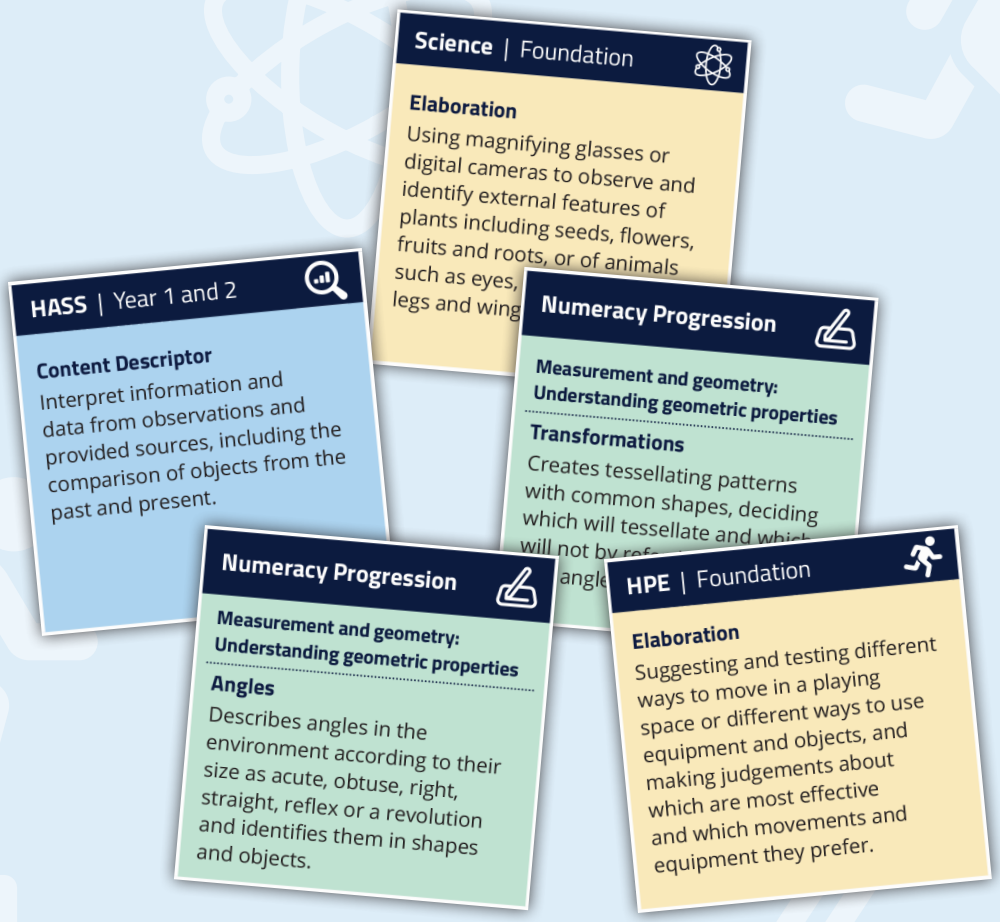
Mathematics Hub

Year F–6

Resource 2

Activity 2: Curriculum jigsaw card sets



Contents

Key

Blue: Content Descriptors

Yellow: Elaborations

Green: Numeracy Progressions

HASS | Foundation

HASS | Foundation

Content Descriptor
Sort and record information including pictorial timelines and locations on pictorial maps or models.

HASS | Foundation

Elaboration
Identifying features on a provided pictorial map or oblique aerial photograph of a familiar place and linking the representation of specific features to pictures they have drawn of those features.

HASS | Foundation

Elaboration
Sorting and displaying sources and creating pictorial timelines.

HASS | Foundation

Measurement and geometry: Measuring time

Sequencing time
Measures time duration by counting and using informal units.

Numeracy Progression

Measurement and geometry: Measuring time

Sequencing time
Uses the language of time to describe events in relation to past, present and future.

Numeracy Progression

Measurement and geometry: Measuring time

Sequencing time
Applies an understanding of passage of time to sequence events using everyday language.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Follows simple instructions using positional language.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Locates positions in the classroom relevant to own self.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Orients self to other positions in the classroom.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Identifies things that vary or stay the same in everyday life.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Poses and answers simple questions and collects responses (e.g. Collects data from a simple yes/no question).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Displays information using real objects, drawings or photographs.

HASS | Year 1 and 2

HASS | Year 1 and 2

Content Descriptor
Collect, sort and record information and data from observations and from provided sources, including unscaled timelines and labelled maps or models.

HASS | Year 1 and 2

Content Descriptor
Interpret information and data from observations and provided sources, including the comparison of objects from the past and present.

HASS | Year 1

Elaboration
Recording data about the locations of places and their features on maps and/or plans; for example, labelling the location of their home on a map of the local area, using a provided plan of their classroom and labelling its activity spaces.

HASS | Year 1

Elaboration
Using comparative language when describing family life over time and/or comparing features of places, such as "smaller/bigger than", "closer/further", "not as big as", "younger/older than", "more rainy days", "fewer/less", "hotter/colder", "sunnier/windier than".

HASS | Year 1

Elaboration
Developing a pictorial table to categorise information; for example, matching clothes with seasons, activities with the weather, features with places, places with the work done there.

HASS | Year 1

Elaboration
Creating a peg timeline in which labelled, drawn or photographic representations of events or objects from different generations are pegged onto string in the correct sequence.

HASS | Year 1

Elaboration
Categorising objects, drawings or images by their features and explaining the reason for their categorisation.

HASS | Year 2

Elaboration
Creating pictorial maps with annotations to show historical sites or places they are connected to, incorporating symbols to show locations of objects, places or significant features.

HASS | Year 2

Elaboration
Locating the places they are connected to, such as through family, travel or friends, or the places they visit for shopping, recreation or other reasons on a print, electronic or wall map.

HASS | Year 2

Elaboration
Ordering key events in the history of the local community or in its development using formats such as unscaled timelines, slideshows or stories.

HASS | Year 2

Elaboration
Interpreting distance on maps using terms such as "distant", "close", "local", "many hours in a bus/car/plane" and "walking distance" to decide on the accessibility of different features and places.

HASS | Year 2

Elaboration
Interpreting geographic maps, concept maps and other digital or visual displays to explore system connections.

HASS | Year 2

Elaboration
Interpreting symbols and codes that provide information, such as map legends.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Uses and justifies the appropriate unit of time to describe the duration of events.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Identifies that the clockface is a circle subdivided into 12 parts and uses these to allocate hour markers.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Identifies that hour markers on a clock can also represent quarter-hour and half-hour marks and shows that there is a minute hand and an hour hand on a clock.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Uses a calendar to identify the date and determine the number of days in each month.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Identifies the direction of clockwise and anticlockwise relating it to the hands of the clock.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Reads time on analog clocks to the hour, half-hour and quarter-hour.

Numeracy Progression

Measurement and geometry: Measuring time

Units of time
Uses a calendar to identify the date and determine the number of days in each month.

HASS | Year 1 and 2

Numeracy Progression

Measurement and geometry: Using informal units of measurement

Measures an attribute by choosing and using multiple identical, informal units

Selects the appropriate size and dimensions of an informal unit to measure and compare attributes.

Numeracy Progression

Measurement and geometry: Using informal units of measurement

Measures an attribute by choosing and using multiple identical, informal units

Chooses and uses appropriate uniform informal units to measure length and area without gaps or overlaps.

Numeracy Progression

Measurement and geometry: Using informal units of measurement

Measures an attribute by choosing and using multiple identical, informal units

Counts the individual uniform units used by ones to compare measurements.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Estimating measurements

Estimates a measurement based on a number of uniform informal units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Estimating measurements

Checks an estimate using informal units to compare to predicted measurement.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Poses questions that could be investigated from a simple numerical or categorical data set (e.g. Number of family members, types of pets, where people live).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Displays and describes one variable data in lists or tables.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Communicates information through text, picture graphs and tables using numbers and symbols (e.g. Creates picture graphs to display one-variable data).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Responds to questions and interprets general observations made about data represented in simple one-to-one data displays (e.g. a simple picture graph).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Displays and interprets categorical data in one-to-many data displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Collects, records and displays one-variable data in variety of ways such as tables, charts, plots and graphs using the appropriate digital tools.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Interprets and represents categorical data in simple displays such as bar and column graphs, pie charts, models, maps, colour wheels, and pictorial timelines, and makes simple inferences from such displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Designs survey questions to collect categorical data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Makes comparisons from categorical data displays using relative heights from a common baseline (e.g. Compares the heights of the columns in a simple column graph and recognises most frequent response).

Numeracy Progression

Number sense and algebra: Counting processes

Counting sequences

Continues counting from any number forwards and backwards beyond 100100 using knowledge of place value.

Numeracy Progression

Number sense and algebra: Counting processes

Counting sequences

Counts in sequence by twos and fives starting at zero.

HASS | Year 1 and 2

Numeracy Progression

Number sense and algebra: Counting processes

Counting sequences

Counts in sequence forwards and backwards by tens on the decade up to 100100.

Numeracy Progression

Number sense and algebra: Counting processes

Perceptual counting

Counts items in groups of twos, fives and tens.

Numeracy Progression

Number sense and algebra: Counting processes

Counting sequences

Counts forward by one using the full counting sequence to determine the number before or after a given number, within the range of 1–10.

Numeracy Progression

Number sense and algebra: Counting processes

Perceptual counting

Matches the count to objects, using one-to-one correspondence.

Numeracy Progression

Number sense and algebra: Counting processes

Perceptual counting

Determines that the last number said in a count names the quantity or total of that collection.

HASS | Year 3 and 4

HASS | Year 3 and 4

Content Descriptor
Locate, collect and record information and data from a range of sources, including annotated timelines and maps.

HASS | Year 3 and 4

Content Descriptor
Interpret information and data displayed in different formats.

HASS | Year 3

Elaboration
Sequencing information about local people and events in annotated timelines to show change.

HASS | Year 3

Elaboration
Interpreting climate data to describe the temperature and rainfall for a place in Australia and a place in a neighbouring country.

HASS | Year 3

Elaboration
Interpreting data to identify patterns of change over time.

HASS | Year 3

Elaboration
Using maps, ground and aerial photographs, and a digital source such as online satellite images to identify, locate and describe features, including the interpretation of cartographic information such as titles, map symbols, north point and compass direction.

HASS | Year 3

Elaboration
Creating tables or picture and column graphs to show patterns in data collected.

HASS | Year 4

Elaboration
Constructing and annotating maps, using the appropriate cartographic conventions, including map symbols, title and north point.

HASS | Year 4

Elaboration
Using timelines, maps, graphs or tables to display data and information and using digital applications as appropriate.

HASS | Year 4

Elaboration
Interpreting the data presented in picture, line, bar or column graphs to identify trends; for example, explaining survey results.

HASS | Year 4

Elaboration
Interpreting thematic maps and using online satellite images to describe the environmental characteristics of a continent or region, or to identify a particular characteristic, such as equatorial rainforests or clearance of natural vegetation for farming and settlement.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using informal maps and plans
Locates self on an informal map to select an appropriate path to a given location.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using informal maps and plans
Draws an informal map or sketch to provide directions.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using informal maps and plans
Describes and locates relative positions on an informal map or plan.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using informal maps and plans
Orients an informal map using recognisable landmarks and current location.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Explains how data displays can be misleading (e.g. Whether a scale should start at zero; not using uniform intervals on the axes).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Interprets visual representations of data displayed using a multi-unit scale, reading values between the marked units and describing any variation and trends in the data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Collects and records discrete numerical data using an appropriate method for recording.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Constructs graphical representations of numerical data and explains the difference between continuous and discrete data.

HASS | Year 5 and 6

HASS | Year 5 and 6

Content Descriptor
Locate, collect and organise information and data from primary and secondary sources in a range of formats.

HASS | Year 5 and 6

Content Descriptor
Evaluate information and data in a range of formats to identify and describe patterns and trends, or to infer relationships.

HASS | Year 5 and 6

Content Descriptor
Interpret line graphs representing change over time; discuss the relationships that are represented and conclusions that can be made.

HASS | Year 5

Elaboration
Interpreting data presented in a line, bar, column or pie graph.

HASS | Year 5

Elaboration
Creating maps, using spatial technologies and cartographic conventions as appropriate, including border, source, scale, legend, title and north point, to show information and data such as location.

HASS | Year 5

Elaboration
Using geospatial tools such as a globe, wall map or a digital application to collect information.

HASS | Year 5

Elaboration
Constructing timelines, maps, tables and graphs using appropriate digital applications and cartographic conventions, such as border, source, scale, legend, title and north point, to display data and information.

HASS | Year 5

Elaboration
Exploring maps and sources showing First Nations Australians' language groups and Countries/Places, to explain the diversity of their connections to Country/Place.

HASS | Year 6

Elaboration
Creating maps, using spatial technologies and cartographic conventions as appropriate, including border, source, scale, legend, title and north point, to show information and data such as location.

HASS | Year 6

Elaboration
Using maps to identify patterns, trends and cause–effect relationships.

Numeracy Progression

Measurement and geometry: Positioning and locating

Measuring time with large and small timescales
Constructs timelines using an appropriate scale.

Numeracy Progression

Measurement and geometry: Positioning and locating

Measuring time with large and small timescales
Uses appropriate metric prefixes to measure both large and small durations of time.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using proportional thinking for scaling
Interprets the scale used to create plans, drawings or maps.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using proportional thinking for scaling
Interprets and uses plans and maps involving scale.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using proportional thinking for scaling
Describes and interprets maps to determine the geographical location and positioning of states and territories within Australia and of countries relative to Australia.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using proportional thinking for scaling
Interprets and uses more formal directional language such as compass bearings, degrees of turn, coordinates and distances to locate position or the distance from one location to another.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Constructs graphical representations of numerical data and explains the difference between continuous and discrete data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Explains how data displays can be misleading (e.g. Whether a scale should start at zero; not using uniform intervals on the axes).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Poses questions based on variations in continuous numerical data and chooses the appropriate method to collect and record data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning.

HASS | Year 5 and 6

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Determines and calculates the most appropriate statistic to describe the spread of data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Compares the usefulness of different representations of the same data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Describes the spread of a data distribution in terms of the range, clusters, skewness and symmetry of the graphical display, and determines and makes connections to the mode, median and mean of the data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data

Interprets visual representations of data displayed using a multi-unit scale, reading values between the marked units and describing any variation and trends in the data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data

Collects and records discrete numerical data using an appropriate method for recording.

Health and Physical Education (HPE) | Foundation

HPE | Foundation

Content Descriptor
Experiment with different ways of moving their body safely and manipulating objects and space.

HPE | Foundation

Content Descriptor
Practise fundamental movement skills in minor game and play situations.

HPE | Foundation

Elaboration
Combining fine and gross motor skills in increasingly complex patterns.

HPE | Foundation

Elaboration
Applying fundamental movement skills for purpose and enjoyment in natural environments.

HPE | Foundation

Elaboration
Suggesting and testing different ways to move in a playing space or different ways to use equipment and objects, and making judgements about which are most effective and which movements and equipment they prefer.

HPE | Foundation

Elaboration
Applying fundamental movement skills for purpose and enjoyment in natural environments.

HPE | Foundation

Elaboration
Applying different locomotor skills to move from one point to another.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Locates positions in the classroom relevant to self.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Orients self to other positions in the classroom.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Follows simple instructions using positional language.

Health and Physical Education (HPE) | Year 1 and 2

HPE | Year 1 and 2

Content Descriptor
Practise fundamental movement skills and apply them in a variety of movement situations.

HPE | Year 1 and 2

Content Descriptor
Investigate different ways of moving their body, and manipulating objects and space, and draw conclusions about their effectiveness.

HPE | Year 1 and 2

Elaboration
Performing locomotor movements using different body parts to travel in different directions.

HPE | Year 1 and 2

Elaboration
Demonstrating changes in speed, direction and level as they use locomotor and non-locomotor skills in sequences.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to other
Interprets a simple diagram or picture to describe the position of an object in relation to other objects.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to other
Gives and follows simple directions to move from one place to another using familiar reference points.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to other
Uses positional terms with reference to themselves.

Health and Physical Education (HPE) | Year 3 and 4

HPE | Year 3 and 4

Content Descriptor
Describe and apply protective behaviours and help-seeking strategies in a range of online and offline situations.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using formal maps and plans
Locates position on maps using grid references.

HPE | Year 3 and 4

Content Descriptor
Explore recommendations about physical activity and sedentary behaviours and discuss strategies to achieve the recommendations.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using formal maps and plans
Describes routes using landmarks and directional language including reference to quarter, half, three-quarter turns; turns to the left and right; clockwise and anticlockwise turns.

HPE | Year 3 and 4

Elaboration
Indicating on a local map the location of safe places and people who can help if they feel unsafe or scared.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using formal maps and plans
Interprets keys, simple scales and compass directions contained within a map to locate features.

HPE | Year 3 and 4

Elaboration
Exploring physical activity and screen-usage time recommendations in the Australian 24-Hour Movement Guidelines for Children and Young People and proposing how they can meet these recommendations.

Numeracy Progression

Measurement and geometry: Measuring time

Measuring time
Uses a calendar to calculate time intervals in days and weeks, bridging months to develop fitness plans, progress and set realistic personal and health goals using a calendar.

Health and Physical Education (HPE) | Year 5 and 6

HPE | Year 5 and 6

Content Descriptor
Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation.

HPE | Year 5 and 6

Content Descriptor
Investigate different sources and types of health information and how these apply to their own and others' health choices.

HPE | Year 5 and 6

Elaboration
Analysing nutritional information of different foods and developing strategies to communicate healthier choices to their family.

HPE | Year 5 and 6

Elaboration
Researching the Australian 24-Hour Movement Guidelines for Children and Young People, comparing their daily habits of physical activity to the recommendations and proposing strategies for enhancing or maintaining their levels of activity.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Poses questions based on variations in continuous numerical data and chooses the appropriate method to collect and record data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Determines and calculates the most appropriate statistic to describe the spread of data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution. Compares the usefulness of different representations of the same data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data
Describes the spread of a data distribution in terms of the range, clusters, skewness and symmetry of the graphical display, and determines and makes connections to the mode, median and mean of the data.

Numeracy Progression

Measurement and geometry: Measuring time

Converting between units of time
Interprets and converts between 12-hour and 24-hour digital time, and analog and digital representations of time to solve duration problems.

Numeracy Progression

Measurement and geometry: Measuring time

Converting between units of time
Converts between units of time, using appropriate conversion rates, to solve problems involving time.

Numeracy Progression

Measurement and geometry: Measuring time

Converting between units of time
Uses rates involving time to solve problems.

Science | Foundation

Science | Foundation

Content Descriptor
Represent observations in provided templates and identify patterns with guidance.

Science | Foundation

Content Descriptor
Observe external features of plants and animals and describe ways they can be grouped based on these features.

Science | Foundation

Content Descriptor
Describe how objects move and how factors including their size, shape or material influence their movement.

Science | Foundation

Content Descriptor
Recognise that objects can be composed of different materials and describe the observable properties of those materials.

Science | Foundation

Content Descriptor
Engage in investigations safely and make observations using their senses.

Science | Foundation

Elaboration
Engage in investigations safely and make observations using their senses.

Science | Foundation

Elaboration
Collaborating to create a floor or wall display to link images or samples of materials to images of observed objects.

Science | Foundation

Elaboration
Using provided tables or graphic organisers to sort images or models of plants and animals into groups based on external features.

Science | Foundation

Elaboration
Recognising humans as animals, describing external features of humans and exploring similarities and differences compared with other animals

Science | Foundation

Elaboration
Using magnifying glasses or digital cameras to observe and identify external features of plants including seeds, flowers, fruits and roots, or of animals such as eyes, body covering, legs and wings.

Science | Foundation

Elaboration
Sorting collections of model animals and explaining different grouping strategies.

Science | Foundation

Elaboration
Recognising First Nations Australians' use of observable features to group living things.

Science | Foundation

Elaboration
Comparing the way different-sized, similar-shaped objects such as tennis balls, golf balls, marbles or basketballs roll and bounce.

Science | Foundation

Elaboration
Observing and describing ways different and unusually shaped objects such as blocks, tubes or eggs move when rolled down a slope.

Science | Foundation

Elaboration
Observing how toys move and grouping them based on their movement.

Science | Foundation

Elaboration
Sorting and grouping materials based on observed properties such as colour, hardness, texture and flexibility

Science | Foundation

Elaboration
Creating a display of different materials, naming each material and exploring language to describe properties of materials.

Science | Foundation

Elaboration
Recording observations using numbers, dots, drawings, voice recordings, digital photography or video.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Uses everyday language to describe and compare shapes and objects (e.g. round, small, flat, pointy).

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Locates and describes similar shapes and objects in the environment.

Science | Foundation

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Names familiar shapes in the environment.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Comparing and ordering objects
Uses direct comparison to compare 2 objects and indicates whether they are the same or different based on attributes such as length, height, mass or capacity.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Comparing and ordering objects
Orders 3 or more objects by comparing pairs of objects.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Comparing and ordering objects
Uses comparative language to compare 2 objects.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Identifies things that vary or stay the same in everyday life.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Poses and answers simple questions and collects responses (e.g. Collects data from a simple yes/no question).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Displays information using real objects, drawings or photographs.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification
Identifies and names numerals in the range of 1–10.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification
Matches a quantity of items in a collection to the correct number name or numeral in the range of 1–10.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification
Identifies standard number configurations such as on standard dice or dominos and in other arrangements up to 6, using subitising.

Numeracy Progression

Number sense and algebra: Number and place value

Developing place value
Identifies smaller collections within collections to 10, such as numbers represented in non-standard number configurations.

Numeracy Progression

Number sense and algebra: Number and place value

Developing place value
Orders numbers represented by numerals to at least 10.

Numeracy Progression

Number sense and algebra: Number and place value

Developing place value
Indicates the greater or lesser of 2 numbers represented by numerals in the range from one to 10.

Numeracy Progression

Number sense and algebra: Number and place value

Developing place value
Demonstrates that one 10 is the same as 10 ones.

Science | Year 1 and 2

Science | Year 1

Content Descriptor
Describe daily and seasonal changes in the environment and explore how these changes affect everyday life.

Science | Year 1

Content Descriptor
Describe pushes and pulls in terms of strength and direction and predict the effect of these forces on objects' motion and shape.

Science | Year 1 and 2

Content Descriptor
Describe how people use science in their daily lives, including using patterns to make scientific predictions.

Science | Year 1 and 2

Content Descriptor
Pose questions to explore observed simple patterns and relationships and make predictions based on experiences.

Science | Year 1 and 2

Content Descriptor
Suggest and follow safe procedures to investigate questions and test predictions.

Science | Year 1 and 2

Elaboration
Make and record observations, including informal measurements, using digital tools as appropriate.

Science | Year 1 and 2

Elaboration
Sort and order data and information and represent patterns, including with provided tables and visual or physical models.

Science | Year 2

Elaboration
Recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky.

Science | Year 1

Elaboration
Making and recording observations of phenomena such as changes to weather, seasonal changes to plants such as colour or dropping of leaves, and growth of flowers or fruit.

Science | Year 1

Elaboration
Investigating how changes in the weather affect plants and animals, including humans.

Science | Year 1

Elaboration
Investigating how seasonal changes affect plants and animals, including animals that hibernate and migrate.

Science | Year 1

Elaboration
Observing and manipulating everyday objects such as playground equipment, toys, windows or doors and identifying the forces used to move these objects.

Science | Year 1

Elaboration
Investigating how the design of age-appropriate sporting equipment such as paddles, plastic bats and racquets help to produce stronger pushes and pulls.

Science | Year 1

Elaboration
Using pictographs featuring drawings or digital photographs and tables of measurements to document patterns of growth of plants.

Science | Year 1

Elaboration
Learning from farmers, bush care volunteers, gardeners or nursery owners about how they observe the needs of plants, and how they have designed or managed habitats to meet those needs.

Science | Year 2

Elaboration
Making predictions about future appearances of phenomena in the sky at certain times of the week, month or year, such as the moon or satellites.

Science | Year 1

Elaboration
Making predictions about patterns of observable phenomena such as seasonal changes of plants or changes in temperatures across the seasons.

Science | Year 1

Elaboration
Following steps in a guided investigation to determine how different objects move when pushed or pulled.

Science | Year 2

Elaboration
Posing questions about the appearance or position of celestial objects in space across time, such as: 'I wonder if the moon will look the same tomorrow or next week, as it does today?'

Science | Year 1

Elaboration
Using familiar units of measurement such as cups, handspans, walking paces, blocks or pencil lengths.

Science | Year 1 and 2

Science | Year 1

Elaboration
Recording observations through text, drawing, counts, informal measurements, digital photography or video.

Science | Year 2

Elaboration
Recording observations through text, drawing, counts, digital photography or video.

Science | Year 2

Elaboration
Ordering images of seasonal changes across the year.

Science | Year 2

Elaboration
Engaging in a guided discussion about how to measure something in a fair way.

Science | Year 2

Elaboration
Representing informal measurements with concrete objects, such as drawing chalk lines and using lengths of string to measure shadows.

Science | Year 2

Elaboration
Counting and using informal measurements such as cups, handspans, walking paces, blocks, pencil lengths or lengths of string.

Science | Year 2

Elaboration
Making suggestions about types of measurements that may be made during an investigation, including using blocks to measure plant growth or paces to measure how far an object has moved.

Science | Year 2

Elaboration
Constructing simple column graphs and picture graphs with guidance to represent class investigations, such as recording objects that produce or do not produce sound.

Science | Year 2

Elaboration
Completing a table to record the number of ways different materials can be changed physically.

Numeracy Progression

Measurement and geometry

Measuring time
Reads time on analog clocks to the hour, half-hour and quarter-hour.

Numeracy Progression

Measurement and geometry

Measuring time
Names and orders days of the week and months of the year.

Numeracy Progression

Measurement and geometry

Measuring time
Uses a calendar to identify the date and determine the number of days in each month.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using informal units of measurement
Measures an attribute by choosing and using multiple identical, informal units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using informal units of measurement
Selects the appropriate size and dimensions of an informal unit to measure and compare attributes.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using informal units of measurement
Chooses and uses appropriate uniform informal units to measure length and area without gaps or overlaps.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using informal units of measurement
Uses multiple uniform informal units to measure and make direct comparisons between the mass or capacity of objects.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using informal units of measurement
Counts the individual uniform units used by ones to compare measurements.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Estimating measurements
Estimates a measurement based on a number of uniform informal units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Estimating measurements
Checks an estimate using informal units to compare to predicted measurement.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Identifies the pattern unit with a simple repeating pattern.

Science | Year 1 and 2

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Continues and creates repeating patterns involving the repetition of a pattern unit with shapes, movements, sounds, physical and virtual materials and numbers.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Identifies, continues and creates simple geometric patterns involving shapes, physical or virtual materials.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Determines a missing element within a pattern involving shapes, physical or virtual materials.

Numeracy Progression

Number sense and algebra: Interpreting fractions

Repeating fractional parts
Demonstrates that fractions can be written symbolically and interprets using part-whole knowledge.

Numeracy Progression

Number sense and algebra: Interpreting fractions

Repeating fractional parts
Identifies fractions in measurement situations and solves problems using halves, quarters and eighths.

Numeracy Progression

Statistics and probability: Understanding chance

Describing chance
Describes everyday occurrences that involve chance.

Numeracy Progression

Statistics and probability: Understanding chance

Describing chance
Makes predictions on the likelihood of simple, everyday occurrences as to it will or won't, might or might not happen, based on experiences.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays
Poses questions that could be investigated from a simple numerical or categorical data set.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays
Displays and describes one variable data in lists or tables.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays
Communicates information through text, picture graphs and tables using numbers and symbols.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays
Responds to questions and interprets general observations made about data represented in simple one-to-one data displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data
Designs survey questions to collect categorical data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data
Collects, records and displays one-variable data in variety of ways such as tables, charts, plots and graphs using the appropriate digital tools.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data
Displays and interprets categorical data in one-to-many data displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data
Interprets and represents categorical data in simple displays such as bar and column graphs, pie charts, models, maps, colour wheels, and pictorial timelines, and makes simple inferences from such displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data
Makes comparisons from categorical data displays using relative heights from a common baseline.

Science | Year 3 and 4

Science | Year 3

Content Descriptor
Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources.

Science | Year 3

Content Descriptor
Identify sources of heat energy and examine how temperature changes when heat energy is transferred from one object to another.

Science | Year 3 and 4

Content Descriptor
Examine how people use data to develop scientific explanations.

Science | Year 3 and 4

Content Descriptor
Follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate.

Science | Year 3 and 4

Content Descriptor
Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns.

Science | Year 3

Elaboration
Exploring the school grounds or a local area and observing or collecting different types of rocks and describing similarities or differences such as texture, colour, grain or crystal size.

Science | Year 3

Elaboration
Recognising that changes in heat energy can be measured using a thermometer.

Science | Year 3

Elaboration
Exploring age-appropriate science reports and journal articles and identifying where in the text the author has included data, findings or explanations.

Science | Year 4

Elaboration
Examining age-appropriate scientific journal articles, identifying common text features and exploring why the scientific community might have conventions for sharing information about data and explanations.

Science | Year 4

Elaboration
Viewing or listening to documentaries or news reports that feature researchers and identifying how they talk about their area of research, particularly references to observations, data and evidence.

Science | Year 4

Elaboration
Using appropriate equipment to make and record observations, such as digital cameras, video, voice recorders and familiar scaled instruments with appropriate increments.

Science | Year 4

Elaboration
Describing how to use rounding up or down when reading scaled instruments, and the effect of the scale size on the accuracy of the measurement.

Science | Year 4

Elaboration
Constructing tables or graphic organisers to record observations.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Displays information using real objects, drawings or photographs.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Sorts and classifies shapes and objects into groups based on their features or characteristics and describes how they have been sorted.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Poses and answers simple questions and collects responses.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Identifies things that vary or stay the same in everyday life.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Collects and records discrete numerical data using an appropriate method for recording (e.g. uses a frequency table to record experiment results; records sample measurements taken during a science investigation).

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Constructs graphical representations of numerical data and explains the difference between continuous and discrete data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Interprets visual representations of data displayed using a multi-unit scale, reading values between the marked units and describing any variation and trends in the data.

Science | Year 3 and 4

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data

Explains how data displays can be misleading (e.g. whether a scale should start at zero; not using uniform intervals on the axes).

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units

Measures, compares and estimates length, perimeter and area of a surface using metric units.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification

Identifies, reads and writes numerals, beyond 4 digits in length, with spacing after every 3 digits.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification

Identifies, reads and writes decimals to one and 2 decimal places.

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Estimates and rounds natural numbers to the nearest 10 thousand, thousand etc.

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Recognising the multiplicative relationships between the place value of the digits.

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Explains and demonstrates that the place value system extends beyond tenths to hundredths, thousandths ... (e.g. Uses decimals to represent part units of measurement for length, mass, capacity and temperature).

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Represents, compares, orders and interprets decimals up to 2 decimal places.

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Rounds decimals to the nearest natural number in order to estimate answers.

Science | Year 5 and 6

Science | Year 5

Content Descriptor
Describe how weathering, erosion, transportation and deposition cause slow or rapid change to Earth's surface.

Science | Year 6

Content Descriptor
Describe the movement of Earth and other planets relative to the sun and model how Earth's tilt, rotation on its axis and revolution around the sun relate to cyclic observable phenomena, including variable day and night length.

Science | Year 5 and 6

Content Descriptor
Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships.

Science | Year 5 and 6

Content Descriptor
Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate.

Science | Year 5 and 6

Content Descriptor
Examine why advances in science are often the result of collaboration or build on the work of others.

Science | Year 5

Elaboration
Investigating how humans have changed local landscapes and predicting the effect these changes might have on rates of erosion.

Science | Year 5

Elaboration
Considering the effects of significant rainfall, such as a monsoon, on the transportation and deposition of river sediments in the Asia-Pacific region.

Science | Year 5

Elaboration
Recording data using standard units, such as grams, second and metre, and developing the use of standard prefixes for metric units such as kilo- and milli-.

Science | Year 5

Elaboration
Recording data in tables and diagrams or electronically as digital images and spreadsheets.

Science | Year 5

Elaboration
Exploring the precision of measurements of different equipment such as a cup compared with a measuring jug and discussing why precision is important in measurement.

Science | Year 5

Elaboration
Using maps to identify patterns in erosion site locations or aerial photographs to show effects of erosion over time.

Science | Year 5

Elaboration
Constructing a column graph to illustrate the relationship between predation and an animal feature such as colour as indicated by a simulation and using values to represent the outcomes of repeated simulations.

Science | Year 6

Elaboration
Examining why ecologists collaborate with engineers and computer scientists to develop remote sensing techniques, identify patterns in habitat change and make predictions.

Science | Year 6

Elaboration
Selecting and using instruments with the correct scale for measuring data with appropriate accuracy, such as a multimeter.

Science | Year 6

Elaboration
Exploring simulations of the solar system such as a pocket solar system to appreciate the distances and relationships between the sun and planets.

Science | Year 6

Elaboration
Using 3-dimensional models or role-play to model how earth's rotation on its axis causes day and night.

Science | Year 6

Elaboration
Using 3-dimensional models to explore how the tilt of Earth points one hemisphere towards the sun and the other away at different times of the year and predicting how this affects the amount of sunlight on the surface of different regions on Earth.

Science | Year 6

Elaboration
Recording data in tables and diagrams or electronically as digital images and spreadsheets.

Science | Year 6

Elaboration
Recording data using standard units, such as volt, ampere, gram, second and metre, and developing the use of standard prefixes for metric units such as kilo- and milli-.

Science | Year 6

Elaboration
Using digital tools such as digital thermometers or soil moisture probes to collect data over time and record data in spreadsheets.

Science | Year 5 and 6

Science | Year 6

Elaboration
Using line graphs to show changes in growth over time under different physical conditions.

Numeracy Progression

Number sense and algebra: Proportional thinking

Understanding percentages and relative size
Explains that a percentage is a proportional relationship between a quantity and 100.

Numeracy Progression

Number sense and algebra: Proportional thinking

Understanding percentages and relative size
Uses percentage to describe, represent and compare relative size.

Numeracy Progression

Number sense and algebra: Proportional thinking

Understanding percentages and relative size
Demonstrates that 100% is a complete whole.

Numeracy Progression

Number sense and algebra: Proportional thinking

Understanding percentages and relative size
Recognises that complementary percentages add to give 100% and applies to situations.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Calculates perimeter using properties of two-dimensional shapes to determine unknown lengths.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Measures and calculates the area of different shapes using metric units and a range of strategies.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Angles as measures of turn
Estimates and measures angles in degrees up to one revolution.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Measures, compares and estimates length, perimeter and area of a surface using metric units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Uses scaled instruments to measure length, mass, capacity and temperature, correctly interpreting any unlabelled calibrations estimates measurements of an attribute using metric units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Angles as measures of turn
Compares angles to a right angle and classifies them as equal to, less than or greater than a right angle.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Converting units
Converts between metric units of measurement of the same attribute.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Converting units
Describes and uses the relationship between metric units of measurement and the base-10 place value system to accurately measure and record measurements using decimals.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Converting units
Using metric units and formulas establishes and uses formulas and metric units for calculating the area of rectangles and triangles.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Angles as measures of turn
Measures and uses key angles (45˚, 90˚, 1180˚, 360˚) to define other angles according to their size.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and objects
Classifies three-dimensional objects according to their properties (e.g. describes the difference between a triangular prism and a triangular pyramid).

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and objects
Creates two-dimensional nets for pyramids and prisms.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Uses combinations of reflecting, translating and rotating shapes to describe and create patterns and solve problems.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Identifies tessellations used in the environment and explains why some combinations of shapes will tesselate while others will not.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Explains the result of changing critical and non-critical properties of shapes.

Science | Year 5 and 6

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles

Identifies supplementary and complementary angles and uses them to solve problems.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles

Identifies that angles at a point add to 360° and that vertically opposite angles are equal and reasons to solve problems.

Numeracy Progression

Measurement and geometry: Measuring time

Measuring time with large and small timescales

Uses appropriate metric prefixes to measure both large and small durations of time.

Numeracy Progression

Measurement and geometry: Measuring time

Measuring time with large and small timescales

Constructs timelines using an appropriate scale.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification

Reads, represents, interprets and uses negative numbers in computation (e.g. explains that the temperature −10 °C is colder than the temperature −2.5°C).

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification

Recognises that negative numbers are less than zero; locates −12 on a number line).

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Identifies that negative numbers are integers that represent both size and direction understands that multiplying and dividing numbers by 10,100,1000 changes the positional value of the digits.

Numeracy Progression

Number sense and algebra: Number and place value

Place value

Rounds decimals to a specified number of decimal places for a purpose.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Poses questions based on variations in continuous numerical data and chooses the appropriate method to collect and record data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Determines and calculates the most appropriate statistic to describe the spread of data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Compares the usefulness of different representations of the same data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying, interpreting and analysing numerical data

Describes the spread of a data distribution in terms of the range, clusters, skewness and symmetry of the graphical display, and determines and makes connections to the mode, median and mean of the data.

Design and Technologies | Foundation

Design and Technologies | Foundation

Content Descriptor
Generate, communicate and evaluate design ideas, and use materials, equipment and steps to safely make a solution for a purpose.

Design and Technologies | Foundation

Content Descriptor
Generate and communicate design ideas through describing, drawing or modelling, including using digital tools.

Design and Technologies | Foundation

Elaboration
Exploring ideas by drawing or modelling and choosing the most suitable idea.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Locates positions in the classroom relevant to self.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Orients self to other positions in the classroom.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to self
Follows simple instructions using positional language.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Names familiar shapes in the environment.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles
Identifies and describes a turn in either direction.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Uses everyday language to describe and compare shapes and objects.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Locates and describes similar shapes and objects in the environment.

Design and Technologies | Year 1 and 2

Design and Technologies | Year 1 and 2

Content Descriptor
Generate and communicate design ideas through describing, drawing or modelling, including using digital tools.

Design and Technologies | Year 1 and 2

Content Descriptor
Sequence steps for making designed solutions cooperatively.

Design and Technologies | Year 1 and 2

Elaboration
Communicating design ideas by modelling or producing and labelling 2-dimensional drawings using a range of technologies.

Design and Technologies | Year 1 and 2

Elaboration
Using lists or storyboarding when planning and making, for example when creating an electronic planting calendar.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Names familiar shapes in the environment.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Locates and describes similar shapes and objects in the environment.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Familiar shapes and objects
Uses everyday language to describe and compare shapes and objects.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles
Identifies and describes a turn in either direction.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Features of shapes and objects
Identifies and describes features of shapes and objects.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Features of shapes and objects
Sorts and classifies familiar shapes and objects based on obvious features.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Identifies features of shapes and objects of different sizes and in different orientations in the environment.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Explains that the shape or object does not change when presented in different orientations.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles
Identifies angles in the environment

Numeracy Progression

Measurement and geometry: Measuring time

Sequencing time
Applies an understanding of passage of time to sequence events using everyday language.

Numeracy Progression

Measurement and geometry: Measuring time

Sequencing time
Uses the language of time to describe events in relation to past, present and future.

Design and Technologies | Year 3 and 4

Design and Technologies | Year 3 and 4

Content Descriptor
Generate and communicate design ideas and decisions using appropriate attributions, technical terms and graphical representation techniques, including using digital tools.

Design and Technologies | Year 3 and 4

Content Descriptor
Select and use materials, components, tools, equipment and techniques to safely make designed solutions.

Design and Technologies | Year 3 and 4

Content Descriptor
Sequence steps to individually and collaboratively make designed solutions.

Design and Technologies | Year 3 and 4

Elaboration
Determining planning processes as a class, for example recording when parts of a project need to be completed on a timeline, in a spreadsheet, calendar or list.

Design and Technologies | Year 3 and 4

Elaboration
Visualising innovative design ideas by producing thumbnail sketches, models and labelled drawings to explain features and modifications.

Design and Technologies | Year 3 and 4

Elaboration
Communicating design ideas using annotated diagrams.

Design and Technologies | Year 3 and 4

Elaboration
Using tools and equipment accurately when measuring, marking and cutting, for example when creating a template or pattern, measuring ingredients in a recipe or preparing a garden bed for sowing seeds.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using informal maps and plans
Describes and locates relative positions on a plan.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using informal maps and plans
Draws a sketch to provide directions.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Measures, compares and estimates length, perimeter and area of a surface using metric units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Uses scaled instruments to measure length, mass, capacity and temperature, correctly interpreting any unlabelled calibrations.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Using metric units
Estimates measurements of an attribute using metric units.

Numeracy Progression

Measurement and geometry: Understanding units of measurement

Angles as measures of turn
Compares angles to a right angle and classifies them as equal to, less than or greater than a right angle.

Numeracy Progression

Measurement and geometry: Measuring time

Measuring time
Uses standard instruments and units to describe and measure time to hours, minutes and seconds.

Numeracy Progression

Measurement and geometry: Measuring time

Measuring time
Reads and interprets different representations of time.

Numeracy Progression

Measurement and geometry: Measuring time

Measuring time
Identifies the minute hand movement on an analog clock and the 60-minute markings, interpreting the numbers as representing lots of 5.

Numeracy Progression

Measurement and geometry: Measuring time

Relating units of time
Identifies the relationship between units of time.

Numeracy Progression

Measurement and geometry: Measuring time

Relating units of time
Determines elapsed time using different units such as hours and minutes, weeks and days.

Numeracy Progression

Measurement and geometry: Measuring time

Relating units of time
Interprets and uses a timetable.

Numeracy Progression

Measurement and geometry: Measuring time

Relating units of time
Constructs timelines using a time scale.

Design and Technologies | Year 5 and 6

Design and Technologies | Year 5 and 6

Content Descriptor
Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions.

Design and Technologies | Year 5 and 6

Content Descriptor
Generate and communicate design ideas and decisions using appropriate attributions, technical terms and graphical representation techniques, including using digital tools.

Design and Technologies | Year 5 and 6

Elaboration
Surveying people in the school community about their needs in order to design an appropriate product, service or environment that addresses the need.

Design and Technologies | Year 5 and 6

Elaboration
Visualising innovative design ideas by producing thumbnail sketches, models and labelled drawings to explain features and modifications.

Design and Technologies | Year 5 and 6

Elaboration
Representing and communicating design ideas using modelling and drawing standards including the use of digital tools, for example including scale, symbols and codes in plans and diagrams.

Numeracy Progression

Statistics and probability: Interpreting and representing data
Collecting, displaying and interpreting categorical data.

Numeracy Progression

Statistics and probability: Interpreting and representing data
Designs survey questions to collect categorical data.

Numeracy Progression

Statistics and probability: Interpreting and representing data
Collects, records and displays one-variable data in variety of ways such as tables, charts, plots and graphs using the appropriate digital tools.

Numeracy Progression

Statistics and probability: Interpreting and representing data
Displays and interprets categorical data in one-to-many data displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data
Interprets and represents categorical data in simple displays such as graphs, tables, models, maps, colour wheels, and pictorial timelines, and makes simple inferences from such displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data
Makes comparisons from categorical data displays using relative heights from a common baseline.

Numeracy Progression

Measurement and geometry: Positioning and locating
Using informal plans.

Numeracy Progression

Measurement and geometry: Positioning and locating
Draws an informal sketch to provide directions.

Numeracy Progression

Measurement and geometry: Positioning and locating
Describes and locates relative positions on a plan.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and object
Identifies, names and classifies two-dimensional shapes according to their side and angle properties.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and object
Identifies key features of shapes.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and object
Aligns three-dimensional objects to their two-dimensional nets.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and object
Identifies the relationship between the number of faces, edges and the number of vertices of a three-dimensional object.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Identifies that shapes can have rotational symmetry.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Creates symmetrical designs using a range of shapes and identifies the type of symmetry as appropriate.

Design and Technologies | Year 5 and 6

Numeracy Progression	Numeracy Progression	Numeracy Progression
Measurement and geometry: Understanding geometric properties	**Measurement and geometry: Understanding geometric properties**	**Measurement and geometry: Understanding geometric properties**
Transformations Creates tessellating patterns with common shapes, deciding which will tessellate and which will not by referring to their sides and angles.	**Angles** Estimates, compares and constructs angles.	**Angles** Describes angles in the environment according to their size as acute, obtuse, right, straight, reflex or a revolution and identifies them in shapes and objects.

Digital Technologies | Foundation

Digital Technologies | Foundation

Content Descriptor
Represent data as objects, pictures and symbols.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Poses and answers simple questions and collects responses.

Digital Technologies | Foundation

Elaboration
Drawing a picture representing each of their family members and their interests, for example drawing one family member with a surfboard and another with a skateboard.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Displays information using real objects, drawings or photographs.

Digital Technologies | Foundation

Elaboration
Using coloured blocks to represent an attribute of people, for example representing students and their sports houses with different coloured blocks.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Sorts and classifies shapes and objects into groups based on their features or characteristics and describes how they have been sorted.

Digital Technologies | Foundation

Elaboration
Using a symbol to represent an idea but knowing that the symbol is not the data itself, for example the symbols and colour on both the Australian Aboriginal flag and the Torres Strait Islander flag.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Emergent data collection and representation
Identifies things that vary or stay the same in everyday life.

Digital Technologies | Year 1 and 2

Digital Technologies | Year 1 and 2

Content Descriptor
Represent data as pictures, symbols, numbers and words.

Digital Technologies | Year 1 and 2

Content Descriptor
Follow and describe algorithms involving a sequence of steps, branching (decisions) and iteration (repetition).

Digital Technologies | Year 1 and 2

Elaboration
Recognising that pictures in First Nations Australians' seasonal calendars are used to represent and communicate data.

Digital Technologies | Year 1 and 2

Elaboration
Recognising the equivalence of different representations of numbers, including words, digits and tally marks.

Digital Technologies | Year 1 and 2

Elaboration
Following a short, ordered sequence of steps and making decisions to solve a simple problem.

Digital Technologies | Year 1 and 2

Elaboration
Identifying the decisions needed to solve a problem and the next steps to follow in each case.

Digital Technologies | Year 1 and 2

Elaboration
Following algorithms that repeat a single step a fixed number of times, for example practise spelling a word 5 times or throw and catch a ball with a partner 10 times.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Repeated abstract composite units
Uses composite units in repeated addition using the unit a specified number of times.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Repeated abstract composite units
Uses composite units in repeated subtraction using the unit a specified number of times.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Identifies the pattern unit with a simple repeating pattern.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Continues and creates repeating patterns involving the repetition of a pattern unit with shapes, movements, sounds, physical and virtual materials and numbers.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Identifies, continues and creates simple geometric patterns involving shapes, physical or virtual materials.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Determines a missing element within a pattern involving shapes, physical or virtual materials.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Identifying and creating patterns
Conceptually subitises by identifying patterns in standard representations.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to other
Uses positional terms with reference to themselves.

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to other
Interprets a simple diagram or picture to describe the position of an object in relation to other objects.

Digital Technologies | Year 1 and 2

Numeracy Progression

Measurement and geometry: Positioning and locating

Position to other

Gives and follows simple directions to move from one place to another using familiar reference points.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Poses questions that could be investigated from a simple numerical or categorical data set.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Displays and describes one variable data in lists or tables.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Communicates information through text, picture graphs and tables using numbers and symbols.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Basic one-to-one data displays

Responds to questions and interprets general observations made about data represented in simple one-to-one data displays.

Digital Technologies | Year 3 and 4

Digital Technologies | Year 3 and 4

Content Descriptor
Recognise different types of data and explore how the same data can be represented differently depending on the purpose.

Digital Technologies | Year 3 and 4

Content Descriptor
follow and describe algorithms involving sequencing, comparison operators (branching) and iteration.

Digital Technologies | Year 3 and 4

Content Descriptor
Implement simple algorithms as visual programs involving control structures and input.

Digital Technologies | Year 3 and 4

Elaboration
Writing and editing programs to solve simple problems using branching and simple iteration in a visual programming environment.

Digital Technologies | Year 3 and 4

Elaboration
Describing different types of data and how they can be used, for example numbers, letters, symbols and pictures.

Digital Technologies | Year 3 and 4

Elaboration
Explaining how the same data can be represented in different ways and why some representations are better than others in certain contexts.

Digital Technologies | Year 3 and 4

Elaboration
Explaining that the same information can be represented differently.

Digital Technologies | Year 3 and 4

Elaboration
Writing programs that repeat one or more steps a fixed number of times.

Digital Technologies | Year 3 and 4

Elaboration
Describing algorithms that repeat steps a fixed number of times, for example calculating multiplication using repeated addition, where the sum changes in each iteration.

Digital Technologies | Year 3 and 4

Elaboration
Describing the decisions needed to solve a problem, including numerical and text comparisons.

Digital Technologies | Year 3 and 4

Elaboration
Understanding there can be more than one sequence of steps to solve a problem, some are better than others, and the steps should be unambiguous.

Digital Technologies | Year 3 and 4

Elaboration
Writing programs that take input from the user or environment.

Digital Technologies | Year 3 and 4

Elaboration
Running and testing a program to check it performs as expected.

Digital Technologies | Year 3 and 4

Elaboration
Writing programs that make decisions involving comparison.

Numeracy Progression

Number sense and algebra: Additive strategies

Flexible strategies with three-digit numbers and beyond
Uses place value, standard and non-standard partitioning, trading or exchanging of units to mentally add and subtract numbers with 33 or more digits.

Numeracy Progression

Number sense and algebra: Additive strategies

Flexible strategies with three-digit numbers and beyond
Chooses and uses strategies including algorithms and technology to efficiently solve additive problems.

Numeracy Progression

Number sense and algebra: Additive strategies

Flexible strategies with three-digit numbers and beyond
Uses estimation to determine the reasonableness of the solution to an additive problem.

Numeracy Progression

Number sense and algebra: Additive strategies

Flexible strategies with three-digit numbers and beyond
Represents a wide range of familiar real-world additive situations involving large numbers as standard number sentences explaining their reasoning.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for single digit multiplication and division
Draws on the structure of multiplication to use known multiples in calculating related multiples.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for single digit multiplication and division
Interprets a range of multiplicative situations using the context of the problem to form a number sentence.

Digital Technologies | Year 3 and 4

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for single digit multiplication and division

Demonstrates flexibility in the use of single-digit multiplication facts.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for single digit multiplication and division

Uses the commutative and distributive properties of multiplication to aid computation when solving problems.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for single digit multiplication and division

Explains the idea of a remainder as what is "left over" from the division.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for multiplication and division

Uses multiplication and division as inverse operations to solve problems, including solving problems with digital tools and to justify a solution.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for multiplication and division

Uses known mental and written strategies such as using the distributive property, partitioning into place value or factors to solve multiplicative problems involving numbers with up to 33 digits and can justify their use.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for multiplication and division

Uses estimation and rounding to check the reasonableness of products and quotients.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Designs survey questions to collect categorical data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Collects, records and displays one-variable data in variety of ways such as tables, charts, plots and graphs using the appropriate digital tools.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Displays and interprets categorical data in one-to-many data displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Interprets and represents categorical data in simple displays such as bar and column graphs, pie charts, models, maps, colour wheels, and pictorial timelines, and makes simple inferences from such displays.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting categorical data

Makes comparisons from categorical data displays using relative heights from a common baseline.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data

Collects and records discrete numerical data using an appropriate method for recording.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data

Constructs graphical representations of numerical data and explains the difference between continuous and discrete data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data

Explains how data displays can be misleading. Interprets visual representations of data displayed using a multi-unit scale, reading values between the marked units and describing any variation and trends in the data.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using formal maps and plans

Locates position on maps using grid references.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using formal maps and plans

Describes routes using landmarks and directional language including reference to quarter, half, three-quarter turns; turns to the left and right; clockwise and anticlockwise turns.

Numeracy Progression

Measurement and geometry: Positioning and locating

Using formal maps and plans

Interprets keys, simple scales and compass directions contained within a map to locate features.

Digital Technologies | Year 5 and 6

Digital Technologies | Year 5 and 6

Content Descriptor
Explain how digital systems represent all data using numbers.

Digital Technologies | Year 5 and 6

Content Descriptor
Design algorithms involving multiple alternatives (branching) and iteration.

Digital Technologies | Year 5 and 6

Content Descriptor
Implement algorithms as visual programs involving control structures, variables and input.

Digital Technologies | Year 5 and 6

Elaboration
Representing data using whole numbers and recognising this is how digital systems represent data.

Digital Technologies | Year 5 and 6

Elaboration
Designing an algorithm including branching and iteration which responds to data.

Digital Technologies | Year 5 and 6

Elaboration
Explaining how the data type used to represent data changes the operations that can be performed on it.

Digital Technologies | Year 5 and 6

Elaboration
Designing an algorithm or understanding and modifying an existing algorithm to fix an error or change functionality.

Digital Technologies | Year 5 and 6

Elaboration
Designing an algorithm or understanding and modifying an existing algorithm to fix an error or change functionality.

Digital Technologies | Year 5 and 6

Elaboration
Constructing more than one sequence of steps that solve the same problem and explaining why one is better than the other.

Digital Technologies | Year 5 and 6

Elaboration
Modelling a decision that has more than 2 options to select the next step.

Digital Technologies | Year 5 and 6

Elaboration
Planning algorithms that repeat until a condition is met.

Digital Technologies | Year 5 and 6

Elaboration
Writing programs that repeat multiple steps based on the user's input.

Digital Technologies | Year 5 and 6

Elaboration
Writing and editing programs to solve problems using branching, iteration and variables in a visual programming environment.

Digital Technologies | Year 5 and 6

Elaboration
Stating the expected behaviour of a program, running the program to check it is correct and fixing any errors.

Digital Technologies | Year 5 and 6

Elaboration
Writing programs that repeat multiple steps based on the user's input.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and objects
Classifies three-dimensional objects according to their properties.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Properties of shapes and objects
Creates two-dimensional nets for pyramids and prisms.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Uses combinations of reflecting, translating and rotating shapes to describe and create patterns and solve problems.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Identifies tessellations used in the environment and explains why some combinations of shapes will tesselate while others will not.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Transformations
Explains the result of changing critical and non-critical properties of shapes.

Digital Technologies | Year 5 and 6

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles
Identifies supplementary and complementary angles and uses them to solve problems.

Numeracy Progression

Measurement and geometry: Understanding geometric properties

Angles
Identifies that angles at a point add to 360° and that vertically opposite angles are equal and reasons to solve problems.

Numeracy Progression

Number sense and algebra: Number and place value

Numeral recognition and identification
Reads, represents, interprets and uses negative numbers in computation.

Numeracy Progression

Number sense and algebra: Number and place value

Place value
Identifies that negative numbers are integers that represent both size and direction.

Numeracy Progression

Number sense and algebra: Number and place value

Place value
Understands that multiplying and dividing numbers by 10,100,1000 changes the positional value of the digits.

Numeracy Progression

Number sense and algebra: Number and place value

Place value
Rounds decimals to a specified number of decimal places for a purpose.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Collects and records discrete numerical data using an appropriate method for recording.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Constructs graphical representations of numerical data and explains the difference between continuous and discrete data.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Explains how data displays can be misleading.

Numeracy Progression

Statistics and probability: Interpreting and representing data

Collecting, displaying and interpreting numerical data
Interprets visual representations of data displayed using a multi-unit scale, reading values between the marked units and describing any variation and trends in the data.

Numeracy Progression

Statistics and probability: Understanding chance

Probabilities
Expresses the theoretical probability of an event as the number of ways an event can happen out of the total number of possibilities.

Numeracy Progression

Statistics and probability: Understanding chance

Probabilities
Identifies a range of chance events that have a probability from 0–10.

Numeracy Progression

Statistics and probability: Understanding chance

Probabilities
Describes probabilities as fractions of one.

Numeracy Progression

Statistics and probability: Understanding chance

Probabilities
Expresses probabilities as fractions, decimals, percentages and ratios recognising that all probabilities lie on a measurement scale of zero to one.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for multiplication and division
Uses known mental and written strategies such as using the distributive property, partitioning into place value or factors to solve multiplicative problems involving numbers with up to 3 digits and can justify their use.

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for multiplication and division
Uses multiplication and division as inverse operations to solve problems, including solving problems with digital tools and to justify a solution.

Digital Technologies | Year 5 and 6

Numeracy Progression

Number sense and algebra: Multiplicative strategies

Flexible strategies for multiplication and division

Uses estimation and rounding to check the reasonableness of products and quotients.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Generalising patterns

Creates and interprets tables used to summarise patterns.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Generalising patterns

Relates the position number of shapes within a pattern to the rule for the sequence.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Generalising patterns

Determines a higher term of a pattern using the pattern's rule.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Generalising patterns

Extends number patterns to include rational numbers.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Relational thinking

Solves numerical equations involving one or more operations following conventions of order of operations.

Numeracy Progression

Number sense and algebra: Number patterns and algebraic thinking

Relational thinking

Identifies and uses equivalence in number sentences to solve multiplicative problems involving numerical equations.