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| Prep–Year 6 multi-age Mathematics Curriculum and assessment plan  [Insert school name, implementation year] |

Use this template in a multi-age context to plan an overview or summary of the teaching, learning and assessment for multiple year levels in the Australian Curriculum: Mathematics. For planning advice, refer to the *Planning for teaching, learning and assessment* document available on the Planning tab for each learning area at [www.qcaa.qld.edu.au/p-10/aciq/version-9/learning-areas](http://www.qcaa.qld.edu.au/p-10/aciq/version-9/learning-areas).

**How to use this template:** Type information into the fields (yellow shading). When the plan is complete, delete the highlighted instructions (blue shading). To do so, select the instruction text, click the **Home tab > Styles dropdown > Clear All/Clear Formatting >** text will revert to Normal style and you can delete the text.

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| Context and cohort considerations (if applicable) |
| Describe the context and cohort.  Consider the following to make informed professional decisions during the planning process:   * + relevant student data and information, e.g. achievement data   + available resources, e.g. timetabling   + school and sector priorities.   [Insert context and cohort considerations] |

| Level description — Prep | Level description — Year 1 | Level description — Year 2 | Level description — Year 3 | Level description — Year 4 | Level description — Year 5 | Level description — Year 6 |
| --- | --- | --- | --- | --- | --- | --- |
| In Foundation, learning in Mathematics builds on the Early Years Learning Framework and each student’s prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, skills, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:   * explore situations, sparked by curiosity, using physical and virtual materials to represent, sort, quantify, compare and solve everyday problems * look for and make connections between number names, numerals and quantities, and compare quantities and shapes, using elementary mathematical reasoning in active learning experiences * bring mathematical meaning to their use of familiar terms and language when they pose and respond to questions, and explain their thinking and reasoning * build confidence and autonomy in being able to make and justify mathematical decisions based on quantification and direct comparisons * learn to recognise repetition in pattern sequences and apply this to creatively build repeating patterns in a range of contexts * develop a sense of sameness, difference and change when they engage in play-based activities. | In Year 1, learning in Mathematics builds on each student’s prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:   * use their curiosity and imagination to explore situations, recognise patterns in their environment and choose ways of representing their thinking when communicating with others * demonstrate that numbers can be represented, partitioned and composed in various ways, recognise patterns in numbers and extend their knowledge of numbers beyond 2 digits * use physical or virtual materials and diagrams when modelling practical problems through active learning experiences, recognise existing patterns, employ different strategies and discuss the reasonableness of answers * explain ways of making direct and indirect comparisons and begin to use uniform, informal units to measure some attributes * reason spatially and use spatial features to classify shapes and objects; they recognise these shapes and objects in their environment and use simple transformations, directions and pathways to move the positions of shapes and objects within a space * use simple surveys to collect and sort data, based on a question of interest, recognise that data can be represented in different ways, and explain patterns that they see in the results * develop a sense of equivalence, fairness, repetition and variability when they engage in play-based and practical activities. | In Year 2, learning in Mathematics builds on each student's prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency with positive dispositions towards mathematics and its use as they:   * recognise that mathematics can be used to investigate things they are curious about, to solve practical problems and model everyday situations, describing their thinking and reasoning using familiar mathematical language * partition and combine numbers flexibly, recognising and describing the relationship between addition and subtraction and employing part-part-whole reasoning and relational thinking to solve additive problems * use number sentences to formulate additive situations and represent simple multiplicative situations using equal groups and arrays * use mathematical modelling to solve practical problems involving authentic situations by representing problems with physical and virtual materials, diagrams, and using different calculation strategies to find solutions * compare and contrast related operations and use known addition and subtraction facts to develop strategies for unfamiliar calculations * recognise types of patterns in different contexts * partition collections, shapes and objects into equal parts and build a sense of fractions as a measure, connecting this to measures of turn and representations of time * use uniform units to measure, compare and discuss the attributes of shapes and objects, and the duration of events * describe spatial relationships such as the relative position of objects represented within a two-dimensional space * build the foundations for statistical inquiry by choosing questions based on their interests as they collect, represent, and interpret data, and recognise features of different representations * develop a sense of equivalence, chance and variability when they engage in play-based and practical activities. | In Year 3, learning in Mathematics builds on each student’s prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:   * become increasingly aware of the usefulness of mathematics to model situations and solve practical problems * recognise that mathematics has conventions and language enabling the unambiguous communication of ideas and results * experience the power of being able to manipulate numbers using a range of strategies that are based on proficiency with single-digit addition facts and their understanding of place value in the base 10 number system, partitioning and regrouping * begin to apply their understanding of algorithms and technology to experiment with numbers and recognise patterns * develop, extend and apply their addition and multiplication facts and related facts for subtraction and division through recognising connections between operations and develop automaticity for 3, 4, 5, and 10 multiplication facts through games and meaningful practice * learn to formulate, choose and use calculation strategies, communicating their solutions within a modelling context * use metric units to measure and compare objects and events * recognise the relationship between dollars and cents and learn to represent money values in different ways * determine key features of objects and spaces, and use these when they build models and spatial representations * undertake, with guidance, statistical investigations that are meaningful to them, making decisions about their use and representation of categorical and discrete numerical data and reporting findings * develop a qualitative understanding of chance and use the language of chance to describe and compare the outcomes of familiar chance events * become increasingly able to understand that different outcomes can be the results of random processes. | In Year 4, learning in Mathematics builds on each student’s prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:   * draw on their proficiency with number facts, fractions and decimals to deepen their appreciation of how numbers work * develop and use strategies for multiplication that are based on their understanding of multiplication as an operation and their knowledge of laws for arithmetic operations * choose and use efficient strategies when modelling problems, communicating their solutions within the context of the situation * use algorithms to generate sets of numbers, recognising and describing any patterns that emerge * become aware of the importance of context and purpose when they make judgements and reflect on the reasonableness of measurements and the results of calculations, and how they choose to represent mathematics and mathematical information * measure and estimate common attributes of objects using conventional instruments and appropriate metric units * develop and use surveys to obtain data that is directly relevant to their statistical investigations * draw on their reasoning skills to analyse, categorise and order chance events and identify independent and dependent events * investigate variability by conducting repeated chance experiments and observing results. | In Year 5, learning in Mathematics builds on each student’s prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:   * apply their understanding of relationships to convert between forms of numbers, units and spatial representations * use mathematical modelling to solve practical problems, with guidance, using natural numbers and operations, and report on insights and conclusions they reach about the context * use common percentages to make proportional comparisons of quantities * use appropriate instruments and digital tools to construct and measure angles in degrees * use appropriate metric units to directly measure the area and perimeter of regular and irregular spaces * locate and move positions within a grid coordinate system * recognise what stays the same and what changes when shapes undergo transformations * experiment with factors and multiples using algorithms and digital tools * plan, conduct and report findings from statistical investigations that involve an increasing range of types of data and means for representing data * develop their reasoning skills when they consider relationships between events and connect long-term frequency over many trials to the likelihood of an event occurring. | In Year 6, learning in Mathematics builds on each student’s prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with of concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.  Students further develop proficiency and positive dispositions towards mathematics and its use as they:   * expand the repertoire of numbers they work with to include rational numbers and the use of integers in practical contexts such as locating points in the 4 quadrants of a Cartesian plane * extend their knowledge of factors and multiples to understand the properties of prime, composite and square numbers * solve arithmetic problems involving all 4 operations with natural numbers of any size * use mathematical modelling to solve practical problems, choosing models, representations and calculation strategies and justify solutions * apply computational approaches to develop algorithms that use rules to generate numbers * develop a range of written and digital means for representing objects and three-dimensional spaces in 2 dimensions * apply their understanding of area and use multiplicative thinking to establish the formula for the areas of a rectangle * begin to formally use deductive reasoning in spatial contexts involving lines and angles * describe and compare probabilities numerically * determine the mode and range and discuss the shape of distributions in their reports of findings from their statistical investigations * observe and compare long-run frequencies in repeated chance experiments and simulations. |

**Note:** Insert/delete rows/columns, as required, to provide an overview of the teaching, learning and assessment sequence across the year levels.

|  | Unit 1 — [Insert unit title] | Unit 2 — [Insert unit title] | Unit 3 — [Insert unit title] | Unit 4 — [Insert unit title] |
| --- | --- | --- | --- | --- |
|  | Duration: [Insert semester, term and/or weeks] | Duration: [Insert semester, term and/or weeks] | Duration: [Insert semester, term and/or weeks] | Duration: [Insert semester, term and/or weeks] |
|  | [Insert unit description and learning focus] | [Insert unit description and learning focus] | [Insert unit description and learning focus] | [Insert unit description and learning focus] |
| Prep | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |
| Year 1 | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |
| Year 2 | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |
| Year 3 | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |
| Year 4 | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |
| Year 5 | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |
| Year 6 | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] | [Insert relevant year level specific detail] |

# Prep

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Foundation Year, students make connections between number names, numerals and position in the sequence of numbers from zero to at least 20. They use subitising and counting strategies to quantify collections. Students compare the size of collections to at least 20. They partition and combine collections up to 10 in different ways, representing these with numbers. Students represent practical situations that involve quantifying, equal sharing, adding to and taking away from collections to at least 10. They copy and continue repeating patterns.  Students identify the attributes of mass, capacity, length and duration, and use direct comparison strategies to compare objects and events. They sequence and connect familiar events to the time of day. Students name, create and sort familiar shapes and give their reasoning. They describe the position and the location of themselves and objects in relation to other objects and people within a familiar space.  Students collect, sort and compare data in response to questions in familiar contexts. | | By the end of Foundation Year, students make connections between number names, numerals and position in the sequence of numbers from zero to at least 20. They use subitising and counting strategies to quantify collections. Students compare the size of collections to at least 20. They partition and combine collections up to 10 in different ways, representing these with numbers. Students represent practical situations that involve quantifying, equal sharing, adding to and taking away from collections to at least 10. They copy and continue repeating patterns.  Students identify the attributes of mass, capacity, length and duration, and use direct comparison strategies to compare objects and events. They sequence and connect familiar events to the time of day. Students name, create and sort familiar shapes and give their reasoning. They describe the position and the location of themselves and objects in relation to other objects and people within a familiar space.  Students collect, sort and compare data in response to questions in familiar contexts. | | By the end of Foundation Year, students make connections between number names, numerals and position in the sequence of numbers from zero to at least 20. They use subitising and counting strategies to quantify collections. Students compare the size of collections to at least 20. They partition and combine collections up to 10 in different ways, representing these with numbers. Students represent practical situations that involve quantifying, equal sharing, adding to and taking away from collections to at least 10. They copy and continue repeating patterns.  Students identify the attributes of mass, capacity, length and duration, and use direct comparison strategies to compare objects and events. They sequence and connect familiar events to the time of day. Students name, create and sort familiar shapes and give their reasoning. They describe the position and the location of themselves and objects in relation to other objects and people within a familiar space.  Students collect, sort and compare data in response to questions in familiar contexts. | | By the end of Foundation Year, students make connections between number names, numerals and position in the sequence of numbers from zero to at least 20. They use subitising and counting strategies to quantify collections. Students compare the size of collections to at least 20. They partition and combine collections up to 10 in different ways, representing these with numbers. Students represent practical situations that involve quantifying, equal sharing, adding to and taking away from collections to at least 10. They copy and continue repeating patterns.  Students identify the attributes of mass, capacity, length and duration, and use direct comparison strategies to compare objects and events. They sequence and connect familiar events to the time of day. Students name, create and sort familiar shapes and give their reasoning. They describe the position and the location of themselves and objects in relation to other objects and people within a familiar space.  Students collect, sort and compare data in response to questions in familiar contexts. | |
| Moderation | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| name, represent and order numbers including zero to at least 20, using physical and virtual materials and numerals  AC9MFN01 |  |  |  |  | recognise, copy and continue repeating patterns represented in different ways  AC9MFA01 |  |  |  |  | identify and compare attributes of objects and events, including length, capacity, mass and duration, using direct comparisons and communicating reasoning  AC9MFM01 |  |  |  |  | |
| recognise and name the number of objects within a collection up to 5 using subitising  AC9MFN02 |  |  |  |  |  |  |  |  |  | sequence days of the week and times of the day including morning, lunchtime, afternoon and night time, and connect them to familiar events and actions  AC9MFM02 |  |  |  |  | |
| quantify and compare collections to at least 20 using counting and explain or demonstrate reasoning AC9MFN03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| partition and combine collections up to 10 using part-part-whole relationships and subitising to recognise and name the parts  AC9MFN04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| represent practical situations involving addition, subtraction and quantification with physical and virtual materials and use counting or subitising strategies  AC9MFN05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| represent practical situations that involve equal sharing and grouping with physical and virtual materials and use counting or subitising strategies AC9MFN06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 |
| **sort, name and create familiar shapes; recognise and describe familiar shapes within objects in the environment, giving reasons**  AC9MFSP01 |  |  |  |  | collect, sort and compare data represented by objects and images in response to given investigative questions that relate to familiar situations  **AC9MFST01** |  |  |  |  |
| describe the position and location of themselves and objects in relation to other people and objects within a familiar space  AC9MFSP02 |  |  |  |  |  |  |  |  |  |

# Year 1

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Year 1, students connect number names, numerals and quantities, and order numbers to at least 120. They demonstrate how one- and two-digit numbers can be partitioned in different ways and that two-digit numbers can be partitioned into tens and ones. Students partition collections into equal groups and skip count in twos, fives or tens to quantify collections to at least 120. They solve problems involving addition and subtraction of numbers to 20 and use mathematical modelling to solve practical problems involving addition, subtraction, equal sharing and grouping, using calculation strategies. Students use numbers, symbols and objects to create skip counting and repeating patterns, identifying the repeating unit.  They compare and order objects and events based on the attributes of length, mass, capacity and duration, communicating reasoning. Students measure the length of shapes and objects using uniform informal units. They make, compare and classify shapes and objects using obvious features. Students give and follow directions to move people and objects within a space.  They collect and record categorical data, create one-to-one displays, and compare and discuss the data using frequencies. | | By the end of Year 1, students connect number names, numerals and quantities, and order numbers to at least 120. They demonstrate how one- and two-digit numbers can be partitioned in different ways and that two-digit numbers can be partitioned into tens and ones. Students partition collections into equal groups and skip count in twos, fives or tens to quantify collections to at least 120. They solve problems involving addition and subtraction of numbers to 20 and use mathematical modelling to solve practical problems involving addition, subtraction, equal sharing and grouping, using calculation strategies. Students use numbers, symbols and objects to create skip counting and repeating patterns, identifying the repeating unit.  They compare and order objects and events based on the attributes of length, mass, capacity and duration, communicating reasoning. Students measure the length of shapes and objects using uniform informal units. They make, compare and classify shapes and objects using obvious features. Students give and follow directions to move people and objects within a space.  They collect and record categorical data, create one-to-one displays, and compare and discuss the data using frequencies. | | By the end of Year 1, students connect number names, numerals and quantities, and order numbers to at least 120. They demonstrate how one- and two-digit numbers can be partitioned in different ways and that two-digit numbers can be partitioned into tens and ones. Students partition collections into equal groups and skip count in twos, fives or tens to quantify collections to at least 120. They solve problems involving addition and subtraction of numbers to 20 and use mathematical modelling to solve practical problems involving addition, subtraction, equal sharing and grouping, using calculation strategies. Students use numbers, symbols and objects to create skip counting and repeating patterns, identifying the repeating unit.  They compare and order objects and events based on the attributes of length, mass, capacity and duration, communicating reasoning. Students measure the length of shapes and objects using uniform informal units. They make, compare and classify shapes and objects using obvious features. Students give and follow directions to move people and objects within a space.  They collect and record categorical data, create one-to-one displays, and compare and discuss the data using frequencies. | | By the end of Year 1, students connect number names, numerals and quantities, and order numbers to at least 120. They demonstrate how one- and two-digit numbers can be partitioned in different ways and that two-digit numbers can be partitioned into tens and ones. Students partition collections into equal groups and skip count in twos, fives or tens to quantify collections to at least 120. They solve problems involving addition and subtraction of numbers to 20 and use mathematical modelling to solve practical problems involving addition, subtraction, equal sharing and grouping, using calculation strategies. Students use numbers, symbols and objects to create skip counting and repeating patterns, identifying the repeating unit.  They compare and order objects and events based on the attributes of length, mass, capacity and duration, communicating reasoning. Students measure the length of shapes and objects using uniform informal units. They make, compare and classify shapes and objects using obvious features. Students give and follow directions to move people and objects within a space.  They collect and record categorical data, create one-to-one displays, and compare and discuss the data using frequencies. | |
| Moderation | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| recognise, represent and order numbers to at least 120 using physical and virtual materials, numerals, number lines and charts  AC9M1N01 |  |  |  |  | recognise, continue and create pattern sequences, with numbers, symbols, shapes and objects, formed by skip counting, initially by twos, fives and tensAC9M1A01 |  |  |  |  | compare directly and indirectly and order objects and events using attributes of length, mass, capacity and duration, communicating reasoning  **AC9M1M01** |  |  |  |  | |
| partition one- and two-digit numbers in different ways using physical and virtual materials, including partitioning two-digit numbers into tens and ones AC9M1N02 |  |  |  |  | recognise, continue and create repeating patterns with numbers, symbols, shapes and objects, identifying the repeating unit  AC9M1A02 |  |  |  |  | measure the length of shapes and objects using informal units, recognising that units need to be uniform and used end-to-end  AC9M1M02 |  |  |  |  | |
| quantify sets of objects, to at least 120, by partitioning collections into equal groups using number knowledge and skip counting  AC9M1N03 |  |  |  |  |  |  |  |  |  | describe the duration and sequence of events using years, months, weeks, days and hours  AC9M1M03 |  |  |  |  | |
| add and subtract numbers within 20, using physical and virtual materials, part-part-whole knowledge to 10 and a variety of calculation strategies AC9M1N04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| use mathematical modelling to solve practical problems involving additive situations including simple money transactions; represent the situations with diagrams, physical and virtual materials, and use calculation strategies to solve the problem  AC9M1N05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| use mathematical modelling to solve practical problems involving equal sharing and grouping; represent the situations with diagrams, physical and virtual materials, and use calculation strategies to solve the problem  AC9M1N06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 |
| make, compare and classify familiar shapes; recognise familiar shapes and objects in the environment, identifying the similarities and differences between them  AC9M1SP01 |  |  |  |  | acquire and record data for categorical variables in various ways including using digital tools, objects, images, drawings, lists, tally marks and symbols **AC9M1ST01** |  |  |  |  |
| give and follow directions to move people and objects to different locations within a space AC9M1SP02 |  |  |  |  | represent collected data for a categorical variable using one-to-one displays and digital tools where appropriate; compare the data using frequencies and discuss the findings  AC9M1ST02 |  |  |  |  |

## Year 2

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Year 2, students order and represent numbers to at least 1000, apply knowledge of place value to partition, rearrange and rename two- and three-digit numbers in terms of their parts, and regroup partitioned numbers to assist in calculations. They use mathematical modelling to solve practical additive and multiplicative problems, including money transactions, representing the situation and choosing calculation strategies. Students identify and represent part-whole relationships of halves, quarters and eighths in measurement contexts. They describe and continue patterns that increase and decrease additively by a constant amount and identify missing elements in the pattern. Students recall and demonstrate proficiency with addition and subtraction facts within 20 and multiplication facts for twos.  They use uniform informal units to measure and compare shapes and objects. Students determine the number of days between events using a calendar and read time on an analog clock to the hour, half hour and quarter hour. They compare and classify shapes, describing features using formal spatial terms. Students locate and identify positions of features in two-dimensional representations and move position by following directions and pathways.  They use a range of methods to collect, record, represent and interpret categorical data in response to questions. | | By the end of Year 2, students order and represent numbers to at least 1000, apply knowledge of place value to partition, rearrange and rename two- and three-digit numbers in terms of their parts, and regroup partitioned numbers to assist in calculations. They use mathematical modelling to solve practical additive and multiplicative problems, including money transactions, representing the situation and choosing calculation strategies. Students identify and represent part-whole relationships of halves, quarters and eighths in measurement contexts. They describe and continue patterns that increase and decrease additively by a constant amount and identify missing elements in the pattern. Students recall and demonstrate proficiency with addition and subtraction facts within 20 and multiplication facts for twos.  They use uniform informal units to measure and compare shapes and objects. Students determine the number of days between events using a calendar and read time on an analog clock to the hour, half hour and quarter hour. They compare and classify shapes, describing features using formal spatial terms. Students locate and identify positions of features in two-dimensional representations and move position by following directions and pathways.  They use a range of methods to collect, record, represent and interpret categorical data in response to questions. | | By the end of Year 2, students order and represent numbers to at least 1000, apply knowledge of place value to partition, rearrange and rename two- and three-digit numbers in terms of their parts, and regroup partitioned numbers to assist in calculations. They use mathematical modelling to solve practical additive and multiplicative problems, including money transactions, representing the situation and choosing calculation strategies. Students identify and represent part-whole relationships of halves, quarters and eighths in measurement contexts. They describe and continue patterns that increase and decrease additively by a constant amount and identify missing elements in the pattern. Students recall and demonstrate proficiency with addition and subtraction facts within 20 and multiplication facts for twos.  They use uniform informal units to measure and compare shapes and objects. Students determine the number of days between events using a calendar and read time on an analog clock to the hour, half hour and quarter hour. They compare and classify shapes, describing features using formal spatial terms. Students locate and identify positions of features in two-dimensional representations and move position by following directions and pathways.  They use a range of methods to collect, record, represent and interpret categorical data in response to questions. | | By the end of Year 2, students order and represent numbers to at least 1000, apply knowledge of place value to partition, rearrange and rename two- and three-digit numbers in terms of their parts, and regroup partitioned numbers to assist in calculations. They use mathematical modelling to solve practical additive and multiplicative problems, including money transactions, representing the situation and choosing calculation strategies. Students identify and represent part-whole relationships of halves, quarters and eighths in measurement contexts. They describe and continue patterns that increase and decrease additively by a constant amount and identify missing elements in the pattern. Students recall and demonstrate proficiency with addition and subtraction facts within 20 and multiplication facts for twos.  They use uniform informal units to measure and compare shapes and objects. Students determine the number of days between events using a calendar and read time on an analog clock to the hour, half hour and quarter hour. They compare and classify shapes, describing features using formal spatial terms. Students locate and identify positions of features in two-dimensional representations and move position by following directions and pathways.  They use a range of methods to collect, record, represent and interpret categorical data in response to questions. | |
| Moderation | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| recognise, represent and order numbers to at least 1000 using physical and virtual materials, numerals and number lines  AC9M2N01 |  |  |  |  | recognise, describe and create additive patterns that increase or decrease by a constant amount, using numbers, shapes and objects, and identify missing elements in the pattern  AC9M2A01 |  |  |  |  | measure and compare objects based on length, capacity and mass using appropriate uniform informal units and smaller units for accuracy when necessary  AC9M2M01 |  |  |  |  | |
| partition, rearrange, regroup and rename two- and three-digit numbers using standard and non-standard groupings; recognise the role of a zero digit in place value notation  AC9M2N02 |  |  |  |  | recall and demonstrate proficiency with addition facts to 20; extend and apply facts to develop related subtraction facts  AC9M2A02 |  |  |  |  | identify common uses and represent halves, quarters and eighths in relation to shapes, objects and events  AC9M2M02 |  |  |  |  | |
| recognise and describe one-half as one of 2 equal parts of a whole and connect halves, quarters and eighths through repeated halving  AC9M2N03 |  |  |  |  | recall and demonstrate proficiency with multiplication facts for twos; extend and apply facts to develop the related division facts using doubling and halving  AC9M2A03 |  |  |  |  | identify the date and determine the number of days between events using calendars  AC9M2M03 |  |  |  |  | |
| add and subtract one- and two-digit numbers, representing problems using number sentences, and solve using part-part-whole reasoning and a variety of calculation strategies  AC9M2N04 |  |  |  |  |  |  |  |  |  | recognise and read the time represented on an analog clock to the hour, half-hour and quarter-hour AC9M2M04 |  |  |  |  | |
| multiply and divide by one-digit numbers using repeated addition, equal grouping, arrays, and partitioning to support a variety of calculation strategies  AC9M2N05 |  |  |  |  |  |  |  |  |  | identify, describe and demonstrate quarter, half, three-quarter and full measures of turn in everyday situations  AC9M2M05 |  |  |  |  | |
| use mathematical modelling to solve practical problems involving additive and multiplicative situations, including money transactions; represent situations and choose calculation strategies; interpret and communicate solutions in terms of the situation  AC9M2N06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

Note: Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 |
| recognise, compare and classify shapes, referencing the number of sides and using spatial terms such as “opposite”, “parallel”, “curved” and “straight”  AC9M2SP01 |  |  |  |  | acquire data for categorical variables through surveys, observation, experiment and using digital tools; sort data into relevant categories and display data using lists and tables  AC9M2ST01 |  |  |  |  |
| locate positions in two dimensional representations of a familiar space; move positions by following directions and pathways  AC9M2SP02 |  |  |  |  | create different graphical representations of data using software where appropriate; compare the different representations, identify and describe common and distinctive features in response to questions  AC9M2ST02 |  |  |  |  |

# Year 3

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Year 3, students order and represent natural numbers beyond 10 000. 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. | | By the end of Year 3, students order and represent natural numbers beyond 10 000. 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. | | By the end of Year 3, students order and represent natural numbers beyond 10 000. 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. | | By the end of Year 3, students order and represent natural numbers beyond 10 000. 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. | |
| Moderation | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| recognise, represent and order natural numbers using naming and writing conventions for numerals beyond 10 000  AC9M3N01 |  |  |  |  | recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences  AC9M3A01 |  |  |  |  | identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates  AC9M3M01 |  |  |  |  | |
| recognise and represent unit fractions including and and their multiples in different ways; combine fractions with the same denominator to complete the whole  AC9M3N02 |  |  |  |  | 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 |  |  |  |  | measure and compare objects using familiar metric units of length, mass and capacity, and instruments with labelled markings  AC9M3M02 |  |  |  |  | |
| 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 |  |  |  |  | recall and demonstrate proficiency with multiplication facts for 3, 4, 5 and 10; extend and apply facts to develop the related division facts AC9M3A03 |  |  |  |  | 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 |  |  |  |  | |
| multiply and divide one- and two-digit numbers, representing problems using number sentences, diagrams and arrays, and using a variety of calculation strategies  AC9M3N04 |  |  |  |  |  |  |  |  |  | describe the relationship between the hours and minutes on analog and digital clocks, and read the time to the nearest minute  AC9M3M04 |  |  |  |  | |
| estimate the quantity of objects in collections and make estimates when solving problems to determine the reasonableness of calculations AC9M3N05 |  |  |  |  |  |  |  |  |  | identify angles as measures of turn and compare angles with right angles in everyday situations AC9M3M05 |  |  |  |  | |
| 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  AC9M3N06 |  |  |  |  |  |  |  |  |  | recognise the relationships between dollars and cents and represent money values in different ways AC9M3M06 |  |  |  |  | |
| follow and create algorithms involving a sequence of steps and decisions to investigate numbers; describe any emerging patterns  AC9M3N07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 | Probability | 1 | 2 | 3 | 4 | |
| make, compare and classify objects, identifying key features and explaining why these features make them suited to their uses  AC9M3SP01 |  |  |  |  | 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 |  |  |  |  | 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 |  |  |  |  | |
| interpret and create two dimensional representations of familiar environments, locating key landmarks and objects relative to each other AC9M3SP02 |  |  |  |  | create and compare different graphical representations of data sets including using software where appropriate; interpret the data in terms of the context  AC9M2ST02 |  |  |  |  | conduct repeated chance experiments; identify and describe possible outcomes, record the results, recognise and discuss the variation  AC9M3P02 |  |  |  |  | |
|  |  |  |  |  | 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 |  |  |  |  |  |  |  |  |  | |

# Year 4

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They 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. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. Students use the properties of odd and even numbers. They recognise equivalent fractions and make connections between fraction and decimal notations. Students count and represent fractions on a number line. They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.  They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.  Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results. | | By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They 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. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. Students use the properties of odd and even numbers. They recognise equivalent fractions and make connections between fraction and decimal notations. Students count and represent fractions on a number line. They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.  They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.  Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results. | | By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They 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. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. Students use the properties of odd and even numbers. They recognise equivalent fractions and make connections between fraction and decimal notations. Students count and represent fractions on a number line. They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.  They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.  Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results. | | By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They 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. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. Students use the properties of odd and even numbers. They recognise equivalent fractions and make connections between fraction and decimal notations. Students count and represent fractions on a number line. They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.  They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.  Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results. | |
| Moderation | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| recognise and extend the application of place value to tenths and hundredths and use the conventions of decimal notation to name and represent decimals AC9M4N01 |  |  |  |  | find unknown values in numerical equations involving addition and subtraction, using the properties of numbers and operations  AC9M4A01 |  |  |  |  | interpret unmarked and partial units when measuring and comparing attributes of length, mass, capacity, duration and temperature, using scaled and digital instruments and appropriate unitsAC9M4M01 |  |  |  |  | |
| explain and use the properties of odd and even numbers  AC9M4N02 |  |  |  |  | recall and demonstrate proficiency with multiplication facts up to 10 x 10 and related division facts; extend and apply facts to develop efficient mental strategies for computation with larger numbers without a calculator  AC9M4A02 |  |  |  |  | recognise ways of measuring and approximating the perimeter and area of shapes and enclosed spaces, using appropriate formal and informal units AC9M4M02 |  |  |  |  | |
| find equivalent representations of fractions using related denominators and make connections between fractions and decimal notation  AC9M4N03 |  |  |  |  |  |  |  |  |  | solve problems involving the duration of time including situations involving “am” and “pm” and conversions between units of time  AC9M4M03 |  |  |  |  | |
| count by fractions including mixed numerals; locate and represent these fractions as numbers on number lines  AC9M4N04 |  |  |  |  |  |  |  |  |  | estimate and compare angles using angle names including acute, obtuse, straight angle, reflex and revolution, and recognise their relationship to a right angle  AC9M4M04 |  |  |  |  | |
| solve problems involving multiplying or dividing natural numbers by multiples and powers of 10 without a calculator, using the multiplicative relationship between the place value of digits AC9M4N05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| develop efficient strategies and use appropriate digital tools for solving problems involving addition and subtraction, and multiplication and division where there is no remainder  AC9M4N06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| choose and use estimation and rounding to check and explain the reasonableness of calculations including the results of financial transactions AC9M4N07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate the problems using number sentences and choose efficient calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation  AC9M4N08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| follow and create algorithms involving a sequence of steps and decisions that use addition or multiplication to generate sets of numbers; identify and describe any emerging patterns  AC9M4N09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 | Probability | 1 | 2 | 3 | 4 | |
| represent and approximate composite shapes and objects in the environment, using combinations of familiar shapes and objects  AC9M4SP01 |  |  |  |  | acquire data for categorical and discrete numerical variables to address a question of interest or purpose, using digital tools; represent data using many-to-one pictographs, column graphs and other displays or visualisations; interpret and discuss the information that has been created  AC9M4ST01 |  |  |  |  | describe possible everyday events and the possible outcomes of chance experiments and order outcomes or events based on their likelihood of occurring; identify independent or dependent events AC9M4P01 |  |  |  |  | |
| create and interpret grid reference systems using grid references and directions to locate and describe positions and pathways  AC9M4SP02 |  |  |  |  | analyse the effectiveness of different displays or visualisations in illustrating and comparing data distributions, then discuss the shape of distributions and the variation in the data  AC9M4ST02 |  |  |  |  | conduct repeated chance experiments to observe relationships between outcomes; identify and describe the variation in results  AC9M4P02 |  |  |  |  | |
| recognise line and rotational symmetry of shapes and create symmetrical patterns and pictures, using dynamic geometric software where appropriate AC9M4SP03 |  |  |  |  | conduct statistical investigations, collecting data through survey responses and other methods; record and display data using digital tools; interpret the data and communicate the results  AC9M4ST03 |  |  |  |  |  |  |  |  |  | |

# Year 5

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Year 5, students use place value to write and order decimals including decimals greater than one. They express natural numbers as products of factors and identify multiples. Students order and represent, add and subtract fractions with the same or related denominators. They represent common percentages and connect them to their fraction and decimal equivalents. Students use their proficiency with multiplication facts and efficient calculation strategies to multiply large numbers by one- and two-digit numbers and divide by single-digit numbers. They check the reasonableness of their calculations using estimation. Students use mathematical modelling to solve financial and other practical problems, formulating and solving problems, choosing arithmetic operations and interpreting results in terms of the situation. They apply properties of numbers and operations to find unknown values in numerical equations involving multiplication and division. Students create and use algorithms to identify and explain patterns in the factors and multiples of numbers.  They choose and use appropriate metric units to measure the attributes of length, mass and capacity, and to solve problems involving perimeter and area. Students convert between 12- and 24-hour time. They estimate, construct and measure angles in degrees. Students use grid coordinates to locate and move positions. They connect objects to their two-dimensional nets. Students perform and describe the results of transformations and identify any symmetries. | | By the end of Year 5, students use place value to write and order decimals including decimals greater than one. They express natural numbers as products of factors and identify multiples. Students order and represent, add and subtract fractions with the same or related denominators. They represent common percentages and connect them to their fraction and decimal equivalents. 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They apply properties of numbers and operations to find unknown values in numerical equations involving multiplication and division. Students create and use algorithms to identify and explain patterns in the factors and multiples of numbers.  They choose and use appropriate metric units to measure the attributes of length, mass and capacity, and to solve problems involving perimeter and area. Students convert between 12- and 24-hour time. They estimate, construct and measure angles in degrees. Students use grid coordinates to locate and move positions. They connect objects to their two-dimensional nets. Students perform and describe the results of transformations and identify any symmetries. | |
|  | They plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools. Students identify the mode and interpret the shape of distributions of data in context. They interpret and compare data represented in line graphs. Students conduct repeated chance experiments, list the possible outcomes, estimate likelihoods and make comparisons between those with and without equally likely outcomes. | | They plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools. Students identify the mode and interpret the shape of distributions of data in context. They interpret and compare data represented in line graphs. Students conduct repeated chance experiments, list the possible outcomes, estimate likelihoods and make comparisons between those with and without equally likely outcomes. | | They plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools. Students identify the mode and interpret the shape of distributions of data in context. They interpret and compare data represented in line graphs. Students conduct repeated chance experiments, list the possible outcomes, estimate likelihoods and make comparisons between those with and without equally likely outcomes. | | They plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools. Students identify the mode and interpret the shape of distributions of data in context. They interpret and compare data represented in line graphs. Students conduct repeated chance experiments, list the possible outcomes, estimate likelihoods and make comparisons between those with and without equally likely outcomes. | |
| Moderation | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | | [Insert moderation details, including when moderation will occur and how it will be conducted] | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| interpret, compare and order numbers with more than 2 decimal places, including numbers greater than one, using place value understanding; represent these on a number line  AC9M5N01 |  |  |  |  | recognise and explain the connection between multiplication and division as inverse operations and use this to develop families of number factsAC9M5A01 |  |  |  |  | choose appropriate metric units when measuring the length, mass and capacity of objects; use smaller units or a combination of units to obtain a more accurate measure  AC9M5M01 |  |  |  |  | |
| express natural numbers as products of their factors, recognise multiples and determine if one number is divisible by another  AC9M5N02 |  |  |  |  | find unknown values in numerical equations involving multiplication and division using the properties of numbers and operations  AC9M5A02 |  |  |  |  | solve practical problems involving the perimeter and area of regular and irregular shapes using appropriate metric units  AC9M5M02 |  |  |  |  | |
| compare and order fractions with the same and related denominators including mixed numerals, applying knowledge of factors and multiples; represent these fractions on a number line AC9M5N03 |  |  |  |  |  |  |  |  |  | compare 12- and 24-hour time systems and solve practical problems involving the conversion between them  AC9M5M03 |  |  |  |  | |
| recognise that 100% represents the complete whole and use percentages to describe, represent and compare relative size; connect familiar percentages to their decimal and fraction equivalents  AC9M5N04 |  |  |  |  |  |  |  |  |  | estimate, construct and measure angles in degrees, using appropriate tools including a protractor, and relate these measures to angle names  AC9M5M04 |  |  |  |  | |
| solve problems involving addition and subtraction of fractions with the same or related denominators, using different strategies  AC9M5N05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| solve problems involving multiplication of larger numbers by one- or two-digit numbers, choosing efficient calculation strategies and using digital tools where appropriate; check the reasonableness of answers  AC9M5N06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| solve problems involving division, choosing efficient strategies and using digital tools where appropriate; interpret any remainder according to the context and express results as a whole number, decimal or fraction  AC9M5N07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| check and explain the reasonableness of solutions to problems including financial contexts using estimation strategies appropriate to the context AC9M5N08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate the problems, choosing operations and efficient calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation  AC9M5N09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| create and use algorithms involving a sequence of steps and decisions and digital tools to experiment with factors, multiples and divisibility; identify, interpret and describe emerging patterns AC9M5N010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 | Probability | 1 | 2 | 3 | 4 | |
| connect objects to their nets and build objects from their nets using spatial and geometric reasoning AC9M5SP01 |  |  |  |  | acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables, to address a question of interest or purpose using software including spreadsheets; discuss and report on data distributions in terms of highest frequency (mode) and shape, in the context of the data  AC9M5ST01 |  |  |  |  | list the possible outcomes of chance experiments involving equally likely outcomes and compare to those which are not equally likely  AC9M5P01 |  |  |  |  | |
| construct a grid coordinate system that uses coordinates to locate positions within a space; use coordinates and directional language to describe position and movement  AC9M5SP02 |  |  |  |  | interpret line graphs representing change over time; discuss the relationships that are represented and conclusions that can be made  AC9M5ST02 |  |  |  |  | conduct repeated chance experiments including those with and without equally likely outcomes, observe and record the results; use frequency to compare outcomes and estimate their likelihoods AC9M5P02 |  |  |  |  | |
| describe and perform translations, reflections and rotations of shapes, using dynamic geometric software where appropriate; recognise what changes and what remains the same, and identify any symmetries  AC9M5SP03 |  |  |  |  | plan and conduct statistical investigations by posing questions or identifying a problem and collecting relevant data; choose appropriate displays and interpret the data; communicate findings within the context of the investigation  AC9M5ST03 |  |  |  |  |  |  |  |  |  | |

# Year 6

**Note:**

Adjust the table to reflect the number of units you will offer.

Highlight the aspects of the achievement standard that will be assessed within each unit.

|  | Unit 1 | | Unit 2 | | Unit 3 | | Unit 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing | Assessment — [Insert assessment title] | Timing |
| Assessment | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] | [Insert concise description of assessment]  [Insert technique]  [Insert mode, if applicable]  [Insert conditions] | [Insert week/s or date/s] |
| Achievement standard | By the end of Year 6, students use integers to represent points on a number line and in the Cartesian plane. They solve problems using the properties of prime, composite and square numbers. Students order common fractions, giving reasons, and add and subtract fractions with related denominators. They use all 4 operations with decimals and connect decimal representations of measurements to the metric system. Students solve problems involving finding a fraction, decimal or percentage of a quantity and use estimation to find approximate solutions to problems involving rational numbers and percentages. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.  They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. Students locate an ordered pair in any one of the 4 quadrants on the Cartesian plane. | | By the end of Year 6, students use integers to represent points on a number line and in the Cartesian plane. They solve problems using the properties of prime, composite and square numbers. Students order common fractions, giving reasons, and add and subtract fractions with related denominators. They use all 4 operations with decimals and connect decimal representations of measurements to the metric system. Students solve problems involving finding a fraction, decimal or percentage of a quantity and use estimation to find approximate solutions to problems involving rational numbers and percentages. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.  They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. 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Students solve problems involving finding a fraction, decimal or percentage of a quantity and use estimation to find approximate solutions to problems involving rational numbers and percentages. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.  They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. Students locate an ordered pair in any one of the 4 quadrants on the Cartesian plane. | |
|  | They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments. | | They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments. | | They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments. | | They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments. | |
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**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | Algebra | 1 | 2 | 3 | 4 | Measurement | 1 | 2 | 3 | 4 | |
| recognise situations, including financial contexts, that use integers; locate and represent integers on a number line and as coordinates on the Cartesian plane  AC9M6N01 |  |  |  |  | recognise and use rules that generate visually growing patterns and number patterns involving rational numbers  **AC9M6A01** |  |  |  |  | convert between common metric units of length, mass and capacity; choose and use decimal representations of metric measurements relevant to the context of a problem  AC9M6M01 |  |  |  |  | |
| identify and describe the properties of prime, composite and square numbers and use these properties to solve problems and simplify calculations  AC9M6N02 |  |  |  |  | find unknown values in numerical equations involving brackets and combinations of arithmetic operations, using the properties of numbers and operations  AC9M6A02 |  |  |  |  | establish the formula for the area of a rectangle and use it to solve practical problems  AC9M6M02 |  |  |  |  | |
| apply knowledge of equivalence to compare, order and represent common fractions including halves, thirds and quarters on the same number line and justify their order  AC9M6N03 |  |  |  |  | create and use algorithms involving a sequence of steps and decisions that use rules to generate sets of numbers; identify, interpret and explain emerging patterns  AC9M6A03 |  |  |  |  | interpret and use timetables and itineraries to plan activities and determine the duration of events and journeys  AC9M6M03 |  |  |  |  | |
| apply knowledge of place value to add and subtract decimals, using digital tools where appropriate; use estimation and rounding to check the reasonableness of answers  AC9M6N04 |  |  |  |  |  |  |  |  |  | identify the relationships between angles on a straight line, angles at a point and vertically opposite angles; use these to determine unknown angles, communicating reasoning  AC9M6M04 |  |  |  |  | |
| solve problems involving addition and subtraction of fractions using knowledge of equivalent fractions AC9M6N05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| multiply and divide decimals by multiples of powers of 10 without a calculator, applying knowledge of place value and proficiency with multiplication facts; using estimation and rounding to check the reasonableness of answers  AC9M6N06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| solve problems that require finding a familiar fraction, decimal or percentage of a quantity, including percentage discounts, choosing efficient calculation strategies and using digital tools where appropriate  AC9M6N07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| approximate numerical solutions to problems involving rational numbers and percentages, including financial contexts, using appropriate estimation strategies  AC9M6N08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| use mathematical modelling to solve practical problems involving natural and rational numbers and percentages, including in financial contexts; formulate the problems, choosing operations and efficient calculation strategies, and using digital tools where appropriate; interpret and communicate solutions in terms of the situation, justifying the choices made  AC9M6N09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

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| Content descriptions | Units | | | | Content descriptions | Units | | | | Content descriptions | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space | 1 | 2 | 3 | 4 | Statistics | 1 | 2 | 3 | 4 | Probability | 1 | 2 | 3 | 4 | |
| compare the parallel cross-sections of objects and recognise their relationships to right prisms AC9M6SP01 |  |  |  |  | interpret and compare data sets for ordinal and nominal categorical, discrete and continuous numerical variables using comparative displays or visualisations and digital tools; compare distributions in terms of mode, range and shape  AC9M6ST01 |  |  |  |  | recognise that probabilities lie on numerical scales of 0–1 or 0%–100% and use estimation to assign probabilities that events occur in a given context, using common fractions, percentages and decimals  AC9M6P01 |  |  |  |  | |
| locate points in the 4 quadrants of a Cartesian plane; describe changes to the coordinates when a point is moved to a different position in the plane AC9M6SP02 |  |  |  |  | identify statistically informed arguments presented in traditional and digital media; discuss and critique methods, data representations and conclusions AC9M6ST02 |  |  |  |  | conduct repeated chance experiments and run simulations with an increasing number of trials using digital tools; compare observations with expected results and discuss the effect on variation of increasing the number of trials  AC9M6P02 |  |  |  |  | |
| recognise and use combinations of transformations to create tessellations and other geometric patterns, using dynamic geometric software where appropriate  AC9M6SP03 |  |  |  |  | plan and conduct statistical investigations by posing and refining questions or identifying a problem and collecting relevant data; analyse and interpret the data and communicate findings within the context of the investigation  AC9M6ST03 |  |  |  |  |  |  |  |  |  | |

**Note:** Adjust the table to reflect the number of units you will offer. Check or uncheck the columns as appropriate for each unit.

| General capabilities | Units | | | |  | Cross-curriculum priorities | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |  |  | 1 | 2 | 3 | 4 |
| Critical and creative thinking |  |  |  |  |  | Aboriginal and Torres Strait Islander histories and cultures |  |  |  |  |
| Digital literacy |  |  |  |  |  | Asia and Australia’s engagement with Asia |  |  |  |  |
| Ethical understanding |  |  |  |  |  | Sustainability |  |  |  |  |
| Intercultural understanding |  |  |  |  |
| Literacy |  |  |  |  |
| Numeracy |  |  |  |  |
| Personal and social capability |  |  |  |  |

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