time considerations</li> </ul> | <ul> <li>✓ Access to resources</li> <li>✓ Individual task</li> <li>Have you considered:</li> <li>☐ Time considerations</li> </ul>  |  |  |

 $\hfill \square$  Accessibility for all students

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<sup>&</sup>lt;sup>1</sup> For more information about Assessment conventions, navigate to Summative assessment tasks page on the Teaching and Learning Hub, <a href="https://det-school.eq.edu.au/teachingandlearning/assessment/quality-assessment/summative-assessment-tasks">https://det-school.eq.edu.au/teachingandlearning/assessment/quality-assessment/summative-assessment-tasks</a>

| Agnosto of the pobles amont of an devel   | Semester 1          |                     | Semester 2          |                     |  |  |  |  |
|---|---------------------|---------------------|---------------------|---------------------|--|--|--|--|
| Aspects of the achievement standard   | Unit 1              | Unit 2              | Unit 3              | Unit 4              |  |  |  |  |
| Number and Algebra <sup>‡</sup>   |                     |                     |                     |                     |  |  |  |  |
| use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10  |                     |                     | Assessment task 3.1 |                     |  |  |  |  |
| use mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation* |                     | Assessment task 2.1 | Assessment task 3.1 |                     |  |  |  |  |
| use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently   |                     | Assessment task 2.1 |                     |                     |  |  |  |  |
| choose rounding and estimation strategies to determine whether results of calculations are reasonable   |                     | Assessment task 2.1 |                     |                     |  |  |  |  |
| use the properties of odd and even numbers  |                     | Assessment task 2.1 |                     |                     |  |  |  |  |
| recognise equivalent fractions and make connections between fraction and decimal notations  |                     |                     | Assessment task 3.1 |                     |  |  |  |  |
| count and represent fractions on a number line  |                     |                     | Assessment task 3.1 |                     |  |  |  |  |
| find unknown values in numerical equations involving addition and subtraction   |                     |                     |                     | Assessment task 4.1 |  |  |  |  |
| follow and create algorithms that generate sets of numbers and identify emerging patterns   |                     |                     |                     | Assessment task 4.1 |  |  |  |  |
| Measurement and Space <sup>☼</sup>  |                     |                     |                     |                     |  |  |  |  |
| use scaled instruments and appropriate units to measure length, mass, capacity and temperature  |                     |                     | Assessment task 3.2 |                     |  |  |  |  |
| measure and approximate perimeters and areas  |                     |                     | Assessment task 3.2 |                     |  |  |  |  |
| convert between units of time when solving problems involving duration  |                     | Assessment task 2.2 |                     |                     |  |  |  |  |
| compare angles relative to a right angle using angle names  |                     |                     | Assessment task 3.2 |                     |  |  |  |  |
| represent and approximate shapes and objects in the environment   |                     |                     | Monitoring strategy |                     |  |  |  |  |
| create and interpret grid references  | Assessment task 1.1 |                     |                     |                     |  |  |  |  |
| identify line and rotational symmetry in plane shapes and create symmetrical patterns   | Assessment task 1.1 |                     |                     |                     |  |  |  |  |
| Statistics and Probability <sup>☼</sup>   |                     |                     |                     |                     |  |  |  |  |
| create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data   | Assessment task 1.2 |                     |                     |                     |  |  |  |  |
| use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context  | Assessment task 1.2 |                     |                     |                     |  |  |  |  |
| order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent  |                     |                     |                     | Assessment task 4.2 |  |  |  |  |
| conduct repeated chance experiments and describe the variation in results   |                     |                     |                     | Assessment task 4.2 |  |  |  |  |

<sup>\*</sup>This aspect of the Achievement standard is assessed over two tasks.

<u>C2C Resource libraries</u> and resources in <u>AC V8 C2C units</u> may support teaching and learning of the updated curriculum.

