## Australian Curriculum Version 9.0: Achievement standard aligned to content descriptions

This resource shows alignment between aspects of the achievement standard and relevant content descriptions for Year 3. A similar resource is available for other year levels.

The Australian Curriculum (AC) v9.0 code for each content description includes an element indicating the strand it is organised by, e.g. AC9M3N01 indicates Number strand.

## Key to content description codes: Mathematics

e.g. AC9M3N01

Australian Curriculum (AC)
Version 9 (9)
Mathematics (M)
Year (3)
Strand (N, A, M, SP, ST, P)
Content description number (\#\#)

Strands:

- N-Number
- A_-Algebra
- M-Measurement
- SP - Space
- ST- Statistics
- P - Probability


## Year 3 Australian Curriculum: Mathematics achievement standard

By the end of Year 3, students order and represent natural numbers beyond 10000 . They partition, rearrange and regroup two- and three-digit numbers in different ways to assist in calculations. Students extend and use single-digit addition and related subtraction facts and apply additive strategies to model and solve problems involving two- and three-digit numbers. They use mathematical modelling to solve practical problems involving single-digit multiplication and division, recalling multiplication facts for twos, threes, fours, fives and tens, and using a range of strategies. Students represent unit fractions and their multiples in different ways. They make estimates and determine the reasonableness of financial and other calculations. Students find unknown values in number sentences involving addition and subtraction. They create algorithms to investigate numbers and explore simple patterns.

Students use familiar metric units when estimating, comparing and measuring the attributes of objects and events. They identify angles as measures of turn and compare them to right angles. Students estimate and compare measures of duration using formal units of time. They represent money values in different ways. Students make, compare and classify objects using key features. They interpret and create two-dimensional representations of familiar environments.
Students conduct guided statistical investigations involving categorical and discrete numerical data, and interpret their results in terms of the context. They record, represent and compare data they have collected. Students use practical activities, observation or experiment to identify and describe outcomes and the likelihood of everyday events explaining reasoning. They conduct repeated chance experiments and discuss variation in results.

| Achievement standard aspect | Relevant content description/s | AC v9.0 code |
| :---: | :---: | :---: |
| By the end of Year 3 | Students learn to: |  |
| Students order and represent natural numbers beyond 10000 . | - recognise, represent and order natural numbers using naming and writing conventions for numerals beyond 10000 | AC9M3N01 |
| They partition, rearrange and regroup two- and three-digit numbers in different ways to assist in calculations. | - add and subtract two- and three-digit numbers using place value to partition, rearrange and regroup numbers to assist in calculations without a calculator | AC9M3N03 |
|  | - recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences | AC9M3A01. |
|  | - recognise the relationships between dollars and cents and represent money values in different ways | AC9M3M06 |
| They extend and use single-digit addition and related subtraction facts and apply additive strategies to model and solve problems involving two- and three-digit numbers. | - add and subtract two- and three-digit numbers using place value to partition, rearrange and regroup numbers to assist in calculations without a calculator | AC9M3N03 |
|  | - use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate problems using number sentences and choose calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation | AC9M3NO6 |
|  | - extend and apply knowledge of addition and subtraction facts to 20 to develop efficient mental strategies for computation with larger numbers without a calculator | AC9M3A02 |
| They use mathematical modelling to solve practical problems involving single-digit multiplication and division, recalling multiplication facts for twos, threes, fours, fives and tens, and using a range of strategies. | - multiply and divide one- and two-digit numbers, representing problems using number sentences, diagrams and arrays, and using a variety of calculation strategies | AC9M3N04 |
|  | - use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate problems using number sentences and choose calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation | AC9M3NO6 |
|  | - recall and demonstrate proficiency with multiplication facts for $3,4,5$ and 10 ; extend and apply facts to develop the related division facts | AC9M3A03 |
| They represent unit fractions and their multiples in different ways. | - recognise and represent unit fractions including $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}$ and $\frac{1}{10}$ and their multiples in different ways; combine fractions with the same denominator to complete the whole | AC9M3N02 |
| They make estimates and determine the reasonableness of financial and other calculations. | - estimate the quantity of objects in collections and make estimates when solving problems to determine the reasonableness of calculations | AC9M3NO5 |
|  | - use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate problems using number sentences and choose calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation | AC9M3NO6 |
|  | - identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates | AC9M3M01 |
|  | - recognise the relationships between dollars and cents and represent money values in different ways | AC9M3M06 |


| Achievement standard aspect | Relevant content description/s | AC v9.0 code |
| :---: | :---: | :---: |
| They find unknown values in number sentences involving addition and subtraction. | - recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences | AC9M3A01. |
| They create algorithms to investigate numbers and explore simple patterns. | - follow and create algorithms involving a sequence of steps and decisions to investigate numbers; describe any emerging patterns | AC9M3N07. |
| They use familiar metric units when estimating, comparing and measuring the attributes of objects and events. | - identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates | AC9M3M01 |
|  | - measure and compare objects using familiar metric units of length, mass and capacity, and instruments with labelled markings | AC9M3M 02 |
|  | - recognise and use the relationship between formal units of time including days, hours, minutes and seconds to estimate and compare the duration of events | AC9M3M03 |
| They identify angles as measures of turn and compare them to right angles. | - identify angles as measures of turn and compare angles with right angles in everyday situations | AC9M3M05 |
| They estimate and compare measures of duration using formal units of time. | - recognise and use the relationship between formal units of time including days, hours, minutes and seconds to estimate and compare the duration of events | AC9M3M03 |
|  | - describe the relationship between the hours and minutes on analog and digital clocks, and read the time to the nearest minute | AC9M3M04 |
| They represent money values in different ways. | - recognise the relationships between dollars and cents and represent money values in different ways | AC9M3M06 |
| They make, compare and classify objects using key features. | - make, compare and classify objects, identifying key features and explaining why these features make them suited to their uses | AC9M3SP01 |
| They interpret and create twodimensional representations of familiar environments. | - interpret and create two-dimensional representations of familiar environments, locating key landmarks and objects relative to each other | AC9M3SP02 |
| They conduct guided statistical investigations involving categorical and discrete numerical data, and interpret their results in terms of the context. | - acquire data for categorical and discrete numerical variables to address a question of interest or purpose by observing, collecting and accessing data sets; record the data using appropriate methods including frequency tables and spreadsheets | AC9M3ST01 |
|  | - create and compare different graphical representations of data sets including using software where appropriate; interpret the data in terms of the context | AC9M3ST02 |
|  | - conduct guided statistical investigations involving the collection, representation and interpretation of data for categorical and discrete numerical variables with respect to questions of interest | AC9M3ST03 |
| They record, represent and compare data they have collected. | - acquire data for categorical and discrete numerical variables to address a question of interest or purpose by observing, collecting and accessing data sets; record the data using appropriate methods including frequency tables and spreadsheets | AC9M3ST01 |
|  | - create and compare different graphical representations of data sets including using software where appropriate; interpret the data in terms of the context | AC9M3ST02 |
| They use practical activities, observation or experiment to identify and describe outcomes and the likelihood of everyday events explaining reasoning. | - identify practical activities and everyday events involving chance; describe possible outcomes and events as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' explaining reasoning | AC9M3P01 |
|  | - conduct repeated chance experiments; identify and describe possible outcomes, record the results, recognise and discuss the variation | AC9M3P02 |
| They conduct repeated chance experiments and discuss variation in results. | - conduct repeated chance experiments; identify and describe possible outcomes, record the results, recognise and discuss the variation. | AC9M3P02 |

## More information

If you would like more information, please visit the QCAA website www.qcaa.qld.edu.au. Alternatively, email the K-10 Curriculum and Assessment branch at australiancurriculum@qcaa.qId.edu.au

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