

(no-code)

investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys

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Elaborations

- observing and identifying the similarities and differences of particular features within and between groups of organisms
- creating and modifying a dichotomous key to classify organisms into groups and groups within groups
- naming and classifying species using scientific conventions from the Linnaean hierarchical classification, such as kingdom, phylum, class, order, family, genus, species
- considering the reasons for classifying living things, such as identification and communication
- examining how biological classification has changed over time through improvements in microscopy
- using provided dichotomous keys to identify organisms surveyed on a field trip
- investigating First Nations Australians' of classifying living things and how these differ from those used by contemporary science

Students learn to:

investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys

(AC9S7U01)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Inquiring

- Identify, process and evaluate information

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional.

Inquiring

- Identify, process and evaluate information

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Inquiring

- Identify, process and evaluate information

Engaging with cultural and linguistic diversity

- Develop multiple perspectives

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Develop multiple perspectives

Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop multiple perspectives

Content description

AC9S7U01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine how cultural beliefs or practices influence their own perspectives, and those of others, when discussing unfamiliar topics
- consider multiple perspectives held on unfamiliar topics, identifying commonality and difference, and describe how perspectives may be influenced by cultural beliefs and practices
- analyse unfamiliar topics and develop respectful responses, reconciling different cultural perspectives

AC9S7U02

use , including , to represent and energy flow in ecosystems and predict the impact of changing and factors on populations

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Elaborations

- analysing to show feeding between organisms in an ecosystem and the role of microorganisms
- modelling how energy flows into and out of an ecosystem via the pathways of
- predicting the effects on local ecosystems when living things such pollinators or predators are removed from or die out in an area
- examining how events such as seasonal changes, destruction of or introduction of a species impact and factors and cause changes to populations
- investigating First Nations Australians' responses to invasive species and their effect on that many communities are a part of, and depend on, for produce and medicine
- considering how First Nations Australians' fire management practices over tens of thousands of years have changed the distribution of flora and fauna in most regions of Australia

Students learn to:

use models, including food webs, to represent matter and energy flow in ecosystem impact of changing abiotic and biotic factors on populations

(AC9S7U02)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Generating

- Put ideas into action

Inquiring

- Identify, process and evaluate information

Systems

- All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival.
- Social, economic and political systems influence the sustainability of Earth's systems.

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Identify, process and evaluate information

Systems

- All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival.

Inquiring

- Identify, process and evaluate information

Systems

- All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Systems

- All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Systems

- All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival.
- Social, economic and political systems influence the sustainability of Earth's systems.

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.
- The First Peoples of Australia (Aboriginal Peoples) belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture despite the many historic and enduring impacts of colonisation, and continue to celebrate and share the past, present and future manifestations of their cultures.

Country/Place

- The First Peoples of Australia are the Traditional Owners of Country/Place, protected in Australian Law by the Native Title Act 1993 which recognises pre-existing sovereignty, continuing systems of law and customs, and connection to Country/Place. This recognised legal right provides for economic sustainability and a voice into the development and management of Country/Place.

Systems

- Social, economic and political systems influence the sustainability of Earth's systems.

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Systems

- Social, economic and political systems influence the sustainability of Earth's systems.

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9TDE8K04

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7U02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U02

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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AC9S7U03

cyclic changes in the relative positions of the Earth, sun and moon and explain how these cycles cause eclipses and influence predictable phenomena on Earth, including seasons and tides

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Elaborations

- using physical or virtual to explain how Earth's tilt and position relative to the sun causes differences in light intensity on Earth's surface, resulting in seasons
- examining the effect of the gravitational attraction of the moon and the sun on Earth's oceans and describing how the relative positions of the moon and sun with respect to Earth result in tidal variations
- using physical or virtual to explain the cyclic of lunar phases and eclipses of the sun and moon
- researching knowledges held by First Nations Australians regarding the phases of the moon and the connection between the lunar cycle and ocean tides
- investigating First Nations Australians' calendars and how they are used to predict seasonal changes
- researching First Nations Australians' oral traditions and cultural recordings of solar and lunar eclipses and investigating similarities and differences with contemporary understandings of such

phenomena

Students learn to:

model cyclic changes in the relative positions of the Earth, sun and moon and explain how cycles cause eclipses and influence predictable phenomena on Earth, including sea level changes

(AC9S7U03)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Identify, process and evaluate information

Investigating

- Acquire and collate data

Inquiring

- Identify, process and evaluate information

Inquiring

- Identify, process and evaluate information

Investigating

- Acquire and collate data

Engaging with cultural and linguistic diversity

- Develop multiple perspectives

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Engaging with cultural and linguistic diversity

- Develop multiple perspectives

Culture

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Country/Place

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Engaging with cultural and linguistic diversity

- Develop multiple perspectives

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Country/Place

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Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U03

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- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U03

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

Content description

AC9S7U03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- collect and access data using a range of digital tools and methods in response to a defined question or problem
- collect and access data from a range of sources, using specialised digital tools in response to problems, and evaluate it for relevance
- collect and evaluate quantitative and qualitative data using specialised digital tools and processes in the context of identified problems

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

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Snapshot – Develop multiple perspectives

Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop perspectives

Content description

AC9S7U03

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The following continuum extract shows the alignment of the continuum with this content.

- examine how cultural beliefs or practices influence their own perspectives, and those of others, when discussing unfamiliar topics
- consider multiple perspectives held on unfamiliar topics, identifying commonality and difference, and describe how perspectives may be influenced by cultural beliefs and practices
- analyse unfamiliar topics and develop respectful responses, reconciling different cultural

perspectives

Snapshot – Develop multiple perspectives

Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop multiple perspectives

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perspectives

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Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop multiple perspectives

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perspectives

AC9S7U04

investigate and represent balanced and unbalanced forces, including gravitational forces, acting on objects, and relate changes in an object's motion to its mass and the magnitude and direction of forces acting on it

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Elaborations

- investigating the effects of applying different forces to familiar objects of the same and different mass
- analysing the effect of balanced and unbalanced forces on an object's motion, such as starting, stopping and changing direction
- measuring the magnitude of a force using a meter and representing the magnitude and direction of acting on an object using arrow diagrams
- investigating how Earth's gravitational force is the attractive force which pulls objects to the centre of Earth and its magnitude is related to the mass of an object
- investigating how simple machines such as levers and pulleys are used to change the magnitude of force needed to perform a task
- examining how gravity affects objects in space, including moons, planets, stars, galaxies and black holes
- analysing the acting on boomerangs and how early First Peoples of Australia designed an air foil profile which allowed for multiple variations and applications
- investigating the effect of through the application of simple machines, such as the bow and arrows used by Torres Strait Islander Peoples or the spearthrowers used by First Peoples of Australia

Students learn to:

investigate and represent balanced and unbalanced forces, including gravitational forces, acting on objects, and relate changes in an object's motion to its mass and the magnitude and direction of forces acting on it

(AC9S7U04)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Inquiring

- Identify, process and evaluate information

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Identify, process and evaluate information

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Inquiring

- Identify, process and evaluate information

Reflecting

- Transfer knowledge

Reflecting

- Transfer knowledge

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

People

- Australia has 2 distinct First Nations Peoples; each encompasses a diversity of nations across Australia. Aboriginal Peoples are the first peoples of Australia and have occupied the Australian continent for more than 60,000 years. Torres Strait Islander Peoples are the First Nations Peoples of the Torres Strait and have occupied the region for over 4,000 years.

Culture

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People

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Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9HP8M03

AC9TDE8K03

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U04

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U04

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- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7U04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to achieve a specific purpose
- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7U04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to

achieve a specific purpose

- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

AC9S7U05

use to describe the arrangement of particles in a substance, including the motion of and attraction between particles, and relate this to the of the substance

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Elaborations

- using and constructing , diagrams or virtual to represent changes in particle arrangement as substances change state
- relating motion and energy of particles to distances between particles of the same substance in different states
- comparing attractive in the solid, liquid and gaseous states of the same substance and relating this to relative position and movement of particles
- examining how the changing motion and energy of particles is affected by the amount of heat energy absorbed or released
- comparing the of different states of and explaining differences using
- investigating of such as density, melting point and compressibility and explaining these in terms of particle arrangement
- explaining the process of diffusion in a liquid and a gas in terms of particles

Students learn to:

use particle theory to describe the arrangement of particles in a substance, including and attraction between particles, and relate this to the properties of the substance

(AC9S7U05)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Identify, process and evaluate information

Creating and exchanging

- Create, communicate and collaborate

Inquiring

- Identify, process and evaluate information

Writing

- Creating texts

Reflecting

- Transfer knowledge

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9TDE8K06

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
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- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- select and control a variety of features in appropriate digital tools to create content and communicate and collaborate with trusted groups
- select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
- select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Creating texts

Literacy: Writing: Creating texts

Content description

AC9S7U05

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Crafting ideas

- creates informative, imaginative and persuasive texts for a range of learning area purposes, such as to recount a sequence of events; to describe a person, thing or process; to explain a process; to argue with evidence or reasons; to express emotions
- includes learnt ideas on a range of topics from learning areas
- stages text using typical or familiar features such as an introduction and body paragraphs
- supports ideas with some detail and elaboration (e.g. expands on a topic sentence by adding more details in following sentences)
- uses sources to support ideas (e.g. introduces ideas from a shared text to add detail and engage the reader)

Text forms and features

- writes a range of compound and complex sentences (see Grammar)
- uses pronouns correctly to link to an object or person across the text (see Grammar)
- uses images to reinforce ideas in written text
- maintains consistent tense within and between sentences (see Grammar)
- groups sentences on related ideas into simple paragraphs
- uses cohesive vocabulary to indicate order, cause and effect (e.g. uses text connectives such as "next", "since")
- correctly spells some words with irregular spelling patterns (e.g. "cough") (see Spelling)
- applies learnt spelling generalisations

- accurately spells high-frequency words (see Spelling)
- consistently uses correct simple punctuation (e.g. uses commas in a list) (see Punctuation)

Vocabulary

- uses expressive words to describe action and affect the reader (e.g. "tiptoed" instead of "walked")
- uses vocabulary creatively to affect the reader (e.g. repetition, alliteration)
- uses synonyms to replace common and generic words and avoid repetition across a text (e.g. "thrilled" for "excited")
- uses a range of learning area topic words (e.g. "environment", "equipment")

Crafting ideas

- creates informative texts for a broader range of learning area purposes (e.g. explains a life cycle of a butterfly, recounts a process, describes an artwork)
- includes structural features appropriate to the type of text and task such as opening statements to define the topic and at least 2 body paragraphs
- includes ideas which are relevant to the topic and purpose of the text
- organises information into paragraphs to support the reader
- includes a relevant graphic to support the reader (e.g. diagram or photo)

Text forms and features

- uses cohesive devices to signpost sections of text (e.g. uses text connectives such as "finally", "as a result", "in addition")
- uses present or timeless present tense consistently throughout text (e.g. "bears hibernate in winter") (see Grammar)
- selects visual and audio features to expand ideas in written texts (e.g. diagrams, tables, images)
- uses adjectives to create more accurate description (e.g. "the warm-blooded mammal") (see Grammar)

Vocabulary

- uses a range of technical and subject specific words to add detail and authority to information (e.g. "hibernate" instead of "sleep")

Crafting ideas

- creates informative texts that describe, explain and document (e.g. describe an artwork, document the materials and explain why it was created)
- selects structural elements to comprehensively and accurately represent the information (e.g. a fact sheet includes an opening statement, labelled diagrams and text boxes)
- orients the reader to the topic or concept using a definition or classification
- develops ideas with details and examples
- uses ideas derived from research
- uses written and visual supporting evidence

Text forms and features

- uses cohesive devices to link concepts across texts (e.g. uses lexical cohesion such as word associations and synonyms)
- uses cohesive devices to express cause and effect (e.g. uses text connectives such as "therefore", "subsequently")
- includes salient visual and audio features to expand on written information (e.g. creates graphs and other technical diagrams from authentic data)
- uses language to compare (e.g. "alternatively", "whereas")
- uses formatting appropriately to reference and label graphics

Vocabulary

- uses a range of learnt, technical and discipline-specific terms (e.g. "adapt", "survive")
- uses more sophisticated words to express cause and effect (e.g. "therefore", "subsequently")

Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to

achieve a specific purpose

- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U05

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U05

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information and digital sources

- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U05

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

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Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U05

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U05

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- evaluate the information selected to determine bias and reliability

AC9S7U06

use a particle to describe differences between pure substances and mixtures and apply understanding of of substances to separate mixtures

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Elaborations

- using of particles to show the difference between samples of pure substances and mixtures, and identifying examples of each
- examining different solutions and identifying the solvent and solute
- investigating and using a range of physical separation techniques such as filtration, decantation, , crystallisation, chromatography and distillation
- exploring and comparing separation methods used in a variety of situations such as in the home, recycling industries and purifying water
- analysing how the physical of substances in mixtures, such as particle size, density or volatility, determine the separation technique used
- investigating separation techniques used by First Nations Australians, such as hand-picking, sieving, winnowing, yandying, filtering, cold-pressing and steam distilling

Students learn to:

use a particle model to describe differences between pure substances and mixtures understanding of properties of substances to separate mixtures

(AC9S7U06)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Inquiring

- Identify, process and evaluate information

Reflecting

- Transfer knowledge

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Identify, process and evaluate information

Inquiring

- Identify, process and evaluate information

Inquiring

- Identify, process and evaluate information

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Reflecting

- Transfer knowledge

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Inquiring

- Identify, process and evaluate information

Reflecting

- Transfer knowledge

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Resources

Work Samples

WS01 - Water purification

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
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- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to achieve a specific purpose
- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

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The following continuum extract shows the alignment of the continuum with this content.

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- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

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- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
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Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

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- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
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Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to achieve a specific purpose
- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
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Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7U06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

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- identify, plan and justify opportunities to transfer knowledge into new contexts

Resource – WS01 - Water purification

By the end of Year 7 students explain how biological diversity is ordered and organised. They represent flows of matter and energy in ecosystems and predict the effects of environmental changes. They model cycles in the Earth-sun-moon system and explain the effects of these cycles on Earth phenomena. They represent and explain the effects of forces acting on objects. They use particle theory to explain the physical properties of substances and develop processes that separate mixtures. Students identify the factors that can influence development of and lead to changes in scientific knowledge. They explain how scientific responses are developed and can impact society. They explain the role of science communication in shaping viewpoints, policies and regulations.

Students plan and conduct safe, reproducible investigations to test relationships and aspects of scientific models. They identify potential ethical issues and intercultural considerations required for field locations or use of secondary data. They use equipment to generate and record data with precision. They select and construct appropriate representations to organise data and information. They process data and information and analyse it to describe patterns, trends and relationships. They identify possible sources of error in methods and identify unanswered questions in conclusions and claims. They identify evidence to support their conclusions and construct arguments to support or dispute claims. They select and use language and text features appropriately for their purpose and audience when communicating their ideas and findings.

AC9S7U06

use a particle model to describe differences between pure substances and mixtures and apply understanding of properties of substances to separate mixtures

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S7I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S7I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S7I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S7I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

AC9S7H01

explain how new or different perspectives can lead to changes in scientific knowledge

-
-

Elaborations

- exploring how scientists are re-examining the between organisms to refine the classification of species as they discover new information or interpret in new ways
- investigating how the land management practices of First Nations Australians inform contemporary management of the to protect biodiversity
- investigating how First Nations Australians' traditional ecological and zoological knowledges inform sustainable harvesting practices of certain species, such as dugongs and turtles
- researching developments in the understanding of astronomy, such as the predictions of eclipses and the calculation of the length of the solar year by Abu Abdallah Mohammad ibn Jabir ibn Sinan al-Raqi al-Harrani al-Sabi al-Battani in the 10th century
- investigating how aeronautical engineers' understanding of the nature of the acting in flight have led to changes in the design of aircraft

Students learn to:

explain how new evidence or different perspectives can lead to changes in scientific

(AC9S7H01)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Reading and viewing

- Understanding texts

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Identify, process and evaluate information

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

World views

- World views that recognise the interdependence of Earth's systems, and value diversity, equity and social justice, are essential for achieving sustainability.

Culture

- The First Peoples of Australia (Aboriginal Peoples) belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture despite the many historic and enduring impacts of colonisation, and continue to celebrate and share the past, present and future manifestations of their cultures.

Country/Place

- The First Peoples of Australia are the Traditional Owners of Country/Place, protected in Australian Law by the Native Title Act 1993 which recognises pre-existing sovereignty, continuing systems of law and customs, and connection to Country/Place. This recognised legal right provides for economic sustainability and a voice into the development and management of Country/Place.

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

Inquiring

- Identify, process and evaluate information

Understanding Asia's global significance

- The peoples of Asia shape human endeavour through aesthetic, creative, political, sporting, economic, technological and scientific domains.

Inquiring

- Identify, process and evaluate information

Reflecting

- Transfer knowledge

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7H01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Understanding texts

Literacy: Reading and viewing: Understanding texts

Content description

AC9S7H01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Comprehension

- reads and views some moderately complex texts (see Text complexity)
- accurately retells a text including most relevant details
- identifies main idea and related or supporting ideas in moderately complex texts (see Text complexity)
- evaluates the accuracy within and across texts on the same topic
- explains how authors use evidence and supporting detail to build and verify ideas

- draws inferences and verifies using textual evidence

Processes

- monitors reading for meaning using grammatical and contextual knowledge (see Fluency)
- explains how textual features support the text's purpose
- identifies and explains techniques used to present perspective (e.g. emotive or descriptive language, order in which ideas are presented)
- predicts the development of ideas based on a partial read (e.g. predicts the final chapter of a narrative, drawing on understanding of the textual features in the previous chapters)
- uses prior knowledge and context to read unknown words (e.g. uses morphemic knowledge of "explosion" to decode "explosive" and uses context and knowledge of metaphorical use of language to understand "explosive outburst")
- uses knowledge of cohesive devices to track meaning throughout a text (e.g. connectives such as "however", "on the other hand") (see Grammar)
- uses knowledge of the features and conventions of the type of text to build meaning (e.g. recognises that the beginning of a persuasive text may introduce the topic and the line of argument)
- identifies language features used to present opinions or points of view
- skims and scans texts for key words to track the development of ideas
- uses sophisticated punctuation to support meaning (e.g. commas to separate clauses in complex sentences)

Vocabulary

- uses knowledge of prefixes and suffixes to read and interpret unfamiliar words
- identifies how technical and discipline-specific words develop meaning in texts
- analyses the effect of antonyms, synonyms and idiomatic language
- understands precise meaning of words with similar connotations (e.g. "generous", "kind-hearted", "charitable")

Comprehension

- reads and views complex texts (see Text complexity)
- identifies the main themes or concepts in complex texts by synthesising key ideas or information
- summarises the text, identifying key details only
- draws inferences, synthesising clues and evidence across a text
- builds meaning by actively linking ideas from a number of texts or a range of digital sources
- distils information from a number of texts according to task and purpose (e.g. uses graphic organisers)
- identifies different interpretations of the text citing evidence from a text
- evaluates language features for relevance to purpose and audience
- analyses texts that have more than one purpose and explains how parts of the text support a particular purpose
- analyses the use of language appropriate to different types of texts (e.g. compare the use of pun in imaginative and persuasive texts)
- identifies techniques used to obscure author's purpose (e.g. inclusion or omission of content)

Processes

- uses processes such as predicting, confirming predictions, monitoring, and connecting relevant elements of the text to build or repair meaning
- uses knowledge of a broader range of cohesive devices to track meaning (e.g. word associations) (see Grammar)
- selects reading or viewing strategies appropriate to reading purpose (e.g. scans text for evidence)
- judiciously selects texts for learning area tasks and purposes

Vocabulary

- identifies language used to create tone or atmosphere
- analyses language and visual features in texts using metalanguage (e.g. cohesion, interpretation, figurative)
- applies knowledge of base words and word origins to understand the meaning of unfamiliar, discipline-specific words
- uses a range of context and grammatical cues to understand unfamiliar words
- interprets complex figurative language (e.g. euphemisms, hyperbole)

Comprehension

- reads and views complex or some highly complex texts (see Text complexity)
- interprets abstract concepts integrating complex ideas
- analyses how language features are used to support the point of view in a text (e.g. the strategic use of images such as a cartoon in an editorial)
- draws inferences using evidence from the text and discounting possible inferences that are not supported by the text
- applies and articulates criteria to evaluate the language structures and features for relevance to purpose and audience
- evaluates the reasoning and evidence in a persuasive text
- explains how context (e.g. time, place, situation) influences interpretations of a text
- analyses the author's perspectives in complex or some highly complex texts
- analyses the techniques authors use to position readers
- recognises when ideas or evidence have been omitted from a text to position the reader

Processes

- automatically integrates a range of processes such as predicting, confirming predictions, monitoring and connecting relevant elements of the text, to build meaning
- describes how sophisticated cohesive devices establish patterns of meaning (e.g. "class" – "subclass")
- navigates extended texts including complex digital texts

Vocabulary

- demonstrates an understanding of nuances and subtleties in words of similar meaning (e.g. "frustrated", "discouraged", "baffled")
- verifies interpretations of unfamiliar words using grammatical and contextual cues

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7H01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to achieve a specific purpose
- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

AC9S7H02

investigate how cultural perspectives and influence the development of scientific knowledge

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Elaborations

- investigating classification used by First Nations Australians and how they differ in context and use from those used by contemporary science
- investigating how First Nations Australians have developed sustainable harvesting practices and cultural protocols based on deep ecological understandings
- exploring how the personal beliefs of a scientist may influence the questions they choose to pursue and how they investigate those questions, such as Richard Levins, whose political views led him to focus on population ecology, or Joseph Rotblat, a physicist who refused to work on science that might lead to development of an atomic bomb
- considering why it is important to recognise that different people in society have different perspectives on the introduction of biological controls to eradicate an invasive species
- exploring the work of Wang Zhenyi, an acclaimed female scholar of 18th-century China, including her experiments in studying lunar eclipses
- exploring how David Unaipon, a Ngarrindjeri man from Coorong region of South Australia, used his cultural knowledge and understanding of the aerodynamic of boomerangs to conceptualise a 'vertical lift flying machine' in 1914

Students learn to:

investigate how cultural perspectives and world views influence the development of scientific knowledge

(AC9S7H02)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Reflecting on culture and cultural diversity

- Examine cultural perspectives and world views

World views

- World views are formed by experiences at personal, local, national and global levels, and are linked to individual, community, business and political actions for sustainability.

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Engaging with cultural and linguistic diversity

- Develop multiple perspectives

Reflecting on culture and cultural diversity

- Examine cultural perspectives and world views

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

World views

- World views that recognise the interdependence of Earth's systems, and value diversity, equity and social justice, are essential for achieving sustainability.

Reflecting on culture and cultural diversity

- Examine cultural perspectives and world views

Reflecting on culture and cultural diversity

- Examine cultural perspectives and world views

World views

- World views are formed by experiences at personal, local, national and global levels, and are linked to individual, community, business and political actions for sustainability.

Reflecting on culture and cultural diversity

- Examine cultural perspectives and world views

Understanding Asia's global significance

- The peoples of Asia shape human endeavour through aesthetic, creative, political, sporting, economic, technological and scientific domains.

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Snapshot – Examine cultural perspectives and world views

Intercultural Understanding: Reflecting on culture and cultural diversity: Examine perspectives and world views

Content description

AC9S7H02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the factors that influence cultural perspectives presented within intercultural contexts
- analyse the reasons, experiences and understandings that inform diverse cultural perspectives and world views in a range of intercultural contexts
- evaluate how common and conflicting values within and across cultural and linguistic groups affect the presentation of cultural perspectives and world views

Snapshot – Develop multiple perspectives

Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop multiple perspectives

Content description

AC9S7H02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine how cultural beliefs or practices influence their own perspectives, and those of others, when discussing unfamiliar topics
- consider multiple perspectives held on unfamiliar topics, identifying commonality and difference, and describe how perspectives may be influenced by cultural beliefs and practices
- analyse unfamiliar topics and develop respectful responses, reconciling different cultural perspectives

Snapshot – Examine cultural perspectives and world views

Intercultural Understanding: Reflecting on culture and cultural diversity: Examine perspectives and world views

Content description

AC9S7H02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the factors that influence cultural perspectives presented within intercultural contexts
- analyse the reasons, experiences and understandings that inform diverse cultural perspectives and world views in a range of intercultural contexts
- evaluate how common and conflicting values within and across cultural and linguistic groups affect the presentation of cultural perspectives and world views

Snapshot – Examine cultural perspectives and world views

Intercultural Understanding: Reflecting on culture and cultural diversity: Examine perspectives and world views

Content description

AC9S7H02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the factors that influence cultural perspectives presented within intercultural contexts
- analyse the reasons, experiences and understandings that inform diverse cultural perspectives and world views in a range of intercultural contexts
- evaluate how common and conflicting values within and across cultural and linguistic groups affect the presentation of cultural perspectives and world views

Snapshot – Examine cultural perspectives and world views

Intercultural Understanding: Reflecting on culture and cultural diversity: Examine perspectives and world views

Content description

AC9S7H02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the factors that influence cultural perspectives presented within intercultural contexts
- analyse the reasons, experiences and understandings that inform diverse cultural perspectives and world views in a range of intercultural contexts
- evaluate how common and conflicting values within and across cultural and linguistic groups affect the presentation of cultural perspectives and world views

Snapshot – Examine cultural perspectives and world views

Intercultural Understanding: Reflecting on culture and cultural diversity: Examine

perspectives and world views

Content description

AC9S7H02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the factors that influence cultural perspectives presented within intercultural contexts
- analyse the reasons, experiences and understandings that inform diverse cultural perspectives and world views in a range of intercultural contexts
- evaluate how common and conflicting values within and across cultural and linguistic groups affect the presentation of cultural perspectives and world views

AC9S7H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

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Elaborations

- investigating how scientific knowledge that larger reserves are better for maintaining ecosystem function might interact with competing viewpoints, values and interests for land use when planning ecological reserves
- examining how laboratory-grown meat might reduce impact on ecosystems and considering any social, ethical and economic implications of developing laboratory-grown meat for wide consumption
- examining how the use of desalination plants to produce fresh water has impacted marine ecosystems where the desalination plants are located
- investigating the contributions of First Nations Australians' knowledges in the identification of medicinal of endemic plants and the ethical, environmental, social and economic implications of others using these knowledges
- investigating the ethical, environmental, social and economic implications of proposed scientific responses that involve cross-cultural partnerships and build on First Nations Australians' land management techniques
- discussing how scientific knowledge of the involved in flight has led to changes in aircraft design and any ethical, environmental, social and economic considerations of these changes
- researching how of gases were utilised in the gas warfare in the First World War and the subsequent development of the Geneva Protocol and the later adoption of the Chemical Weapons Convention international arms control treaty

Students learn to:

examine how proposed scientific responses to contemporary issues may impact on ethical, environmental, social and economic considerations

(AC9S7H03)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Inquiring

- Identify, process and evaluate information

Responding to ethical issues

- Explore ethical issues
- Making and reflecting on ethical decisions

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Responding to ethical issues

- Making and reflecting on ethical decisions

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

Responding to ethical issues

- Making and reflecting on ethical decisions

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

Inquiring

- Identify, process and evaluate information

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

Systems

- Social, economic and political systems influence the sustainability of Earth's systems.

Understanding ethical concepts and perspectives

- Explore ethical concepts

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Responding to ethical issues

- Making and reflecting on ethical decisions

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Analysing

- Draw conclusions and provide reasons

Inquiring

- Identify, process and evaluate information

Design

- Sustainable design requires an awareness of place, past practices, research and technological developments, and balanced judgements based on projected environmental, social and economic impacts.

Systems

- Social, economic and political systems influence the sustainability of Earth's systems.

Reflecting

- Transfer knowledge

Responding to ethical issues

- Explore ethical issues

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9HG7K08

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference

- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine values, rights and responsibilities and ethical norms

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine values, rights and responsibilities and ethical norms

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Explore ethical concepts

Ethical Understanding: Understanding ethical concepts and perspectives: Explore ethical concepts

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and describe ethical concepts, such as truth and justice, and explain how perspectives may vary according to the situation or context
- analyse the similarities and differences between ethical concepts, such as integrity, loyalty and equality, in a range of situations and contexts
- evaluate the consistency in meaning of ethical concepts, such as trust, freedom and rights and responsibilities, in a range of situations and contexts

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine values, rights and responsibilities and ethical norms

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- draw conclusions and make choices when completing tasks, using discipline knowledge to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Transfer knowledge

Critical and Creative Thinking: Reflecting: Transfer knowledge

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply aspects of knowledge and skills gained in one context to a new or unrelated context to achieve a specific purpose
- transfer knowledge and skills gained in previous experiences to both similar and different contexts, and explain reasons for decisions and choices made
- identify, plan and justify opportunities to transfer knowledge into new contexts

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7H03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

AC9S7H04

explore the role of science communication in informing individual viewpoints and community policies and regulations

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-

Elaborations

- investigating how, through two-way approaches, First Nations Australians are communicating their knowledge and viewpoints, such as Caring for Country and Place initiatives to influence related policies
- examining how science communication of endangered species has led to policies and regulations related to fishing catch and hunting limits
- exploring how Dame Jane Goodall's communication of her research resulted in changed individual viewpoints and conservation policies
- examining how global reporting on high-impact weather events such as cyclones, tidal surges and heatwaves has led to the development of warning and evacuation policies
- reflecting on the role of contemporary First Nations Australians astronomers and astrophysicists, such as Wiradjuri astrophysicist and science communicator Kirsten Banks, in promoting First Nations astronomy knowledges and understandings
- investigating how science communication of the impact of waste on the has led to the adoption of community policies for separating household waste and encouraged other recycling initiatives

Students learn to:

explore the role of science communication in informing individual viewpoints and community policies and regulations

(AC9S7H04)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Inquiring

- Identify, process and evaluate information

Social awareness

- Community awareness

Social management

- Communication

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to

general capabilities and cross-curriculum priorities. Content elaborations are optional .

Reflecting on culture and cultural diversity

- Explore the influence of cultures on interactions

Country/Place

- The First Peoples of Australia are the Traditional Owners of Country/Place, protected in Australian Law by the Native Title Act 1993 which recognises pre-existing sovereignty, continuing systems of law and customs, and connection to Country/Place. This recognised legal right provides for economic sustainability and a voice into the development and management of Country/Place.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Responding to ethical issues

- Making and reflecting on ethical decisions

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms
- Recognise influences on ethical behaviour and perspectives

Futures

- Sustainable futures are achieved through informed individual, community, business and political action that values local, national and global equity and fairness across generations into the future.

Responding to ethical issues

- Making and reflecting on ethical decisions

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms
- Recognise influences on ethical behaviour and perspectives

Futures

- Sustainable futures require individuals to seek information, identify solutions, reflect on and evaluate past actions, and collaborate with and influence others as they work towards a desired change.

Social awareness

- Community awareness

Social management

- Communication

Engaging with cultural and linguistic diversity

- Develop multiple perspectives

Reflecting on culture and cultural diversity

- Explore the influence of cultures on interactions

Country/Place

- The First Peoples of Australia are the Traditional Owners of Country/Place, protected in Australian Law by the Native Title Act 1993 which recognises pre-existing sovereignty, continuing systems of law and customs, and connection to Country/Place. This recognised legal right provides for economic sustainability and a voice into the development and management of Country/Place.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Social awareness

- Community awareness

Social management

- Communication

Futures

- Sustainable futures are achieved through informed individual, community, business and political action that values local, national and global equity and fairness across generations into the future.

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Community awareness

Personal and Social capability: Social awareness: Community awareness

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain the way their actions and the actions of others influence communities
- analyse roles and responsibilities of citizens within communities
- evaluate ways of contributing to communities at local, regional, national and global levels

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Explore the influence of cultures on interactions

Intercultural Understanding: Reflecting on culture and cultural diversity: Explore cultures on interactions

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the influence of cultural and linguistic diversity on familiar interactions, and identify opportunities or challenges for relationship-building
- explain the influence of cultural and linguistic diversity on unfamiliar interactions, identifying opportunities to show respect for cultural traditions
- analyse the influence of culture on interactions within and across cultural and linguistic groups, developing opportunities for exchange and collaboration

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine responsibilities and ethical norms

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Recognise influences on ethical behaviour and perspectives

Ethical Understanding: Understanding ethical concepts and perspectives: Recognise ethical behaviour and perspectives

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain how habits and behaviour shape character and examine how they inform ethical perspectives
- explain how different traits, such as honesty, trust, courage and selfishness interact with responsibilities or duties to determine ethically appropriate responses
- explore and analyse examples of the tensions between conflicting positions on issues of personal, social and global importance

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine responsibilities and ethical norms

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and

responsibilities, and ethical norms when responding to ethical issues

- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Recognise influences on ethical behaviour and perspectives

Ethical Understanding: Understanding ethical concepts and perspectives: Recognise ethical behaviour and perspectives

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain how habits and behaviour shape character and examine how they inform ethical perspectives
- explain how different traits, such as honesty, trust, courage and selfishness interact with responsibilities or duties to determine ethically appropriate responses
- explore and analyse examples of the tensions between conflicting positions on issues of personal, social and global importance

Snapshot – Community awareness

Personal and Social capability: Social awareness: Community awareness

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain the way their actions and the actions of others influence communities
- analyse roles and responsibilities of citizens within communities
- evaluate ways of contributing to communities at local, regional, national and global levels

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Develop multiple perspectives

Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop perspectives

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine how cultural beliefs or practices influence their own perspectives, and those of others, when discussing unfamiliar topics
- consider multiple perspectives held on unfamiliar topics, identifying commonality and difference, and describe how perspectives may be influenced by cultural beliefs and practices
- analyse unfamiliar topics and develop respectful responses, reconciling different cultural perspectives

Snapshot – Explore the influence of cultures on interactions

Intercultural Understanding: Reflecting on culture and cultural diversity: Explore cultures on interactions

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine the influence of cultural and linguistic diversity on familiar interactions, and identify opportunities or challenges for relationship-building
- explain the influence of cultural and linguistic diversity on unfamiliar interactions, identifying opportunities to show respect for cultural traditions
- analyse the influence of culture on interactions within and across cultural and linguistic groups, developing opportunities for exchange and collaboration

Snapshot – Community awareness

Personal and Social capability: Social awareness: Community awareness

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain the way their actions and the actions of others influence communities
- analyse roles and responsibilities of citizens within communities
- evaluate ways of contributing to communities at local, regional, national and global levels

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7H04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific , identify and test

-
-

Elaborations

- discussing the features of investigable and non-investigable questions, including consideration of school and web-based resources available, and examining their own and others' questions
- consulting with First Nations Australians to clarify questions based on their traditional ecological knowledges, such as predictions regarding the impact of invasive species
- developing investigable questions to explore scientific , such as: 'How does explain the of substances?'
- developing investigable questions to test , such as: 'How does the volume of a balloon change as it is heated and cooled? What happens to the height of the tide at different points of the lunar cycle?'
- discussing the between a reasoned prediction and a , identifying essential elements of a and using a provided scaffold to develop hypotheses
- formulating hypotheses such as: 'If the surface area of the parachute is decreased, the parachute will descend more quickly because there will be less air resistance'

Students learn to:

develop investigable questions, reasoned predictions and hypotheses to explore scientific , identify patterns and test relationships

(AC9S7I01)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum

priorities.

Generating

- Put ideas into action

Inquiring

- Develop questions

Speaking and listening

- Interacting

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Inquiring

- Develop questions

Reading and viewing

- Understanding texts

Engaging with cultural and linguistic diversity

- Develop multiple perspectives

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- The First Peoples of Australia are the Traditional Owners of Country/Place, protected in Australian Law by the Native Title Act 1993 which recognises pre-existing sovereignty, continuing systems of law and customs, and connection to Country/Place. This recognised legal right provides for economic sustainability and a voice into the development and management of Country/Place.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Inquiring

- Develop questions

Speaking and listening

- Interacting

Inquiring

- Develop questions

Generating

- Put ideas into action

Generating

- Put ideas into action

Speaking and listening

- Interacting

Resources

Work Samples

WS01 - Water purification

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7101

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing

modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Develop questions

Critical and Creative Thinking: Inquiring: Develop questions

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- develop questions to examine unfamiliar ideas and topics
- questions developed focus on improving understanding about a topic and clarifying information about processes or procedures
- develop questions to investigate complex issues and topics
- questions developed assist in forming an understanding of why phenomena or issues arise
- develop questions to investigate complex issues and topics
- questions developed facilitate increasing understanding of abstract ideas and concepts

Snapshot – Interacting

Literacy: Speaking and listening: Interacting

Content description

AC9S7I01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

- critically evaluate ideas and claims made by a speaker
- explains new learning from interacting with others
- appropriately presents an alternative point to the previous speaker
- initiates interactions confidently in group and whole-class discussions
- poses pertinent questions to make connections between a range of ideas
- uses open questions to prompt a speaker to provide more information
- clarifies task goals and negotiates roles in group learning
- monitors discussion to manage digression from the topic
- identifies and articulates the perspective of a speaker, to move a conversation forward
- interacts within school context or the broader community, adjusting language and responses to suit purpose and audience
- synthesises ideas from group discussion into a common theme or hypothesis
- poses problems, hypothesises and formulates questions about abstract ideas in group situations
- restates different views and makes suggestions to negotiate agreement
- poses questions to clarify assumptions made by the speaker
- questions others to evaluate accuracy of thinking or problem-solving processes
- uses language to align the listener with personal position (e.g. "of course", "as you can imagine", "obviously")
- interacts strategically and confidently with a broad range of interactional partners
- gives an extended explanation and evaluation of a complex concept, issue or process
- justifies a personal stance, after analysis of arguments on a particular issue, using evidence and elaboration in a group situation
- uses language strategically to subtly align others to own perspective as appropriate to audience and purpose

Snapshot – Develop questions

Critical and Creative Thinking: Inquiring: Develop questions

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- develop questions to examine unfamiliar ideas and topics
- questions developed focus on improving understanding about a topic and clarifying information about processes or procedures

- develop questions to investigate complex issues and topics
- questions developed assist in forming an understanding of why phenomena or issues arise
- develop questions to investigate complex issues and topics
- questions developed facilitate increasing understanding of abstract ideas and concepts

Snapshot – Understanding texts

Literacy: Reading and viewing: Understanding texts

Content description

AC9S7101

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Comprehension

- reads and views some moderately complex texts (see Text complexity)
- accurately retells a text including most relevant details
- identifies main idea and related or supporting ideas in moderately complex texts (see Text complexity)
- evaluates the accuracy within and across texts on the same topic
- explains how authors use evidence and supporting detail to build and verify ideas
- draws inferences and verifies using textual evidence

Processes

- monitors reading for meaning using grammatical and contextual knowledge (see Fluency)
- explains how textual features support the text's purpose
- identifies and explains techniques used to present perspective (e.g. emotive or descriptive language, order in which ideas are presented)
- predicts the development of ideas based on a partial read (e.g. predicts the final chapter of a narrative, drawing on understanding of the textual features in the previous chapters)
- uses prior knowledge and context to read unknown words (e.g. uses morphemic knowledge of "explosion" to decode "explosive" and uses context and knowledge of metaphorical use of language to understand "explosive outburst")
- uses knowledge of cohesive devices to track meaning throughout a text (e.g. connectives such as "however", "on the other hand") (see Grammar)
- uses knowledge of the features and conventions of the type of text to build meaning (e.g. recognises that the beginning of a persuasive text may introduce the topic and the line of argument)
- identifies language features used to present opinions or points of view
- skims and scans texts for key words to track the development of ideas
- uses sophisticated punctuation to support meaning (e.g. commas to separate clauses in complex sentences)

Vocabulary

- uses knowledge of prefixes and suffixes to read and interpret unfamiliar words
- identifies how technical and discipline-specific words develop meaning in texts
- analyses the effect of antonyms, synonyms and idiomatic language
- understands precise meaning of words with similar connotations (e.g. "generous", "kind-hearted", "charitable")

Comprehension

- reads and views complex texts (see Text complexity)
- identifies the main themes or concepts in complex texts by synthesising key ideas or information
- summarises the text, identifying key details only
- draws inferences, synthesising clues and evidence across a text
- builds meaning by actively linking ideas from a number of texts or a range of digital sources
- distils information from a number of texts according to task and purpose (e.g. uses graphic organisers)
- identifies different interpretations of the text citing evidence from a text
- evaluates language features for relevance to purpose and audience
- analyses texts that have more than one purpose and explains how parts of the text support a particular purpose
- analyses the use of language appropriate to different types of texts (e.g. compare the use of pun

in imaginative and persuasive texts)

- identifies techniques used to obscure author's purpose (e.g. inclusion or omission of content)

Processes

- uses processes such as predicting, confirming predictions, monitoring, and connecting relevant elements of the text to build or repair meaning
- uses knowledge of a broader range of cohesive devices to track meaning (e.g. word associations) (see Grammar)
- selects reading or viewing strategies appropriate to reading purpose (e.g. scans text for evidence)
- judiciously selects texts for learning area tasks and purposes

Vocabulary

- identifies language used to create tone or atmosphere
- analyses language and visual features in texts using metalanguage (e.g. cohesion, interpretation, figurative)
- applies knowledge of base words and word origins to understand the meaning of unfamiliar, discipline-specific words
- uses a range of context and grammatical cues to understand unfamiliar words
- interprets complex figurative language (e.g. euphemisms, hyperbole)

Comprehension

- reads and views complex or some highly complex texts (see Text complexity)
- interprets abstract concepts integrating complex ideas
- analyses how language features are used to support the point of view in a text (e.g. the strategic use of images such as a cartoon in an editorial)
- draws inferences using evidence from the text and discounting possible inferences that are not supported by the text
- applies and articulates criteria to evaluate the language structures and features for relevance to purpose and audience
- evaluates the reasoning and evidence in a persuasive text
- explains how context (e.g. time, place, situation) influences interpretations of a text
- analyses the author's perspectives in complex or some highly complex texts
- analyses the techniques authors use to position readers
- recognises when ideas or evidence have been omitted from a text to position the reader

Processes

- automatically integrates a range of processes such as predicting, confirming predictions, monitoring and connecting relevant elements of the text, to build meaning
- describes how sophisticated cohesive devices establish patterns of meaning (e.g. "class" – "subclass")
- navigates extended texts including complex digital texts

Vocabulary

- demonstrates an understanding of nuances and subtleties in words of similar meaning (e.g. "frustrated", "discouraged", "baffled")
- verifies interpretations of unfamiliar words using grammatical and contextual cues

Snapshot – Develop multiple perspectives

Intercultural Understanding: Engaging with cultural and linguistic diversity: Develop perspectives

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- examine how cultural beliefs or practices influence their own perspectives, and those of others, when discussing unfamiliar topics
- consider multiple perspectives held on unfamiliar topics, identifying commonality and difference, and describe how perspectives may be influenced by cultural beliefs and practices
- analyse unfamiliar topics and develop respectful responses, reconciling different cultural perspectives

Snapshot – Develop questions

Critical and Creative Thinking: Inquiring: Develop questions

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- develop questions to examine unfamiliar ideas and topics
- questions developed focus on improving understanding about a topic and clarifying information about processes or procedures
- develop questions to investigate complex issues and topics
- questions developed assist in forming an understanding of why phenomena or issues arise
- develop questions to investigate complex issues and topics
- questions developed facilitate increasing understanding of abstract ideas and concepts

Snapshot – Interacting

Literacy: Speaking and listening: Interacting

Content description

AC9S7I01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

- critically evaluate ideas and claims made by a speaker
- explains new learning from interacting with others
- appropriately presents an alternative point to the previous speaker
- initiates interactions confidently in group and whole-class discussions
- poses pertinent questions to make connections between a range of ideas
- uses open questions to prompt a speaker to provide more information
- clarifies task goals and negotiates roles in group learning
- monitors discussion to manage digression from the topic
- identifies and articulates the perspective of a speaker, to move a conversation forward
- interacts within school context or the broader community, adjusting language and responses to suit purpose and audience
- synthesises ideas from group discussion into a common theme or hypothesis
- poses problems, hypothesises and formulates questions about abstract ideas in group situations
- restates different views and makes suggestions to negotiate agreement
- poses questions to clarify assumptions made by the speaker
- questions others to evaluate accuracy of thinking or problem-solving processes
- uses language to align the listener with personal position (e.g. "of course", "as you can imagine", "obviously")
- interacts strategically and confidently with a broad range of interactional partners
- gives an extended explanation and evaluation of a complex concept, issue or process
- justifies a personal stance, after analysis of arguments on a particular issue, using evidence and elaboration in a group situation
- uses language strategically to subtly align others to own perspective as appropriate to audience and purpose

Snapshot – Develop questions

Critical and Creative Thinking: Inquiring: Develop questions

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- develop questions to examine unfamiliar ideas and topics
- questions developed focus on improving understanding about a topic and clarifying information about processes or procedures
- develop questions to investigate complex issues and topics

- questions developed assist in forming an understanding of why phenomena or issues arise
- develop questions to investigate complex issues and topics
- questions developed facilitate increasing understanding of abstract ideas and concepts

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Interacting

Literacy: Speaking and listening: Interacting

Content description

AC9S7I01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

- critically evaluate ideas and claims made by a speaker
- explains new learning from interacting with others
- appropriately presents an alternative point to the previous speaker
- initiates interactions confidently in group and whole-class discussions
- poses pertinent questions to make connections between a range of ideas
- uses open questions to prompt a speaker to provide more information
- clarifies task goals and negotiates roles in group learning
- monitors discussion to manage digression from the topic
- identifies and articulates the perspective of a speaker, to move a conversation forward
- interacts within school context or the broader community, adjusting language and responses to suit purpose and audience
- synthesises ideas from group discussion into a common theme or hypothesis
- poses problems, hypothesises and formulates questions about abstract ideas in group situations
- restates different views and makes suggestions to negotiate agreement
- poses questions to clarify assumptions made by the speaker
- questions others to evaluate accuracy of thinking or problem-solving processes
- uses language to align the listener with personal position (e.g. "of course", "as you can imagine", "obviously")
- interacts strategically and confidently with a broad range of interactional partners
- gives an extended explanation and evaluation of a complex concept, issue or process

- justifies a personal stance, after analysis of arguments on a particular issue, using evidence and elaboration in a group situation
- uses language strategically to subtly align others to own perspective as appropriate to audience and purpose

Resource – WS01 - Water purification

By the end of Year 7 students explain how biological diversity is ordered and organised. They represent flows of matter and energy in ecosystems and predict the effects of environmental changes. They model cycles in the Earth-sun-moon system and explain the effects of these cycles on Earth phenomena. They represent and explain the effects of forces acting on objects. They use particle theory to explain the physical properties of substances and develop processes that separate mixtures. Students identify the factors that can influence development of and lead to changes in scientific knowledge. They explain how scientific responses are developed and can impact society. They explain the role of science communication in shaping viewpoints, policies and regulations.

Students plan and conduct safe, reproducible investigations to test relationships and aspects of scientific models. They identify potential ethical issues and intercultural considerations required for field locations or use of secondary data. They use equipment to generate and record data with precision. They select and construct appropriate representations to organise data and information. They process data and information and analyse it to describe patterns, trends and relationships. They identify possible sources of error in methods and identify unanswered questions in conclusions and claims. They identify evidence to support their conclusions and construct arguments to support or dispute claims. They select and use language and text features appropriately for their purpose and audience when communicating their ideas and findings.

AC9S7U06

use a particle model to describe differences between pure substances and mixtures and apply understanding of properties of substances to separate mixtures

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S7I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S7I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S7I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S7I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

AC9S7I02

plan and conduct to answer questions and test hypotheses, including identifying and and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on

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-

Elaborations

- comparing the method with the and examining the reasonableness of the method for testing that
- discussing why it is important to identify and when planning an
- examining the features of , constructing methods and reviewing other students' methods
- identifying relating to that are assumed to be constant, such as ambient temperature, of used or purity of substances
- identifying risks to themselves and others in and considering actions that can be taken to avoid or manage those risks
- considering ethical issues relating to interactions with living things
- recognising state and territory as they relate to First Nations Australians' heritage sites and artefacts
- collaborating with First Nations Australians communities and organisations to conduct about ecosystems, ensuring mutually beneficial outcomes
- acknowledging and recognising First Nations Australians' artefacts and heritage sites, such as human stonework and scatter sites in comparison with rocks changed by natural processes, and understanding not to harm or disturb sites

Students learn to:

plan and conduct reproducible investigations to answer questions and test hypotheses
identifying variables and assumptions and, as appropriate, recognising and managing risks
considering ethical issues and recognising key considerations regarding heritage sites
on Country/Place

(AC9S7I02)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Responding to ethical issues

- Explore ethical perspectives and frameworks
- Making and reflecting on ethical decisions

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Generating

- Put ideas into action

Generating

- Put ideas into action

Generating

- Put ideas into action

Generating

- Put ideas into action

Generating

- Put ideas into action

Generating

- Put ideas into action

Understanding ethical concepts and perspectives

- Explore ethical concepts

- Examine values, rights and responsibilities and ethical norms

Responding to ethical issues

- Explore ethical issues

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Responding to ethical issues

- Explore ethical issues

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Responding to ethical issues

- Explore ethical issues

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Country/Place

- First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways.

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9M7ST03

Resources

Work Samples

WS01 - Water purification

Snapshot – Explore ethical perspectives and frameworks

Ethical Understanding: Responding to ethical issues: Explore ethical perspective

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical frameworks that use consequences, virtues and duties guide ethical decision-making
- explain how different ethical frameworks support developing ethical perspectives and inform ethical decision-making
- analyse and utilise different ethical frameworks when responding to ethical issues and making ethical decisions

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on ethical decisions

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- consider alternative ethical responses to an issue when making and reflecting on ethical decisions
- consider how values and beliefs influence approaches to ethical issues, and analyse how these affect outcomes
- analyse biases when applying ethical concepts, values and ethical frameworks, in order to explore and evaluate ethical decisions

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Explore ethical concepts

Ethical Understanding: Understanding ethical concepts and perspectives: Explore ethical concepts

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and describe ethical concepts, such as truth and justice, and explain how perspectives may vary according to the situation or context
- analyse■the similarities and differences between ethical concepts, such as integrity, loyalty and equality, in a range of situations and contexts
- evaluate■the consistency in meaning of ethical concepts, such as trust, freedom and rights and responsibilities, in a range of situations and contexts

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine values, rights and responsibilities and ethical norms

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues

- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7I02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

AC9S7I03

select and use equipment to generate and record with , using as appropriate

-
-

Elaborations

- selecting and using equipment appropriate to the , such as ensuring a selected thermometer can measure within the range of temperatures expected, or selecting an appropriate-capacity measuring cylinder for the volume of liquid needed
- examining how the use of such as stopwatches and digital scales can enable the generation of more precise
- constructing tables, spreadsheets and graphic organisers to collect and information
- using appropriate standard units and performing simple unit conversions when recording
- using such as sensors to measure factors and apps that use image or call recognition to make field identifications

Students learn to:

select and use equipment to generate and record data with precision, using digital t appropriate

(AC9S7I03)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Investigating

- Acquire and collate data

Number sense and algebra

- Number and place value

Statistics and probability

- Interpreting and representing data

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Generating

- Put ideas into action

Investigating

- Acquire and collate data

Statistics and probability

- Interpreting and representing data

Investigating

- Acquire and collate data

Investigating

- Acquire and collate data

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9M7N03

AC9M7N05

Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

Content description

AC9S7I03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- collect and access data using a range of digital tools and methods in response to a defined question or problem
- collect and access data from a range of sources, using specialised digital tools in response to problems, and evaluate it for relevance
- collect and evaluate quantitative and qualitative data using specialised digital tools and processes in the context of identified problems

Snapshot – Number and place value

Numeracy: Number sense and algebra: Number and place value

Content description

AC9S7I03

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Numerical recognition and identification

- identifies, reads and writes numerals, beyond 4 4 4 digits in length, with spacing after every 3 3 3 digits (e.g. 10 10 1 0 204 204 2 0 4 , 25 25 2 5 000 000 0 0 0 000 000 0 0 0 ; 12 12 1 2 230.25 230.25 2 3 0 . 2 5 ; reads 152 152 1 5 2 450 450 4 5 0 as "one hundred and 52 52 5 2 thousand 4 4 4 hundred and 50 50 5 0 "; compares the size of populations for different countries or the cost of expensive items with an advertised selling price in the millions)
- identifies, reads and writes decimals to one and 2 2 2 decimal places (e.g. reads 4.75 4.75 4 . 7

5 as "four point seven five" or 4 4 4 and 75 75 7 5 hundredths; writes 4 4 4 dollars and 5 5 5 cents as \$ 4.05 \$4.05 \$ 4 . 0 5)

Place value

- estimates and rounds natural numbers to the nearest 10 thousand, thousand etc. recognising the multiplicative relationships between the place value of the digits (e.g. estimates the crowd numbers at a football match; says that the \$ 9863 \$9863 \$ 9 8 6 3 raised at a charity event was close to \$ 10 \$10 \$ 1 0 000 000 0 0 0 ; recognises that 200 years is 10 times as large as 20 years, and applies this to environmental change)
- explains that the place value names for decimal numbers relate to the ones 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)
- represents, compares, orders and interprets decimals up to 2 2 2 decimal places (e.g. constructs a number line to include decimal values between zero and one, when asked "which is greater 0.19 0.19 0 . 1 9 or 0.2 0.2 0 . 2 ?", responds " 0.2 0.2 0 . 2 " ; interprets and compares measurements such as the temperature on different days or the change in height of a growing plant observed and recorded during science investigations)
- rounds decimals to the nearest natural number in order to estimate answers (e.g. estimates the length of material needed by rounding up the measurement to the nearest natural number)

Numerical recognition and identification

- identifies, reads, writes and interprets decimal numbers applying knowledge of the place value periods of tenths, hundredths and thousandths and beyond

Place value

- compares the size of decimals to other numbers including natural numbers and decimals expressed to different numbers of places (e.g. selects 0.35 0.35 0 . 3 5 as the greatest number from the set 0.2 , 0.125 , 0.35 0.2, 0.125, 0.35 0 . 2 , 0 . 1 2 5 , 0 . 3 5 ; explains that 2 2 2 is greater than 1.845 1.845 1 . 8 4 5)
- describes the multiplicative relationship between the adjacent positions in place value for decimals (e.g. understands that 0.2 0.2 0 . 2 is 10 10 1 0 times as great as 0.02 0.02 0 . 0 2 and that 100 100 1 0 0 times 0.005 0.005 0 . 0 0 5 is 0.5 0.5 0 . 5)
- compares and orders decimals greater than one including those expressed to an unequal number of places (e.g. compares the heights of students in the class that are expressed in metres such as 1.6 1 . 6 m is taller than 1.52 1.52 1 . 5 2 m; correctly orders the numbers 1.4 1.4 1 . 4 , 1.375 1.375 1 . 3 7 5 and 2.15 2.15 2 . 1 5 from least to greatest)
- rounds decimals to one and 2 decimal places for a purpose

Numerical recognition and identification

- reads, represents, interprets and uses negative numbers in computation (e.g. explains that the temperature – 10 10 1 0 °C is colder than the temperature – 2.5 2.5 2 . 5 °C; recognises that negative numbers are less than zero; locates – 12 12 1 2 on a number line)

Place value

- identifies that negative numbers are integers that represent both size and direction (e.g. uses a number line to represent position and order negative numbers; uses negative numbers in financial contexts such as to model an overdrawn account)
- understands that multiplying and dividing numbers by 10 , 100 , 1000 10, 100, 1000 1 0 , 1 0 0 , 1 0 0 0 changes the positional value of the digits (e.g. explains that 100 100 1 0 0 times 0.125 0.125 0 . 1 2 5 is 12.5 12.5 1 2 . 5 because each digit value in 0.125 0.125 0 . 1 2 5 is multiplied by 100 100 1 0 0 , so 100×0.1 100 times 0.1 1 0 0 $\times 0 . 1$ is 10 10 1 0 , 100×0.02 100 times 0.02 1 0 0 $\times 0 . 0 2$ is 2 2 2 and 100×0.005 100 times 0.005 1 0 0 $\times 0 . 0 0 5$ is 0.5 0.5 0 . 5 ; converts between units of centimetres and millimetres when planning, measuring and marking materials for cutting)
- rounds decimals to a specified number of decimal places for a purpose (e.g. the mean distance thrown in a school javelin competition was rounded to 2 2 2 decimal places; if the percentage profit was calculated as 12.467921 12.467921 1 2 . 4 6 7 9 2 1 % , rounds the calculation to 12.5 12.5 1 2 . 5 %)

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9S7I03

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Interpreting graphical representations

- uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
- summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
- explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
- interprets graphs depicting motion such as distance–time and velocity–time graphs
- interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
- investigates the association of 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

- considers the context when determining whether to use data from a sample or a population
- determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
- makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
- plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

- applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)
- identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)
- justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

Content description

AC9S7I03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- collect and access data using a range of digital tools and methods in response to a defined question or problem
- collect and access data from a range of sources, using specialised digital tools in response to problems, and evaluate it for relevance
- collect and evaluate quantitative and qualitative data using specialised digital tools and processes in the context of identified problems

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9S7I03

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Interpreting graphical representations

- uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
- summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
- explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
- interprets graphs depicting motion such as distance–time and velocity–time graphs
- interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
- investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

- considers the context when determining whether to use data from a sample or a population

- determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
- makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
- plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

- applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)
- identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)
- justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

Content description

AC9S7I03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- collect and access data using a range of digital tools and methods in response to a defined question or problem
- collect and access data from a range of sources, using specialised digital tools in response to problems, and evaluate it for relevance
- collect and evaluate quantitative and qualitative data using specialised digital tools and processes in the context of identified problems

Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

Content description

AC9S7I03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- collect and access data using a range of digital tools and methods in response to a defined question or problem
- collect and access data from a range of sources, using specialised digital tools in response to problems, and evaluate it for relevance
- collect and evaluate quantitative and qualitative data using specialised digital tools and processes in the context of identified problems

AC9S7I04

select and construct appropriate , including tables, , and mathematical , to organise and process and information

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-

Elaborations

- using spreadsheets to aid the presentation and analysis of
- constructing to represent feeding and flows of energy and in an ecosystem
- constructing of dichotomous keys, such as a creating a visual key or an interactive presentation, or coding a simple program

- analysing , including secondary , to determine mathematical , such as tidal variations over the course of a lunar cycle
- distinguishing between discrete and and selecting appropriate
- acknowledging, analysing and interpreting and information from First Nations Australians' astronomical

Students learn to:

select and construct appropriate representations, including tables, graphs, models relationships, to organise and process data and information

(AC9S7I04)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Number sense and algebra

- Number patterns and algebraic thinking

Statistics and probability

- Interpreting and representing data

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Investigating

- Interpret data

Number sense and algebra

- Proportional thinking

Statistics and probability

- Interpreting and representing data

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Inquiring

- Identify, process and evaluate information

Investigating

- Interpret data

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Number sense and algebra

- Number patterns and algebraic thinking

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Statistics and probability

- Interpreting and representing data

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9HG7S02

AC9M7A01

AC9M7A04

AC9M7A05

AC9M7ST01

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Number patterns and algebraic thinking

Numeracy: Number sense and algebra: Number patterns and algebraic thinking

Content description

AC9S7I04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Algebraic expressions

- creates and identifies algebraic equations from word problems involving one or more operations (e.g. if a taxi charges \$ 5 call out fee then a flat rate of \$ 2.30 per km travelled, represents this algebraically as $C = 5 + 2.3d$ where d is the distance travelled in km and C is the total cost of the trip)
- identifies and justifies equivalent algebraic expressions
- interprets a table of values in order to plot points on a graph

Algebraic relationships

- interprets and uses formulas and algebraic equations that describe relationships in various contexts (e.g. uses $A = \pi r^2$ to calculate the area of a circular space; uses $A = P \left(1 + \frac{r}{n} \right)^{nt}$ to calculate the amount of money accumulated after n years, including interest)

= $P(1 + nr)^n$ when working with compound interest; uses $v = u + at$ to calculate the velocity of an object

- plots relationships on a graph using a table of values representing authentic data (e.g. uses data recorded in a spreadsheet to plot results of a science experiment)

Linear and non-linear relationships

- identifies the difference between linear and non-linear relationships in everyday contexts (e.g. explains that in a linear relationship, the rate of change is constant such as the cost of babysitting by the hour, whereas in a non-linear relationship the rate of change will vary and it could grow multiplicatively or exponentially such as a social media post going viral)
- describes and interprets the graphical features of linear and non-linear growth in authentic problems (e.g. compares simple and compound interest graphs; describes the relationship between scientific data plotted on a graph; analyses a graph to identify the inverse relationship between price and quantity demanded or the relationship between Human Development Index (HDI) and standards of living)

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9S7I04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Interpreting graphical representations

- uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
- summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
- explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
- interprets graphs depicting motion such as distance–time and velocity–time graphs
- interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
- investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

- considers the context when determining whether to use data from a sample or a population
- determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
- makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
- plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

- applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)
- identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)
- justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- analyse and visualise data using a range of digital tools to identify patterns and make predictions
- analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
- analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Proportional thinking

Numeracy: Number sense and algebra: Proportional thinking

Content description

AC9S7I04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Understanding percentages and relative size

- explains that a percentage is a proportional relationship between a quantity and 100 (e.g. 25 % means 25 for every one hundred)
- demonstrates that 100 % is a complete whole (e.g. explains that in order to get 100 % on a quiz, you must answer every question correctly)
- uses percentage to describe, represent and compare relative size (e.g. selects which beaker is 75 % full, describes an object as 50 % of another object; describes and represents clean air as having 21 % oxygen)
- recognises that complementary percentages add to give 100 % and applies to situations (e.g. if 10 % of the jellybeans in a jar are black then 90 % are not black)

Determines a percentage as a part of a whole

- explains and fluently uses interchangeably the equivalence relationship between a fraction, decimal and percentage (e.g. $\frac{1}{2} = 0.5 = 50\%$; explains that at quarter time, 75 % of the game is left to play; ; interchangeably refers to a response from 50 %, 0.5 or half of the audience when evaluating how an audience responded to an aspect of a performance)
- uses key percentages and their equivalences to determine the percentage of a quantity (e.g. to solve 75 % of 160, knows that 50 % [half] of 160 is 80, and 25 % [quarter] is 40 so 75 % is 120)
- calculates a percentage of an amount (e.g. interprets that a 15 % discount on an \$80 purchase means $15\% \times \$80 = \12 and determines $10\% \times \$80 = \8 , so $55\% \times \$80 = \44 therefore $15\% \times \$80 = \12 ; calculates the amount of sugar/fat in a breakfast cereal to make a recommendation on a healthy

choice, such as 12 12 1 2 % of 250 250 2 5 0 grams = 30 30 3 0 grams)

- expresses one quantity as a percentage of another (e.g. determines what percentage 7 7 7 is of 35 35 5 ; determines what percentage 10 10 1 0 millilitres is of 200 200 2 0 0 millilitres when calculating appropriate doses of medicine)
- uses the complement of the percentage to calculate the amount after a percentage discount (e.g. to calculate how much to pay after a 20 20 2 0 % discount, calculates 80 80 8 0 % of the original cost)

Identifies ratios as a part-to-part comparison

- represents ratios using diagrams, physical or virtual materials (e.g. in a ratio 1 : 4 1:4 1 : 4 of red to blue counters, for each red counter there are 4 4 4 blue counters; uses physical or virtual materials to represent the ratio of hydrogen atoms to oxygen atoms in water molecules as 2 : 1 2:1 2 : 1 , 2 2 2 hydrogen atoms for every oxygen atom)
- interprets ratios as a comparison between 2 2 2 like quantities (e.g. ratio of students to teachers in a school is 20 : 1 20:1 2 0 : 1 ; ratio of carbohydrates to fat to protein in a food; interprets ratios such as debt equity ratio or savings-income ratio)
- interprets a rate as a comparison between 2 2 2 different types of quantities (e.g. water flow can be measured at a rate of 5 5 5 litres per second; change of concentration of reactants per time; the relationship between beats per minute and the pulse/rhythm of a dance phrase)
- expresses a ratio as equivalent fractions or percentages (e.g. the ratio of rainy days to fine days in Albany is 1 : 2 1:2 1 : 2 and so $\frac{1}{3}$ of the days are rainy; in a ratio of 1 : 1 1:1 1 : 1 each part represents one $\frac{1}{2}$ or 50 50 5 0 % of the whole; when interpreting food labels and making healthy eating choices)

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9S7I04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

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 (e.g. collects information on the heights of buildings or daily temperatures, tabulates the results and represents these graphically; uses a survey to collect primary data or secondary data extracted from census data)
- uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning (e.g. "I can't use a frequency histogram for categorical data because there is no numerical connection between the categories"; converts their data to percentages in order to compare the girls' results to those of the boys, as the total number of boys and girls who participated in the survey was different)
- determines and calculates the most appropriate statistic to describe the spread of data (e.g. when creating an infographic, uses the mean of the data to describe household income and the median of the data for house prices)
- calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution (e.g. describes the mean kilojoule intake and median hours of exercise of a sample population when investigating community health and wellbeing; describes central tendency when analysing road safety statistics)
- compares the usefulness of different representations of the same data (e.g. chooses to use a line graph to illustrate trends, a bar graph to compare the living standards of different economies and a histogram to show income distribution)
- 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

Interpreting graphical representations

- uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
- summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ of a class live

in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)

- explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
- interprets graphs depicting motion such as distance–time and velocity–time graphs
- interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
- investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

- considers the context when determining whether to use data from a sample or a population
- determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
- makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
- plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources

- evaluate the information selected to determine bias and reliability

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- analyse and visualise data using a range of digital tools to identify patterns and make predictions
- analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
- analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I04

Continuum extract

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- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
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- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources

information and digital sources

- evaluate the information selected to determine bias and reliability

Snapshot – Number patterns and algebraic thinking

Numeracy: Number sense and algebra: Number patterns and algebraic thinking

Content description

AC9S7I04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Algebraic expressions

- creates and identifies algebraic equations from word problems involving one or more operations (e.g. if a taxi charges \$ 5 \$ 5 call out fee then a flat rate of \$ 2.30 \$ 2 . 3 0 per km travelled, represents this algebraically as $C = 5 + 2.3d$ $C=5+2.3d$ $C = 5 + 2 . 3 d$ where d is the distance travelled in km and C is the total cost of the trip)
- identifies and justifies equivalent algebraic expressions
- interprets a table of values in order to plot points on a graph

Algebraic relationships

- interprets and uses formulas and algebraic equations that describe relationships in various contexts (e.g. uses $A = \pi r^2$ $\mathrm{A}=\mathrm{\pi r}^2$ $A = \pi r^2$ to calculate the area of a circular space; uses $A = P \left(1 + \frac{r}{n} \right)^{nt}$ $\mathrm{A}=\mathrm{P}\left(1+\frac{\mathrm{r}}{\mathrm{n}}\right)^{\mathrm{nt}}$ $A = P \left(1 + \frac{r}{n} \right)^{nt}$ when working with compound interest; uses $v = u + at$ $v=u+at$ $v = u + a t$ to calculate the velocity of an object)
- plots relationships on a graph using a table of values representing authentic data (e.g. uses data recorded in a spreadsheet to plot results of a science experiment)

Linear and non-linear relationships

- identifies the difference between linear and non-linear relationships in everyday contexts (e.g. explains that in a linear relationship, the rate of change is constant such as the cost of babysitting by the hour, whereas in a non-linear relationship the rate of change will vary and it could grow multiplicatively or exponentially such as a social media post going viral)
- describes and interprets the graphical features of linear and non-linear growth in authentic problems (e.g. compares simple and compound interest graphs; describes the relationship between scientific data plotted on a graph; analyses a graph to identify the inverse relationship between price and quantity demanded or the relationship between Human Development Index (HDI) and standards of living)

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

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- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9S7I04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

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 the experimental results for rolling a dice; records sample measurements taken during a science investigation)
- constructs graphical representations of numerical data and explains the difference between continuous and discrete data (e.g. explains that measurements such as length, mass and temperature are continuous data whereas a count such as the number of people in a queue is discrete)
- explains how data displays can be misleading (e.g. whether a scale should start at zero; not using uniform intervals on the axes)
- 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

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 (e.g. collects information on the heights of buildings or daily temperatures, tabulates the results and represents these graphically; uses a survey to collect primary data or secondary data extracted from census data)
- uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning (e.g. "I can't use a frequency histogram for categorical data because there is no numerical connection between the categories"; converts their data to percentages in order to compare the girls' results to those of the boys, as the total number of boys and girls who participated in the survey was different)
- determines and calculates the most appropriate statistic to describe the spread of data (e.g. when creating an infographic, uses the mean of the data to describe household income and the median of the data for house prices)
- calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution (e.g. describes the mean kilojoule intake and median hours of exercise of a sample population when investigating community health and wellbeing; describes central tendency when analysing road safety statistics)
- compares the usefulness of different representations of the same data (e.g. chooses to use a line graph to illustrate trends, a bar graph to compare the living standards of different economies and a histogram to show income distribution)
- 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

Interpreting graphical representations

- uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
- summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
- explains that continuous variables depicting growth or change often vary over time (e.g. creates

growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)

- interprets graphs depicting motion such as distance–time and velocity–time graphs
- interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
- investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
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- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

AC9S7I05

analyse and information to describe , and and identify anomalies

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Elaborations

- analysing change in predator and prey numbers over time to identify predator-prey cycles
- identifying and in sets such as identifying qualitative between the of a planet and its gravity
- analysing to identify in the proportions of a day spent in sunlight and in darkness and relating these to the seasons
- identifying anomalies in and investigating their effect on observed or
- collaborating with First Nations Australians communities to create a calendar as a of seasonal and

using

Students learn to:

analyse data and information to describe patterns, trends and relationships and identify

(AC9S7I05)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Statistics and probability

- Interpreting and representing data

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Number sense and algebra

- Number patterns and algebraic thinking

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Number sense and algebra

- Proportional thinking

Analysing

- Interpret concepts and problems

Inquiring

- Identify, process and evaluate information

Investigating

- Interpret data

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I05

Continuum extract

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- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

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Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

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- evaluate the information selected to determine bias and reliability

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

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Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9S7I05

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

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 (e.g. collects information on the heights of buildings or daily temperatures, tabulates the results and represents these graphically; uses a survey to collect primary data or secondary data extracted from census data)

- uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning (e.g. "I can't use a frequency histogram for categorical data because there is no numerical connection between the categories"; converts their data to percentages in order to compare the girls' results to those of the boys, as the total number of boys and girls who participated in the survey was different)
- determines and calculates the most appropriate statistic to describe the spread of data (e.g. when creating an infographic, uses the mean of the data to describe household income and the median of the data for house prices)
- calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution (e.g. describes the mean kilojoule intake and median hours of exercise of a sample population when investigating community health and wellbeing; describes central tendency when analysing road safety statistics)
- compares the usefulness of different representations of the same data (e.g. chooses to use a line graph to illustrate trends, a bar graph to compare the living standards of different economies and a histogram to show income distribution)
- 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

Interpreting graphical representations

- uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
- summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
- explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
- interprets graphs depicting motion such as distance–time and velocity–time graphs
- interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
- investigates the association of 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

- considers the context when determining whether to use data from a sample or a population
- determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
- makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
- plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I05

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

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Snapshot – Number patterns and algebraic thinking

Numeracy: Number sense and algebra: Number patterns and algebraic thinking

Content description

AC9S7I05

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Algebraic expressions

- creates and identifies algebraic equations from word problems involving one or more operations (e.g. if a taxi charges \$ 5 call out fee then a flat rate of \$ 2.30 per km travelled, represents this algebraically as $C = 5 + 2.3d$ where d is the distance travelled in km and C is the total cost of the trip)
- identifies and justifies equivalent algebraic expressions
- interprets a table of values in order to plot points on a graph

Algebraic relationships

- interprets and uses formulas and algebraic equations that describe relationships in various contexts (e.g. uses $A = \pi r^2$ to calculate the area of a circular space; uses $A = P \left(1 + \frac{r}{n} \right)^{nt}$ when working with compound interest; uses $v = u + at$ to calculate the velocity of an object)
- plots relationships on a graph using a table of values representing authentic data (e.g. uses data recorded in a spreadsheet to plot results of a science experiment)

Linear and non-linear relationships

- identifies the difference between linear and non-linear relationships in everyday contexts (e.g. explains that in a linear relationship, the rate of change is constant such as the cost of babysitting by the hour, whereas in a non-linear relationship the rate of change will vary and it could grow multiplicatively or exponentially such as a social media post going viral)
- describes and interprets the graphical features of linear and non-linear growth in authentic problems (e.g. compares simple and compound interest graphs; describes the relationship between scientific data plotted on a graph; analyses a graph to identify the inverse relationship between price and quantity demanded or the relationship between Human Development Index (HDI) and standards)

of living)

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I05

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Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

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Snapshot – Proportional thinking

Numeracy: Number sense and algebra: Proportional thinking

Content description

AC9S7I05

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Understanding percentages and relative size

- explains that a percentage is a proportional relationship between a quantity and 100 (e.g. 25 % means 25 for every one hundred)
- demonstrates that 100 % is a complete whole (e.g. explains that in order to get 100 % on a quiz, you must answer every question correctly)
- uses percentage to describe, represent and compare relative size (e.g. selects which beaker is 75 % full, describes an object as 50 % of another object; describes and represents clean air as having 21 % oxygen)
- recognises that complementary percentages add to give 100 % and applies to situations (e.g. if 10 % of the jellybeans in a jar are black then 90 % are not black)

Determines a percentage as a part of a whole

- explains and fluently uses interchangeably the equivalence relationship between a fraction, decimal and percentage (e.g. $\frac{1}{2} = 0.5 = 50\%$; explains that at quarter time, 75 % of the game is left to play; ; interchangeably refers to a response from 50 %, 0.5 or half of the audience when evaluating how an audience responded to an aspect of a performance)
- uses key percentages and their equivalences to determine the percentage of a quantity (e.g. to solve 75 % of 160, knows that 50 % [half] of 160 is 80, and 25 % [quarter] is 40 so 75 % is 120)

- calculates a percentage of an amount (e.g. interprets that a 15 15 1 5 % discount on an \$ 80 \ \$80 \$ 8 0 purchase means 15 15 1 5 % \times \$ 80 \times \text{space} \\$80 \times \$ 8 0 and determines 10 10 1 0 % \times \$ 80 \times \text{space} \\$80 \times \$ 8 0 is \$ 8 \ \$8 \$ 8 , so 5 5 5 % \times \$ 80 \times \text{space} \\$80 \times \$ 8 0 is \$ 4 \ \$4 \$ 4 therefore 15 15 1 5 % \times \$ 80 \times \text{space} \\$80 \times \$ 8 0 is \$ 8 + \$ 4 = \$ 12 \ \$8 + \ \$4 = \ \$12 \$ 8 + \$ 4 = \$ 1 2 ; calculates the amount of sugar/fat in a breakfast cereal to make a recommendation on a healthy choice, such as 12 12 1 2 % of 250 250 2 5 0 grams = 30 30 3 0 grams)
- expresses one quantity as a percentage of another (e.g. determines what percentage 7 7 7 is of 35 35 3 5 ; determines what percentage 10 10 1 0 millilitres is of 200 200 2 0 0 millilitres when calculating appropriate doses of medicine)
- uses the complement of the percentage to calculate the amount after a percentage discount (e.g. to calculate how much to pay after a 20 20 2 0 % discount, calculates 80 80 8 0 % of the original cost)

Identifies ratios as a part-to-part comparison

- represents ratios using diagrams, physical or virtual materials (e.g. in a ratio 1 : 4 1:4 1 : 4 of red to blue counters, for each red counter there are 4 4 4 blue counters; uses physical or virtual materials to represent the ratio of hydrogen atoms to oxygen atoms in water molecules as 2 : 1 2:1 2 : 1 , 2 2 2 hydrogen atoms for every oxygen atom)
- interprets ratios as a comparison between 2 2 2 like quantities (e.g. ratio of students to teachers in a school is 20 : 1 20:1 2 0 : 1 ; ratio of carbohydrates to fat to protein in a food; interprets ratios such as debt equity ratio or savings-income ratio)
- interprets a rate as a comparison between 2 2 2 different types of quantities (e.g. water flow can be measured at a rate of 5 5 5 litres per second; change of concentration of reactants per time; the relationship between beats per minute and the pulse/rhythm of a dance phrase)
- expresses a ratio as equivalent fractions or percentages (e.g. the ratio of rainy days to fine days in Albany is 1 : 2 1:2 1 : 2 and so 1 3 \frac{1}{3} 3 1 ■ of the days are rainy; in a ratio of 1 : 1 1:1 1 : 1 each part represents one 1 2 \frac{1}{2} 2 1 ■ or 50 50 5 0 % of the whole; when interpreting food labels and making healthy eating choices)

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify the relevant and significant aspects of a concept or problem, understanding that approaches may change depending on the subject or learning area
- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
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- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9S7I05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- analyse and visualise data using a range of digital tools to identify patterns and make predictions
- analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
- analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

AC9S7I06

analyse methods, and for , possible sources of error, conflicting and unanswered questions

-
-

Elaborations

- identifying and considering indicators of the quality of the when analysing results to identify unanswered questions
- evaluating the method used in an , identifying made about that should be controlled, suggesting ways it could be improved and giving reasons for the suggested changes
- analysing and to identify facts or premises that are taken for granted to be true, and considering their relevance to
- considering the spread of repeated measurements and
- identifying possible sources of error in the method used and describing how the method could be improved to remove these sources of error
- identifying the being cited to support a and evaluating conflicting

Students learn to:

analyse methods, conclusions and claims for assumptions, possible sources of error, evidence and unanswered questions

(AC9S7I06)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Interpret concepts and problems
- Draw conclusions and provide reasons

Speaking and listening

- Interacting

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Generating

- Put ideas into action

Analysing

- Draw conclusions and provide reasons
- Evaluate actions and outcomes

Reading and viewing

- Understanding texts

Analysing

- Draw conclusions and provide reasons
- Evaluate actions and outcomes

Speaking and listening

- Interacting

Analysing

- Evaluate actions and outcomes

Analysing

- Evaluate actions and outcomes

Analysing

- Evaluate actions and outcomes

Resources

Work Samples

WS01 - Water purification

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9S7I06

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- identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
- identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- draw conclusions and make choices when completing tasks, using discipline knowledge to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Interacting

Literacy: Speaking and listening: Interacting

Content description

AC9S7I06

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

- critically evaluate ideas and claims made by a speaker
- explains new learning from interacting with others
- appropriately presents an alternative point to the previous speaker
- initiates interactions confidently in group and whole-class discussions
- poses pertinent questions to make connections between a range of ideas
- uses open questions to prompt a speaker to provide more information
- clarifies task goals and negotiates roles in group learning
- monitors discussion to manage digression from the topic
- identifies and articulates the perspective of a speaker, to move a conversation forward
- interacts within school context or the broader community, adjusting language and responses to suit purpose and audience
- synthesises ideas from group discussion into a common theme or hypothesis
- poses problems, hypothesises and formulates questions about abstract ideas in group situations
- restates different views and makes suggestions to negotiate agreement
- poses questions to clarify assumptions made by the speaker

- questions others to evaluate accuracy of thinking or problem-solving processes
- uses language to align the listener with personal position (e.g. "of course", "as you can imagine", "obviously")
- interacts strategically and confidently with a broad range of interactional partners
- gives an extended explanation and evaluation of a complex concept, issue or process
- justifies a personal stance, after analysis of arguments on a particular issue, using evidence and elaboration in a group situation
- uses language strategically to subtly align others to own perspective as appropriate to audience and purpose

Snapshot – Put ideas into action

Critical and Creative Thinking: Generating: Put ideas into action

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- put ideas into action by predicting potential or future outcomes and systematically testing a range of options
- put ideas into action by making predictions, testing and evaluating options, and reconsidering approaches in complex or unfamiliar situations
- put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- draw conclusions and make choices when completing tasks, using discipline knowledge to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Understanding texts

Literacy: Reading and viewing: Understanding texts

Content description

AC9S7I06

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Comprehension

- reads and views some moderately complex texts (see Text complexity)
- accurately retells a text including most relevant details
- identifies main idea and related or supporting ideas in moderately complex texts (see Text complexity)
- evaluates the accuracy within and across texts on the same topic
- explains how authors use evidence and supporting detail to build and verify ideas
- draws inferences and verifies using textual evidence

Processes

- monitors reading for meaning using grammatical and contextual knowledge (see Fluency)
- explains how textual features support the text's purpose
- identifies and explains techniques used to present perspective (e.g. emotive or descriptive language, order in which ideas are presented)
- predicts the development of ideas based on a partial read (e.g. predicts the final chapter of a narrative, drawing on understanding of the textual features in the previous chapters)
- uses prior knowledge and context to read unknown words (e.g. uses morphemic knowledge of "explosion" to decode "explosive" and uses context and knowledge of metaphorical use of language to understand "explosive outburst")
- uses knowledge of cohesive devices to track meaning throughout a text (e.g. connectives such as "however", "on the other hand") (see Grammar)
- uses knowledge of the features and conventions of the type of text to build meaning (e.g. recognises that the beginning of a persuasive text may introduce the topic and the line of argument)
- identifies language features used to present opinions or points of view
- skims and scans texts for key words to track the development of ideas
- uses sophisticated punctuation to support meaning (e.g. commas to separate clauses in complex sentences)

Vocabulary

- uses knowledge of prefixes and suffixes to read and interpret unfamiliar words
- identifies how technical and discipline-specific words develop meaning in texts
- analyses the effect of antonyms, synonyms and idiomatic language
- understands precise meaning of words with similar connotations (e.g. "generous", "kind-hearted", "charitable")

Comprehension

- reads and views complex texts (see Text complexity)
- identifies the main themes or concepts in complex texts by synthesising key ideas or information
- summarises the text, identifying key details only
- draws inferences, synthesising clues and evidence across a text
- builds meaning by actively linking ideas from a number of texts or a range of digital sources
- distils information from a number of texts according to task and purpose (e.g. uses graphic organisers)
- identifies different interpretations of the text citing evidence from a text
- evaluates language features for relevance to purpose and audience
- analyses texts that have more than one purpose and explains how parts of the text support a particular purpose
- analyses the use of language appropriate to different types of texts (e.g. compare the use of pun in imaginative and persuasive texts)
- identifies techniques used to obscure author's purpose (e.g. inclusion or omission of content)

Processes

- uses processes such as predicting, confirming predictions, monitoring, and connecting relevant elements of the text to build or repair meaning
- uses knowledge of a broader range of cohesive devices to track meaning (e.g. word associations) (see Grammar)
- selects reading or viewing strategies appropriate to reading purpose (e.g. scans text for evidence)
- judiciously selects texts for learning area tasks and purposes

Vocabulary

- identifies language used to create tone or atmosphere
- analyses language and visual features in texts using metalanguage (e.g. cohesion, interpretation, figurative)
- applies knowledge of base words and word origins to understand the meaning of unfamiliar, discipline-specific words
- uses a range of context and grammatical cues to understand unfamiliar words
- interprets complex figurative language (e.g. euphemisms, hyperbole)

Comprehension

- reads and views complex or some highly complex texts (see Text complexity)
- interprets abstract concepts integrating complex ideas
- analyses how language features are used to support the point of view in a text (e.g. the strategic use of images such as a cartoon in an editorial)
- draws inferences using evidence from the text and discounting possible inferences that are not supported by the text
- applies and articulates criteria to evaluate the language structures and features for relevance to purpose and audience
- evaluates the reasoning and evidence in a persuasive text
- explains how context (e.g. time, place, situation) influences interpretations of a text
- analyses the author's perspectives in complex or some highly complex texts
- analyses the techniques authors use to position readers
- recognises when ideas or evidence have been omitted from a text to position the reader

Processes

- automatically integrates a range of processes such as predicting, confirming predictions, monitoring and connecting relevant elements of the text, to build meaning
- describes how sophisticated cohesive devices establish patterns of meaning (e.g. "class" – "subclass")
- navigates extended texts including complex digital texts

Vocabulary

- demonstrates an understanding of nuances and subtleties in words of similar meaning (e.g. "frustrated", "discouraged", "baffled")
- verifies interpretations of unfamiliar words using grammatical and contextual cues

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- draw conclusions and make choices when completing tasks, using discipline knowledge to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and

decisions

Snapshot – Interacting

Literacy: Speaking and listening: Interacting

Content description

AC9S7I06

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

- critically evaluate ideas and claims made by a speaker
- explains new learning from interacting with others
- appropriately presents an alternative point to the previous speaker
- initiates interactions confidently in group and whole-class discussions
- poses pertinent questions to make connections between a range of ideas
- uses open questions to prompt a speaker to provide more information
- clarifies task goals and negotiates roles in group learning
- monitors discussion to manage digression from the topic
- identifies and articulates the perspective of a speaker, to move a conversation forward
- interacts within school context or the broader community, adjusting language and responses to suit purpose and audience
- synthesises ideas from group discussion into a common theme or hypothesis
- poses problems, hypothesises and formulates questions about abstract ideas in group situations
- restates different views and makes suggestions to negotiate agreement
- poses questions to clarify assumptions made by the speaker
- questions others to evaluate accuracy of thinking or problem-solving processes
- uses language to align the listener with personal position (e.g. "of course", "as you can imagine", "obviously")
- interacts strategically and confidently with a broad range of interactional partners
- gives an extended explanation and evaluation of a complex concept, issue or process
- justifies a personal stance, after analysis of arguments on a particular issue, using evidence and elaboration in a group situation
- uses language strategically to subtly align others to own perspective as appropriate to audience and purpose

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected

and unexpected results, including using a given or co-developed set of criteria to support decisions

- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

AC9S7I07

construct evidence-based to support or evaluate and consider any ethical issues and cultural protocols associated with using or citing secondary or information

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Elaborations

- constructing an supported by and reasoning to support or reject a
- drawing a logical in consideration of the method of collection, quality of and limitations or significance of a
- exploring how to determine of a source
- investigating the cultural, historical and archaeological used in the scientific debate about the role of early First Nations Australians in the extinction of Australian megafauna
- researching the development of commercial products that are founded on the traditional knowledges and practices of First Nations Australians and discussing related ethical considerations associated with biopiracy and intellectual property rights

Students learn to:

construct evidence-based arguments to support conclusions or evaluate claims and ethical issues and cultural protocols associated with using or citing secondary data

(AC9S7I07)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

- Draw conclusions and provide reasons
- Evaluate actions and outcomes

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms
- Recognise influences on ethical behaviour and perspectives

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms
- Recognise influences on ethical behaviour and perspectives

Reading and viewing

- Understanding texts

Analysing

- Draw conclusions and provide reasons
- Evaluate actions and outcomes

Understanding ethical concepts and perspectives

- Examine values, rights and responsibilities and ethical norms
- Recognise influences on ethical behaviour and perspectives

Inquiring

- Identify, process and evaluate information

Responding to ethical issues

- Explore ethical issues

Culture

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing.

Responding to ethical issues

- Explore ethical issues

Understanding ethical concepts and perspectives

- Recognise influences on ethical behaviour and perspectives

People

- The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally.

Resources

Work Samples

WS01 - Water purification

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- draw conclusions and make choices when completing tasks, using discipline knowledge to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine responsibilities and ethical norms

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Recognise influences on ethical behaviour and perspectives

Ethical Understanding: Understanding ethical concepts and perspectives: Recognise ethical behaviour and perspectives

Content description

AC9S7107

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain how habits and behaviour shape character and examine how they inform ethical perspectives
- explain how different traits, such as honesty, trust, courage and selfishness interact with responsibilities or duties to determine ethically appropriate responses
- explore and analyse examples of the tensions between conflicting positions on issues of personal, social and global importance

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine responsibilities and ethical norms

Content description

AC9S7107

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Recognise influences on ethical behaviour and perspectives

Ethical Understanding: Understanding ethical concepts and perspectives: Recognise ethical behaviour and perspectives

Content description

AC9S7107

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain how habits and behaviour shape character and examine how they inform ethical perspectives
- explain how different traits, such as honesty, trust, courage and selfishness interact with responsibilities or duties to determine ethically appropriate responses
- explore and analyse examples of the tensions between conflicting positions on issues of personal, social and global importance

Snapshot – Understanding texts

Literacy: Reading and viewing: Understanding texts

Content description

AC9S7107

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Comprehension

- reads and views some moderately complex texts (see Text complexity)
- accurately retells a text including most relevant details
- identifies main idea and related or supporting ideas in moderately complex texts (see Text complexity)
- evaluates the accuracy within and across texts on the same topic
- explains how authors use evidence and supporting detail to build and verify ideas
- draws inferences and verifies using textual evidence

Processes

- monitors reading for meaning using grammatical and contextual knowledge (see Fluency)
- explains how textual features support the text's purpose
- identifies and explains techniques used to present perspective (e.g. emotive or descriptive language, order in which ideas are presented)
- predicts the development of ideas based on a partial read (e.g. predicts the final chapter of a narrative, drawing on understanding of the textual features in the previous chapters)
- uses prior knowledge and context to read unknown words (e.g. uses morphemic knowledge of "explosion" to decode "explosive" and uses context and knowledge of metaphorical use of language to understand "explosive outburst")
- uses knowledge of cohesive devices to track meaning throughout a text (e.g. connectives such as "however", "on the other hand") (see Grammar)
- uses knowledge of the features and conventions of the type of text to build meaning (e.g. recognises that the beginning of a persuasive text may introduce the topic and the line of argument)
- identifies language features used to present opinions or points of view
- skims and scans texts for key words to track the development of ideas
- uses sophisticated punctuation to support meaning (e.g. commas to separate clauses in complex sentences)

Vocabulary

- uses knowledge of prefixes and suffixes to read and interpret unfamiliar words
- identifies how technical and discipline-specific words develop meaning in texts
- analyses the effect of antonyms, synonyms and idiomatic language
- understands precise meaning of words with similar connotations (e.g. "generous", "kind-hearted", "charitable")

Comprehension

- reads and views complex texts (see Text complexity)
- identifies the main themes or concepts in complex texts by synthesising key ideas or information
- summarises the text, identifying key details only
- draws inferences, synthesising clues and evidence across a text
- builds meaning by actively linking ideas from a number of texts or a range of digital sources
- distils information from a number of texts according to task and purpose (e.g. uses graphic organisers)
- identifies different interpretations of the text citing evidence from a text
- evaluates language features for relevance to purpose and audience
- analyses texts that have more than one purpose and explains how parts of the text support a particular purpose
- analyses the use of language appropriate to different types of texts (e.g. compare the use of pun in imaginative and persuasive texts)
- identifies techniques used to obscure author's purpose (e.g. inclusion or omission of content)

Processes

- uses processes such as predicting, confirming predictions, monitoring, and connecting relevant elements of the text to build or repair meaning
- uses knowledge of a broader range of cohesive devices to track meaning (e.g. word associations) (see Grammar)
- selects reading or viewing strategies appropriate to reading purpose (e.g. scans text for evidence)
- judiciously selects texts for learning area tasks and purposes

Vocabulary

- identifies language used to create tone or atmosphere

- analyses language and visual features in texts using metalanguage (e.g. cohesion, interpretation, figurative)
- applies knowledge of base words and word origins to understand the meaning of unfamiliar, discipline-specific words
- uses a range of context and grammatical cues to understand unfamiliar words
- interprets complex figurative language (e.g. euphemisms, hyperbole)

Comprehension

- reads and views complex or some highly complex texts (see Text complexity)
- interprets abstract concepts integrating complex ideas
- analyses how language features are used to support the point of view in a text (e.g. the strategic use of images such as a cartoon in an editorial)
- draws inferences using evidence from the text and discounting possible inferences that are not supported by the text
- applies and articulates criteria to evaluate the language structures and features for relevance to purpose and audience
- evaluates the reasoning and evidence in a persuasive text
- explains how context (e.g. time, place, situation) influences interpretations of a text
- analyses the author's perspectives in complex or some highly complex texts
- analyses the techniques authors use to position readers
- recognises when ideas or evidence have been omitted from a text to position the reader

Processes

- automatically integrates a range of processes such as predicting, confirming predictions, monitoring and connecting relevant elements of the text, to build meaning
- describes how sophisticated cohesive devices establish patterns of meaning (e.g. "class" – "subclass")
- navigates extended texts including complex digital texts

Vocabulary

- demonstrates an understanding of nuances and subtleties in words of similar meaning (e.g. "frustrated", "discouraged", "baffled")
- verifies interpretations of unfamiliar words using grammatical and contextual cues

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- draw conclusions and make choices when completing tasks, using discipline knowledge to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
- draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- evaluate the effectiveness of a course of action or the outcome of a task, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
- evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Examine values, rights and responsibilities and ethical norms

Ethical Understanding: Understanding ethical concepts and perspectives: Examine values, rights and responsibilities and ethical norms

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how the relationships between values, rights and responsibilities, and ethical norms influence responses and decisions related to ethical issues
- describe the relationship between the role of individual and community values, rights and responsibilities, and ethical norms when responding to ethical issues
- describe the importance of values, rights and responsibilities when reaching a position on an ethical issue, and evaluate their role in challenging and defending ethical norms

Snapshot – Recognise influences on ethical behaviour and perspectives

Ethical Understanding: Understanding ethical concepts and perspectives: Recognise influences on ethical behaviour and perspectives

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain how habits and behaviour shape character and examine how they inform ethical perspectives
- explain how different traits, such as honesty, trust, courage and selfishness interact with responsibilities or duties to determine ethically appropriate responses
- explore and analyse examples of the tensions between conflicting positions on issues of personal, social and global importance

Snapshot – Identify, process and evaluate information

Critical and Creative Thinking: Inquiring: Identify, process and evaluate information

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- identify and examine relevant information and opinion from a range of sources, including visual information and digital sources
- compare information and opinion that can be verified against claims based on personal preference
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the accuracy, validity and relevance of the information and opinion to the topic of study
- identify and clarify significant information and opinion from a range of sources, including visual information and digital sources
- evaluate the information selected to determine bias and reliability

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- describe how ethical perspectives or approaches to ethical issues may vary in different situations
- analyse the relationships between values, ethical perspectives and ethical frameworks when responding to ethical issues
- apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Recognise influences on ethical behaviour and perspectives

Ethical Understanding: Understanding ethical concepts and perspectives: Recognise ethical behaviour and perspectives

Content description

AC9S7I07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- explain how habits and behaviour shape character and examine how they inform ethical perspectives
- explain how different traits, such as honesty, trust, courage and selfishness interact with responsibilities or duties to determine ethically appropriate responses
- explore and analyse examples of the tensions between conflicting positions on issues of personal, social and global importance

AC9S7I08

write and create texts to communicate ideas, findings and for specific purposes and audiences, including selection of appropriate language and text features, using as appropriate

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-

Elaborations

- examining a range of scientific texts, inferring the purpose of the text and target audience, and identifying specific language and text features that support that
- reporting on a scientific , incorporating diagrams, graphical and as appropriate, and including examination of the and reproducibility of the
- developing a prototype for a dichotomous key app to enable community members to classify plants or animals in a local park or reserve
- writing a letter to the editor to express a view about an environmental issue affecting local ecosystems
- creating an informative text for a younger audience to show how the tilt of Earth's axis, rotation of Earth on that axis, and the revolution of Earth around the sun cause the seasons
- creating an animation that explains to a peer audience

Students learn to:

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital technologies as appropriate

(AC9S7I08)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Creating and exchanging

- Create, communicate and collaborate
- Respect intellectual property

Writing

- Creating texts

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Reading and viewing

- Understanding texts

Social management

- Communication

Social management

- Communication

Writing

- Creating texts

Social management

- Communication

Social management

- Communication

Futures

- Sustainable futures require individuals to seek information, identify solutions, reflect on and evaluate past actions, and collaborate with and influence others as they work towards a desired change.

Social management

- Communication

Writing

- Creating texts

Writing

- Creating texts

Resources

Work Samples

WS01 - Water purification

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- select and control a variety of features in appropriate digital tools to create content and communicate and collaborate with trusted groups
- select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
- select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Respect intellectual property

Digital Literacy: Creating and exchanging: Respect intellectual property

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- respect intellectual property by identifying the legal obligations regarding the ownership and appropriate use of products, exploring copyright protocols and applying some referencing conventions
- respect intellectual property by applying practices that comply with ethical and legal obligations, referencing conventions and copyright protocols
- respect intellectual property by identifying and applying practices that meet legal and ethical obligations, referencing conventions, copyright and trademark protocols

Snapshot – Creating texts

Literacy: Writing: Creating texts

Content description

AC9S7I08

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Generic indicators

- uses tense with variable accuracy throughout the text (see Grammar)
- consistently writes sentences correctly and uses a greater range of complex sentences (see Grammar)
- uses a variety of sentence structures and sentence beginnings
- spells some complex words with complex letter patterns correctly (e.g. correctly adds prefixes and suffixes to base words) (see Spelling)
- uses all sentence punctuation, simple punctuation and some complex punctuation correctly (e.g. uses commas to separate clauses) (see Punctuation)
- uses articles accurately (e.g. "a", "an", "the") (see Grammar)
- uses adverbial phrases to support the staging of the text (e.g. "before lunch", "after midnight")

Generic indicators

- maintains appropriate tense throughout the text (see Grammar)
- uses a range of sentences including correctly structured complex sentences (see Grammar)
- spells simple, most complex and some challenging words correctly (see Spelling)
- uses all simple and complex punctuation correctly (e.g. semi colons) apostrophes of possession) (see Punctuation)
- writes cohesive paragraphs that develop one main idea

Generic indicators

- organises related information and ideas into paragraphs/sections
- uses a range of complex punctuation flexibly and correctly to pace and control the reading of a text (see Punctuation)
- spells complex and most challenging words correctly (see Spelling)
- uses a range of sentence types for effect

Snapshot – Understanding texts

Literacy: Reading and viewing: Understanding texts

Content description

AC9S7I08

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Comprehension

- reads and views some moderately complex texts (see Text complexity)
- accurately retells a text including most relevant details
- identifies main idea and related or supporting ideas in moderately complex texts (see Text complexity)
- evaluates the accuracy within and across texts on the same topic
- explains how authors use evidence and supporting detail to build and verify ideas
- draws inferences and verifies using textual evidence

Processes

- monitors reading for meaning using grammatical and contextual knowledge (see Fluency)
- explains how textual features support the text's purpose
- identifies and explains techniques used to present perspective (e.g. emotive or descriptive language, order in which ideas are presented)
- predicts the development of ideas based on a partial read (e.g. predicts the final chapter of a narrative, drawing on understanding of the textual features in the previous chapters)
- uses prior knowledge and context to read unknown words (e.g. uses morphemic knowledge of "explosion" to decode "explosive" and uses context and knowledge of metaphorical use of language to understand "explosive outburst")

- uses knowledge of cohesive devices to track meaning throughout a text (e.g. connectives such as "however", "on the other hand") (see Grammar)
- uses knowledge of the features and conventions of the type of text to build meaning (e.g. recognises that the beginning of a persuasive text may introduce the topic and the line of argument)
- identifies language features used to present opinions or points of view
- skims and scans texts for key words to track the development of ideas
- uses sophisticated punctuation to support meaning (e.g. commas to separate clauses in complex sentences)

Vocabulary

- uses knowledge of prefixes and suffixes to read and interpret unfamiliar words
- identifies how technical and discipline-specific words develop meaning in texts
- analyses the effect of antonyms, synonyms and idiomatic language
- understands precise meaning of words with similar connotations (e.g. "generous", "kind-hearted", "charitable")

Comprehension

- reads and views complex texts (see Text complexity)
- identifies the main themes or concepts in complex texts by synthesising key ideas or information
- summarises the text, identifying key details only
- draws inferences, synthesising clues and evidence across a text
- builds meaning by actively linking ideas from a number of texts or a range of digital sources
- distils information from a number of texts according to task and purpose (e.g. uses graphic organisers)
- identifies different interpretations of the text citing evidence from a text
- evaluates language features for relevance to purpose and audience
- analyses texts that have more than one purpose and explains how parts of the text support a particular purpose
- analyses the use of language appropriate to different types of texts (e.g. compare the use of pun in imaginative and persuasive texts)
- identifies techniques used to obscure author's purpose (e.g. inclusion or omission of content)

Processes

- uses processes such as predicting, confirming predictions, monitoring, and connecting relevant elements of the text to build or repair meaning
- uses knowledge of a broader range of cohesive devices to track meaning (e.g. word associations) (see Grammar)
- selects reading or viewing strategies appropriate to reading purpose (e.g. scans text for evidence)
- judiciously selects texts for learning area tasks and purposes

Vocabulary

- identifies language used to create tone or atmosphere
- analyses language and visual features in texts using metalanguage (e.g. cohesion, interpretation, figurative)
- applies knowledge of base words and word origins to understand the meaning of unfamiliar, discipline-specific words
- uses a range of context and grammatical cues to understand unfamiliar words
- interprets complex figurative language (e.g. euphemisms, hyperbole)

Comprehension

- reads and views complex or some highly complex texts (see Text complexity)
- interprets abstract concepts integrating complex ideas
- analyses how language features are used to support the point of view in a text (e.g. the strategic use of images such as a cartoon in an editorial)
- draws inferences using evidence from the text and discounting possible inferences that are not supported by the text
- applies and articulates criteria to evaluate the language structures and features for relevance to purpose and audience
- evaluates the reasoning and evidence in a persuasive text
- explains how context (e.g. time, place, situation) influences interpretations of a text

- analyses the author's perspectives in complex or some highly complex texts
- analyses the techniques authors use to position readers
- recognises when ideas or evidence have been omitted from a text to position the reader

Processes

- automatically integrates a range of processes such as predicting, confirming predictions, monitoring and connecting relevant elements of the text, to build meaning
- describes how sophisticated cohesive devices establish patterns of meaning (e.g. "class" – "subclass")
- navigates extended texts including complex digital texts

Vocabulary

- demonstrates an understanding of nuances and subtleties in words of similar meaning (e.g. "frustrated", "discouraged", "baffled")
- verifies interpretations of unfamiliar words using grammatical and contextual cues

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Creating texts

Literacy: Writing: Creating texts

Content description

AC9S7I08

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Crafting ideas

- creates informative, imaginative and persuasive texts for a range of learning area purposes, such as to recount a sequence of events; to describe a person, thing or process; to explain a process; to argue with evidence or reasons; to express emotions
- includes learnt ideas on a range of topics from learning areas
- stages text using typical or familiar features such as an introduction and body paragraphs
- supports ideas with some detail and elaboration (e.g. expands on a topic sentence by adding more details in following sentences)
- uses sources to support ideas (e.g. introduces ideas from a shared text to add detail and engage the reader)

Text forms and features

- writes a range of compound and complex sentences (see Grammar)
- uses pronouns correctly to link to an object or person across the text (see Grammar)
- uses images to reinforce ideas in written text

- maintains consistent tense within and between sentences (see Grammar)
- groups sentences on related ideas into simple paragraphs
- uses cohesive vocabulary to indicate order, cause and effect (e.g. uses text connectives such as "next", "since")
- correctly spells some words with irregular spelling patterns (e.g. "cough") (see Spelling)
- applies learnt spelling generalisations
- accurately spells high-frequency words (see Spelling)
- consistently uses correct simple punctuation (e.g. uses commas in a list) (see Punctuation)

Vocabulary

- uses expressive words to describe action and affect the reader (e.g. "tiptoed" instead of "walked")
- uses vocabulary creatively to affect the reader (e.g. repetition, alliteration)
- uses synonyms to replace common and generic words and avoid repetition across a text (e.g. "thrilled" for "excited")
- uses a range of learning area topic words (e.g. "environment", "equipment")

Crafting ideas

- creates informative texts for a broader range of learning area purposes (e.g. explains a life cycle of a butterfly, recounts a process, describes an artwork)
- includes structural features appropriate to the type of text and task such as opening statements to define the topic and at least 2 body paragraphs
- includes ideas which are relevant to the topic and purpose of the text
- organises information into paragraphs to support the reader
- includes a relevant graphic to support the reader (e.g. diagram or photo)

Text forms and features

- uses cohesive devices to signpost sections of text (e.g. uses text connectives such as "finally", "as a result", "in addition")
- uses present or timeless present tense consistently throughout text (e.g. "bears hibernate in winter") (see Grammar)
- selects visual and audio features to expand ideas in written texts (e.g. diagrams, tables, images)
- uses adjectives to create more accurate description (e.g. "the warm-blooded mammal") (see Grammar)

Vocabulary

- uses a range of technical and subject specific words to add detail and authority to information (e.g. "hibernate" instead of "sleep")

Crafting ideas

- creates informative texts that describe, explain and document (e.g. describe an artwork, document the materials and explain why it was created)
- selects structural elements to comprehensively and accurately represent the information (e.g. a fact sheet includes an opening statement, labelled diagrams and text boxes)
- orients the reader to the topic or concept using a definition or classification
- develops ideas with details and examples
- uses ideas derived from research
- uses written and visual supporting evidence

Text forms and features

- uses cohesive devices to link concepts across texts (e.g. uses lexical cohesion such as word associations and synonyms)
- uses cohesive devices to express cause and effect (e.g. uses text connectives such as "therefore", "subsequently")
- includes salient visual and audio features to expand on written information (e.g. creates graphs and other technical diagrams from authentic data)
- uses language to compare (e.g. "alternatively", "whereas")
- uses formatting appropriately to reference and label graphics

Vocabulary

- uses a range of learnt, technical and discipline-specific terms (e.g. "adapt", "survive")
- uses more sophisticated words to express cause and effect (e.g. "therefore", "subsequently")

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

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Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9S7I08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- apply skills to address factors that influence verbal and non-verbal communication
- demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication
- devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Creating texts

Literacy: Writing: Creating texts

Content description

AC9S7I08

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Crafting ideas

- creates informative, imaginative and persuasive texts for a range of learning area purposes, such as to recount a sequence of events; to describe a person, thing or process; to explain a process; to argue with evidence or reasons; to express emotions
- includes learnt ideas on a range of topics from learning areas
- stages text using typical or familiar features such as an introduction and body paragraphs
- supports ideas with some detail and elaboration (e.g. expands on a topic sentence by adding more details in following sentences)
- uses sources to support ideas (e.g. introduces ideas from a shared text to add detail and engage the reader)

Text forms and features

- writes a range of compound and complex sentences (see Grammar)
- uses pronouns correctly to link to an object or person across the text (see Grammar)
- uses images to reinforce ideas in written text
- maintains consistent tense within and between sentences (see Grammar)
- groups sentences on related ideas into simple paragraphs
- uses cohesive vocabulary to indicate order, cause and effect (e.g. uses text connectives such as "next", "since")

- correctly spells some words with irregular spelling patterns (e.g. "cough") (see Spelling)
- applies learnt spelling generalisations
- accurately spells high-frequency words (see Spelling)
- consistently uses correct simple punctuation (e.g. uses commas in a list) (see Punctuation)

Vocabulary

- uses expressive words to describe action and affect the reader (e.g. "tiptoed" instead of "walked")
- uses vocabulary creatively to affect the reader (e.g. repetition, alliteration)
- uses synonyms to replace common and generic words and avoid repetition across a text (e.g. "thrilled" for "excited")
- uses a range of learning area topic words (e.g. "environment", "equipment")

Crafting ideas

- creates informative texts for a broader range of learning area purposes (e.g. explains a life cycle of a butterfly, recounts a process, describes an artwork)
- includes structural features appropriate to the type of text and task such as opening statements to define the topic and at least 2 body paragraphs
- includes ideas which are relevant to the topic and purpose of the text
- organises information into paragraphs to support the reader
- includes a relevant graphic to support the reader (e.g. diagram or photo)

Text forms and features

- uses cohesive devices to signpost sections of text (e.g. uses text connectives such as "finally", "as a result", "in addition")
- uses present or timeless present tense consistently throughout text (e.g. "bears hibernate in winter") (see Grammar)
- selects visual and audio features to expand ideas in written texts (e.g. diagrams, tables, images)
- uses adjectives to create more accurate description (e.g. "the warm-blooded mammal") (see Grammar)

Vocabulary

- uses a range of technical and subject specific words to add detail and authority to information (e.g. "hibernate" instead of "sleep")

Crafting ideas

- creates informative texts that describe, explain and document (e.g. describe an artwork, document the materials and explain why it was created)
- selects structural elements to comprehensively and accurately represent the information (e.g. a fact sheet includes an opening statement, labelled diagrams and text boxes)
- orients the reader to the topic or concept using a definition or classification
- develops ideas with details and examples
- uses ideas derived from research
- uses written and visual supporting evidence

Text forms and features

- uses cohesive devices to link concepts across texts (e.g. uses lexical cohesion such as word associations and synonyms)
- uses cohesive devices to express cause and effect (e.g. uses text connectives such as "therefore", "subsequently")
- includes salient visual and audio features to expand on written information (e.g. creates graphs and other technical diagrams from authentic data)
- uses language to compare (e.g. "alternatively", "whereas")
- uses formatting appropriately to reference and label graphics

Vocabulary

- uses a range of learnt, technical and discipline-specific terms (e.g. "adapt", "survive")
- uses more sophisticated words to express cause and effect (e.g. "therefore", "subsequently")

Snapshot – Creating texts

Literacy: Writing: Creating texts

Content description

AC9S7108

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Crafting ideas

- creates informative texts for a broader range of learning area purposes (e.g. explains a life cycle of a butterfly, recounts a process, describes an artwork)
- includes structural features appropriate to the type of text and task such as opening statements to define the topic and at least 2 body paragraphs
- includes ideas which are relevant to the topic and purpose of the text
- organises information into paragraphs to support the reader
- includes a relevant graphic to support the reader (e.g. diagram or photo)

Text forms and features

- uses cohesive devices to signpost sections of text (e.g. uses text connectives such as "finally", "as a result", "in addition")
- uses present or timeless present tense consistently throughout text (e.g. "bears hibernate in winter") (see Grammar)
- selects visual and audio features to expand ideas in written texts (e.g. diagrams, tables, images)
- uses adjectives to create more accurate description (e.g. "the warm-blooded mammal") (see Grammar)

Vocabulary

- uses a range of technical and subject specific words to add detail and authority to information (e.g. "hibernate" instead of "sleep")

Crafting ideas

- creates informative texts that describe, explain and document (e.g. describe an artwork, document the materials and explain why it was created)
- selects structural elements to comprehensively and accurately represent the information (e.g. a fact sheet includes an opening statement, labelled diagrams and text boxes)
- orients the reader to the topic or concept using a definition or classification
- develops ideas with details and examples
- uses ideas derived from research
- uses written and visual supporting evidence

Text forms and features

- uses cohesive devices to link concepts across texts (e.g. uses lexical cohesion such as word associations and synonyms)
- uses cohesive devices to express cause and effect (e.g. uses text connectives such as "therefore", "subsequently")
- includes salient visual and audio features to expand on written information (e.g. creates graphs and other technical diagrams from authentic data)
- uses language to compare (e.g. "alternatively", "whereas")
- uses formatting appropriately to reference and label graphics

Vocabulary

- uses a range of learnt, technical and discipline-specific terms (e.g. "adapt", "survive")
- uses more sophisticated words to express cause and effect (e.g. "therefore", "subsequently")

Crafting ideas

- creates informative texts to explain and analyse (e.g. analyses how artists use visual conventions in artworks)
- creates texts to compare and contrast phenomena (e.g. identify the similarities and differences between species of animals)
- orients the reader clearly to the topic or concept (e.g. using a definition or classification in the opening paragraph)
- intentionally selects structural elements for effect (e.g. includes an effective conclusion that synthesises complex ideas)
- uses evidence and research including digital resources to expand upon information and elaborate concepts

Text forms and features

- varies sentence structure for effect (see Grammar)
- judiciously uses language, visual and audio features to emotionally or intellectually affect the reader

- uses more elaborate noun groups/phrases that include classifying adjectives and specific nouns (e.g. "mineral component of sedimentary rocks")
- creates cohesive flow by condensing previous information into a summarising noun (e.g. "A series of tumultuous events culminated in the outbreak of WWI - modern history's turning point.")
- uses passive voice and nominalisation to write succinctly (e.g. "the results were analysed") (see Grammar)

Vocabulary

- uses discipline-specific terminology to provide accurate and explicit information (e.g. "discipline metalanguage")
- uses a range of synonyms for frequently occurring words, in a longer text (e.g. "repair", "fix", "remedy")
- uses vocabulary to indicate and describe relationships (e.g. "additionally", "similarly")