

Sanur Independent School

G4 Curriculum

Based on Australian Curriculum, Assessment and Reporting Authority (ACARA) materials.

Grade 4 Curriculum

English

Grade 4

The English curriculum is built around the three interrelated strands of Language, Literature and Literacy. Teaching and learning programs should balance and integrate all three strands. Together the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. Learning in English builds on concepts, skills and processes developed in earlier years, and teachers will revisit and strengthen these as needed.

In Grades 3 and 4, students experience learning in familiar contexts and a range of contexts that relate to study in other areas of the curriculum. They interact with peers and teachers from other classes and schools in a range of face-to-face and online/virtual environments.

Students engage with a variety of texts for enjoyment. They listen to, read, view and interpret spoken, written and multimodal texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These encompass traditional oral texts including Aboriginal stories, picture books, various types of print and digital texts, simple chapter books, rhyming verse, poetry, non-fiction, film, multimodal texts, dramatic performances, and texts used by students as models for constructing their own work.

Literary texts that support and extend students in Grades 3 and 4 as independent readers describe complex sequences of events that extend over several pages and involve unusual happenings within a framework of familiar experiences. Informative texts present new content about topics of interest and topics being studied in other areas of the curriculum. These texts use complex language features, including varied sentence structures, some unfamiliar vocabulary, a significant number of high-frequency sight words and words that need to be decoded phonically, and a variety of punctuation conventions, as well as illustrations and diagrams that both support and extend the printed text.

Students create a range of imaginative, informative and persuasive types of texts including narratives, procedures, performances, reports, reviews, poetry and expositions.

Grade 4 Achievement Standard

Receptive modes (listening, reading and viewing)

By the end of Grade 4, students understand that texts have different text structures depending on purpose and audience. They explain how language features, images and vocabulary are used to engage the interest of audiences.

They describe literal and implied meaning connecting ideas in different texts. They express preferences for particular texts, and respond to others' viewpoints. They listen for key points in discussions.

Productive modes (speaking, writing and creating)

Students use language features to create coherence and add detail to their texts. They understand how to express an opinion based on information in a text. They create texts that show understanding of how images and detail can be used to extend key ideas.

Students create structured texts to explain ideas for different audiences. They make presentations and contribute actively to class and group discussions, varying language according to context. They demonstrate understanding of grammar, select vocabulary from a range of resources and use accurate spelling and punctuation, editing their work to improve meaning.

Grade 4 Content Descriptions

Language	Literature	Literacy
<p>Language variation and change</p> <p>Understand that Standard Australian English is one of many social dialects used in Australia, and that while it originated in England it has been influenced by many other languages(ACELA1487)</p>	<p>Literature and context</p> <p>Make connections between the ways different authors may represent similar storylines, ideas and relationships (ACELT1602)</p>	<p>Texts in context</p> <p>Identify and explain language features of texts from earlier times and compare with the vocabulary, images, layout and content of contemporary texts (ACELY1686)</p>
<p>Language for interaction</p> <p>Understand that social interactions influence the way people engage with ideas and respond to others for example when exploring and clarifying the ideas of others, summarising their own views and reporting them to a larger group(ACELA1488)</p> <p>Understand differences between the language of opinion and feeling and the language of factual reporting or recording (ACELA1489)</p>	<p>Responding to literature</p> <p>Discuss literary experiences with others, sharing responses and expressing a point of view (ACELT1603)</p> <p>Use metalanguage to describe the effects of ideas, text structures and language features of literary texts (ACELT1604)</p>	<p>Interacting with others</p> <p>Interpret ideas and information in spoken texts and listen for key points in order to carry out tasks and use information to share and extend ideas and information (ACELY1687)</p> <p>Use interaction skills such as acknowledging another’s point of view and linking students’ response to the topic, using familiar and new vocabulary and a range of vocal effects such as tone, pace, pitch and volume to speak clearly and coherently (ACELY1688)</p> <p>Plan, rehearse and deliver presentations incorporating learned content and taking into account the particular purposes and audiences (ACELY1689)</p>
<p>Text structure and organisation</p> <p>Understand how texts vary in complexity and technicality depending on the approach to the topic, the purpose and the intended audience (ACELA1490)</p> <p>Understand how texts are made cohesive through the use of linking devices including pronoun reference and text connectives (ACELA1491)</p> <p>Recognise how quotation marks are used in texts to signal dialogue, titles and quoted (direct) speech (ACELA1492)</p> <p>Identify features of online texts that enhance readability including text, navigation, links, graphics and layout (ACELA1793)</p>	<p>Examining literature</p> <p>Discuss how authors and illustrators make stories exciting, moving and absorbing and hold readers’ interest by using various techniques, for example character development and plot tension (ACELT1605)</p> <p>Understand, interpret and experiment with a range of devices and deliberate word play in poetry and other literary texts, for example nonsense words, spoonerisms, neologisms and puns (ACELT1606)</p>	<p>Interpreting, analysing, evaluating</p> <p>Identify characteristic features used in imaginative, informative and persuasive texts to meet the purpose of the text (ACELY1690)</p> <p>Read different types of texts by combining contextual , semantic, grammatical and phonic knowledge using text processing strategies for example monitoring meaning, cross checking and reviewing (ACELY1691)</p> <p>Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts (ACELY1692)</p>

<p>Expressing and developing ideas</p> <p>Understand that the meaning of sentences can be enriched through the use of noun groups/phrases and verb groups/phrases and prepositional phrases (ACELA1493)</p> <p>Investigate how quoted (direct) and reported (indirect) speech work in different types of text (ACELA1494)</p> <p>Understand how adverb groups/phrases and prepositional phrases work in different ways to provide circumstantial details about an activity (ACELA1495)</p> <p>Explore the effect of choices when framing an image, placement of elements in the image, and salience on composition of still and moving images in a range of types of texts (ACELA1496)</p> <p>Incorporate new vocabulary from a range of sources into students' own texts including vocabulary encountered in research (ACELA1498)</p> <p>Understand how to use strategies for spelling words, including spelling rules, knowledge of morphemic word families, spelling generalisations, and letter combinations including double letters (ACELA1779)</p> <p>Recognise homophones and know how to use context to identify correct spelling (ACELA1780)</p>	<p>Creating literature</p> <p>Create literary texts that explore students' own experiences and imagining (ACELT1607)</p> <p>Create literary texts by developing storylines, characters and settings (ACELT1794)</p>	<p>Creating texts</p> <p>Plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features (ACELY1694)</p> <p>Reread and edit for meaning by adding, deleting or moving words or word groups to improve content and structure (ACELY1695)</p> <p>Write using clearly-formed joined letters, and develop increased fluency and automaticity (ACELY1696)</p> <p>Use a range of software including word processing programs to construct, edit and publish written text, and select, edit and place visual, print and audio elements (ACELY1697)</p>

Grade 4 Curriculum

Math

Grade 4

The proficiency strands *Understanding, Fluency, Problem Solving and Reasoning* are an integral part of mathematics content across the three content strands: *Number and Algebra, Measurement and Geometry, and Statistics and Probability*. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics.

At this year level:

Understanding includes making connections between representations of numbers, partitioning and combining numbers flexibly, extending place value to decimals, using appropriate language to communicate times, and describing properties of symmetrical shapes

Fluency includes recalling multiplication tables, communicating sequences of simple fractions, using instruments to measure accurately, creating patterns with shapes and their transformations, and collecting and recording data

Problem Solving includes formulating, modelling and recording authentic situations involving operations, comparing large numbers with each other, comparing time durations, and using properties of numbers to continue patterns

Reasoning includes using generalising from number properties and results of calculations, deriving strategies for unfamiliar multiplication and division tasks, comparing angles, communicating information using graphical displays and evaluating the appropriateness of different displays

Grade 4 Achievement Standard

By the end of Grade 4, students choose appropriate strategies for calculations involving multiplication and division. They recognise common equivalent fractions in familiar contexts and make connections between fraction and decimal notations up to two decimal places. Students solve simple purchasing problems. They identify unknown quantities in number sentences. They describe number patterns resulting from multiplication. Students compare areas of regular and irregular shapes using informal units. They solve problems involving time duration. They interpret information contained in maps. Students identify dependent and independent events. They describe different methods for data collection and representation, and evaluate their effectiveness.

Students use the properties of odd and even numbers. They recall multiplication facts to 10 x 10 and related division facts. Students locate familiar fractions on a number line. They continue number sequences involving multiples of single digit numbers. Students use scaled instruments to measure temperatures, lengths, shapes and objects. They convert between units of time. Students create symmetrical shapes and patterns. They classify angles in relation to a right angle. Students list the probabilities of everyday events. They construct data displays from given or collected data

Grade 4 Content Descriptions

Number and Algebra	Measurement and Geometry	Statistics and Probability
<p>Number and place value</p> <p>Investigate and use the properties of odd and even numbers (ACMNA071)</p> <p>Recognise, represent and order numbers to at least tens of thousands (ACMNA072)</p> <p>Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems (ACMNA073)</p> <p>Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 (ACMNA074)</p> <p>Recall multiplication facts up to 10×10 and related division facts (ACMNA075)</p> <p>Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder (ACMNA076)</p>	<p>Using units of measurement</p> <p>Use scaled instruments to measure and compare lengths, masses, capacities and temperatures (ACMMG084)</p> <p>Compare objects using familiar metric units of area and volume (ACMMG290)</p> <p>Convert between units of time (ACMMG085)</p> <p>Use am and pm notation and solve simple time problems (ACMMG086)</p>	<p>Chance</p> <p>Describe possible everyday events and order their chances of occurring (ACMSP092)</p> <p>Identify everyday events where one cannot happen if the other happens (ACMSP093)</p> <p>Identify events where the chance of one will not be affected by the occurrence of the other (ACMSP094)</p>
<p>Fractions and decimals</p> <p>Investigate equivalent fractions used in contexts (ACMNA077)</p> <p>Count by quarters halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line (ACMNA078)</p> <p>Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation (ACMNA079)</p>	<p>Location and transformation</p> <p>Use simple scales, legends and directions to interpret information contained in basic maps (ACMMG090)</p> <p>Create symmetrical patterns, pictures and shapes with and without digital technologies (ACMMG091)</p>	<p>Data representation and interpretation</p> <p>Select and trial methods for data collection, including survey questions and recording sheets (ACMSP095)</p> <p>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (ACMSP096)</p> <p>Evaluate the effectiveness of different displays in illustrating data features including variability (ACMSP097)</p>
<p>Money and financial mathematics</p> <p>Solve problems involving purchases and the calculation of change to the nearest five cents with and without</p>	<p>Shape</p> <p>Compare the areas of regular and irregular shapes by informal means (ACMMG087)</p> <p>Compare and describe two dimensional</p>	

digital technologies (ACMNA080)	shapes that result from combining and splitting common shapes, with and without the use of digital technologies (ACMMG088)	
Patterns and algebra	Geometric reasoning	
Explore and describe number patterns resulting from performing multiplication (ACMNA081)	Compare angles and classify them as equal to, greater than or less than a right angle (ACMMG089)	
Solve word problems by using number sentences involving multiplication or division where there is no remainder (ACMNA082)		
Use equivalent number sentences involving addition and subtraction to find unknown quantities (ACMNA083)		

Grade 4 Curriculum

Science

Grade 4

The *Science Inquiry Skills* and *Science as a Human Endeavour* strands are described across a two-year band. In their planning, schools and teachers refer to the expectations outlined in the Achievement Standard and also to the content of the *Science Understanding* strand for the relevant year level to ensure that these two strands are addressed over the two-year period. The three strands of the curriculum are interrelated and their content is taught in an integrated way. The order and detail in which the content descriptions are organised into teaching/learning programs are decisions to be made by the teacher.

Over Grades 3 to 6, students develop their understanding of a range of systems operating at different time and geographic scales. In **Grade 4**, students broaden their understanding of classification and form and function through an exploration of the properties of natural and processed materials. They learn that forces include non-contact forces and begin to appreciate that some interactions result from phenomena that can't be seen with the naked eye. They begin to appreciate that current systems, such as Earth's surface, have characteristics that have resulted from past changes and that living things form part of systems. They understand that some systems change in predictable ways, such as through cycles. They apply their knowledge to make predictions based on interactions within systems, including those involving the actions of humans

Grade 4 Achievement Standard

By the end of Grade 4, students apply the observable properties of materials to explain how objects and materials can be used. They use contact and non-contact forces to describe interactions between objects. They discuss how natural and human processes cause changes to the Earth's surface. They describe relationships that assist the survival of living things and sequence key stages in the life cycle of a plant or animal. They identify when science is used to ask questions and make predictions. They describe situations where science understanding can influence their own and others' actions.

Students follow instructions to identify investigable questions about familiar contexts and predict likely outcomes from investigations. They discuss ways to conduct investigations and safely use equipment to make and record observations. They use provided tables and simple column graphs to organise their data and identify patterns in data. Students suggest explanations for observations and compare their findings with their predictions. They suggest reasons why their methods were fair or not. They complete simple reports to communicate their methods and findings

Grade 4 Content Descriptions

Science Understanding	Science as a Human Endeavour	Science Inquiry Skills
<p>Biological sciences</p> <p>Living things have life cycles (ACSSU072)</p> <p>Living things, including plants and animals, depend on each other and the environment to survive (ACSSU073)</p>	<p>Nature and development of science</p> <p>Science involves making predictions and describing patterns and relationships (ACSHE061)</p>	<p>Questioning and predicting</p> <p>With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge (AC SIS064)</p>
<p>Chemical sciences</p> <p>Natural and processed materials have a range of physical properties; These properties can influence their use (ACSSU074)</p>	<p>Use and influence of science</p> <p>Science knowledge helps people to understand the effect of their actions (ACSHE062)</p>	<p>Planning and conducting</p> <p>Suggest ways to plan and conduct investigations to find answers to questions (AC SIS065)</p> <p>Safely use appropriate materials, tools or equipment to make and record observations, using formal measurements and digital technologies as appropriate (AC SIS066)</p>
<p>Earth and space sciences</p> <p>Earth's surface changes over time as a result of natural processes and human activity(ACSSU075)</p>		<p>Processing and analysing data and information</p> <p>Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends (AC SIS068)</p> <p>Compare results with predictions, suggesting possible reasons for findings (AC SIS216)</p>
<p>Physical sciences</p> <p>Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076)</p>		<p>Evaluating</p> <p>Reflect on the investigation; including whether a test was fair or not (AC SIS069)</p>
		<p>Communicating</p> <p>Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports (AC SIS071)</p>

Grade 4 Curriculum

Geography

Grade 4

The Earth's environment sustains all life focuses on developing students' understanding of sustainability which is about the ongoing capacity of the environment to sustain human life and wellbeing. Students recognise that people have different views on how sustainability can be achieved. They learn that sustainability means more than the careful use of resources and the safe management of waste, and they develop their understanding of the concept by exploring some of the other functions of the environment that support their lives and the lives of other living things. They investigate the custodial responsibility of Aboriginal and Torres Strait Islander Peoples to their Country/Place and their past and present views on the sustainable use of resources. Students' mental maps of the world and their understanding of place are further developed through learning the location of the major countries in South America and Africa and investigating their types of natural vegetation and native animals on those continents.

The inquiry process provides opportunities to consider the sustainable use of environments and resources and to apply this information to develop a plan for appropriate action that people could take to improve environmental quality.

The content of this year level is organised into two strands: Geographical Knowledge and Understanding and Geographical Inquiry and Skills. These strands are interrelated and should be taught in an integrated manner, and in ways that are appropriate to specific local contexts. The order and detail in which they are taught are programming decisions.

Key inquiry questions

A framework for developing students' geographical knowledge, understanding and skills is provided through the inclusion of inquiry questions and specific inquiry skills, including the use and interpretation of maps, photographs and other representations of geographical data.

The key inquiry questions for Year 4 are articulated below.

- How does the environment support the lives of people and other living things?
- How do different views about the environment influence approaches to sustainability?
- How can people use places and environments more sustainably?

Grade 4 Achievement Standard

By the end of Grade 4, students describe and compare the characteristics of places in different locations at the national scale. They identify and describe the interconnections between people and the environment. They describe the location of selected countries in relative terms and identify simple patterns in the distribution of features of places. Students recognise the importance of the environment and identify different views on how to respond to a geographical challenge.

Students develop geographical questions to investigate and collect and record information and data from different sources to answer these questions. They represent data and the location of places and their characteristics in simple graphic forms, including large-scale maps that use the cartographic conventions of scale, legend, title and north point. They describe the location of places and their features using simple grid references, compass direction and distance. Students interpret data to identify spatial distributions and simple patterns and draw conclusions. They present findings using geographical terminology in a range of texts. They propose individual action in response to a local geographical challenge and identify the expected effects of their proposed action.

Grade 4 Content Descriptions

Geographical Knowledge and Understanding	Geographical Inquiry and Skills
<p>The location of the major countries of Africa and South America in relation to Australia, and their main characteristics, including the types of natural vegetation and native animals in at least two countries from both continents (ACHGK020)</p> <p>The types of natural vegetation and the significance of vegetation to the environment and to people (ACHGK021)</p> <p>The importance of environments to animals and people, and different views on how they can be protected (ACHGK022)</p> <p>The custodial responsibility Aboriginal and Torres Strait Islander Peoples have for Country/Place, and how this influences their past and present views about the use of resources (ACHGK023)</p> <p>The natural resources provided by the environment, and different views on how they could be used sustainably (ACHGK024)</p> <p>The sustainable management of waste from production and consumption (ACHGK025)</p>	<p>Observing, questioning and planning</p> <p>Develop geographical questions to investigate (ACHGS026)</p> <p>Collecting, recording, evaluating and representing</p> <p>Collect and record relevant geographical data and information, for example, by observing, by interviewing, conducting surveys and measuring, or from sources such as maps, photographs, satellite images, the media and the internet (ACHGS027)</p> <p>Represent data by constructing tables and graphs (ACHGS028)</p> <p>Represent the location of places and their features by constructing large-scale maps that conform to cartographic conventions including scale, legend, title and north point, and describe their location using simple grid references, compass direction and distance (ACHGS029)</p>
	<p>Interpreting, analysing and concluding</p> <p>Interpret geographical data to identify distributions and patterns and draw conclusions (ACHGS030)</p>
	<p>Communicating</p> <p>Present findings in a range of communication forms, for example, written, oral, digital, graphic, tabular and visual, and use geographical terminology (ACHGS031)</p>
	<p>Reflecting and responding</p> <p>Reflect on their learning to propose individual action in response to a contemporary geographical challenge and identify the expected effects of the proposal (ACHGS032)</p>

Grade 4 Curriculum

History

Grade 4

First Contacts

The Grade 4 curriculum introduces world history and the movement of peoples. Beginning with the history of Aboriginal and Torres Strait Islander peoples, students examine European exploration and colonisation in Australia and throughout the world up to the early 1800s. Students examine the impact of exploration on other societies, how these societies interacted with newcomers, and how these experiences contributed to their cultural diversity.

The content provides opportunities to develop historical understanding through key concepts including **sources, continuity and change, cause and effect, perspectives, empathy and significance**. These concepts may be investigated within a particular historical context to facilitate an understanding of the past and to provide a focus for historical inquiries.

The history content at this year level involves two strands: *Historical Knowledge and Understanding* and *Historical Skills*. These strands are interrelated and should be taught in an integrated way; they may be integrated across learning areas and in ways that are appropriate to specific local contexts. The order and detail in which they are taught are programming decisions.

Key Inquiry Questions

A framework for developing students' historical knowledge, understanding and skills is provided by **inquiry questions** through the use and interpretation of sources. The key inquiry questions at this year level are:

- Why did the great journeys of exploration occur?
- What was life like for Aboriginal and/or Torres Strait Islander Peoples before the arrival of the Europeans?
- Why did the Europeans settle in Australia?

What was the nature and consequence of contact between Aboriginal and/or Torres Strait Islander Peoples and early traders, explorers and settlers?

Grade 4 Achievement Standard

By the end of Grade 4, students explain how and why life changed in the past, and identify aspects of the past that remained the same. They describe the experiences of an individual or group over time. They recognise the significance of events in bringing about change.

Students sequence events and people (their lifetime) in chronological order to identify key dates. They pose a range of questions about the past. They identify sources (written, physical, visual, oral), and locate information to answer these questions. They recognise different points of view. Students develop and present texts, including narratives, using historical term

Grade 4 Content Descriptions

<i>Historical Knowledge and Understanding</i>	Historical Skills
<p>First Contacts</p>	<p>Chronology, terms and concepts</p>
<p>The diversity and longevity of Australia's first peoples and the ways Aboriginal and/or Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the implications for their daily lives. (ACHHK077)</p>	<p>Sequence historical people and events. (ACHHS081)</p> <p>Use historical terms (ACHHS082)</p>
<p>The journey(s) of AT LEAST ONE world navigator, explorer or trader up to the late eighteenth century, including their contacts with other societies and any impacts. (ACHHK078)</p>	<p>Historical questions and research</p>
<p>Stories of the First Fleet, including reasons for the journey, who travelled to Australia, and their experiences following arrival. (ACHHK079)</p>	<p>Pose a range of questions about the past (ACHHS083)</p> <p>Identify sources (ACHHS216)</p>
<p>The nature of contact between Aboriginal people and/or Torres Strait Islanders and others, for example, the Macassans and the Europeans, and the effects of these interactions on, for example families and the environment (ACHHK080)</p>	<p>Analysis and use of sources</p>
	<p>Locate relevant information from sources provided (ACHHS084)</p>
	<p>Perspectives and interpretations</p>
	<p>Identify different points of view (ACHHS085)</p>
	<p>Explanation and communication</p>
	<p>Develop texts, particularly narratives (ACHHS086)</p>
	<p>Use a range of communication forms (oral, graphic, written) and digital technologies (ACHHS087)</p>

Grade 4 Curriculum

Technologies – Design and Technologies

Grades 3 and 4

Grades 3 and 4 Band Description

Learning in Design and Technologies builds on concepts, skills and processes developed in earlier years, and teachers will revisit, strengthen and extend these as needed.

By the end of Grade 4 students will have had the opportunity to create designed solutions at least once in the following technologies contexts: Engineering principles and systems; Food and fibre production and Food specialisations; and Materials and technologies specialisations. Students should have opportunities to experience designing and producing products, services and environments.

In Grade 3 and 4 students develop a sense of self and ownership of their ideas and thinking about their peers and communities and as consumers. Students explore and learn to harness their creative, innovative and imaginative ideas and approaches to achieve designed products, services and environments. They do this through planning and awareness of the characteristics and properties of materials and the use of tools and equipment. They learn to reflect on their actions to refine their working and develop their decision-making skills. Students examine social and environmental sustainability implications of existing products and processes to raise awareness of their place in the world. They compare their predicted implications with real-world case studies including those from the Asia region, and recognise that designs and technologies can affect people and their environments. They become aware of the role of those working in design and technologies occupations and how they think about the way a product might change in the future.

Using a range of technologies including a variety of graphical representation techniques to communicate, students clarify and present ideas, for example by drawing annotated diagrams; modelling objects as three-dimensional images from different views by visualising rotating images and using materials. Students recognise techniques for documenting design and production ideas such as basic drawing symbols, and use simple flow diagrams.

Students become aware of the appropriate ways to manage their time and focus. With teacher guidance, they identify and list criteria for success including in relation to preferred futures and the major steps needed to complete a design task. They show an understanding of the importance of planning when designing solutions, in particular when collaborating. Students identify safety issues and learn to follow simple safety rules when producing designed solutions.

Grades 3 and 4 Achievement Standard

By the end of Grade 4 students explain how products, services and environments are designed to best meet needs of communities and their environments. They describe contributions of people in design and technologies occupations. Students describe how the features of technologies can be used to produce designed solutions for each of the prescribed technologies contexts.

Students create designed solutions for each of the prescribed technologies contexts. They explain needs or opportunities and evaluate ideas and designed solutions against identified criteria for success, including environmental sustainability considerations. They develop and expand design ideas and communicate these using models and drawings including annotations and symbols. Students plan and sequence major steps in design and production. They identify appropriate technologies and techniques and demonstrate safe work practices when producing designed solution

Grades 3 and 4 Content Descriptions

Design and Technologies Knowledge and Understanding	Design and Technologies Processes and Production Skills
<p>Recognise the role of people in design and technologies occupations and explore factors, including sustainability that impact on the design of products, services and environments to meet community needs (ACTDEK010)</p>	<p>Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to produce designed solutions (ACTDEP014)</p>
<p>Investigate how forces and the properties of materials affect the behaviour of a product or system (ACTDEK011)</p>	<p>Generate, develop, and communicate design ideas and decisions using appropriate technical terms and graphical representation techniques (ACTDEP015)</p>
<p>Investigate food and fibre production and food technologies used in modern and traditional societies (ACTDEK012)</p>	<p>Select and use materials, components, tools and equipment using safe work practices to make designed solutions (ACTDEP016)</p>
<p>Investigate the suitability of materials, systems, components, tools and equipment for a range of purposes (ACTDEK013)</p>	<p>Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the environment (ACTDEP017)</p> <p>Plan a sequence of production steps when making designed solutions individually and collaboratively (ACTDEP018)</p>

Grade 4 Curriculum

Technologies – Digital Technologies

Grades 3 and 4

Grades 3 and 4 Band Description

Learning in Digital Technologies focuses on further developing understanding and skills in computational thinking, such as categorising and outlining procedures; and developing an increasing awareness of how digital systems are used and could be used at home, in school and the local community.

By the end of Grade 4, students will have had opportunities to create a range of digital solutions, such as interactive adventures that involve user choice, modelling simplified real world systems and simple guessing games.

In Grade 3 and 4, students explore digital systems in terms of their components, and peripheral devices such as digital microscopes, cameras and interactive whiteboards. They collect, manipulate and interpret data, developing an understanding of the characteristics of data and their representation.

Using the concept of abstraction, students define simple problems using techniques such as summarising facts to deduce conclusions. They record simple solutions to problems through text and diagrams and develop their designing skills from initially following prepared algorithms to describing their own that support branching (choice of options) and user input. Their solutions are implemented using appropriate software including visual programming languages that use graphical elements rather than text instructions. They explain, in general terms, how their solutions meet specific needs and consider how society may use digital systems to meet needs in environmentally sustainable ways.

With teacher guidance, students identify and list the major steps needed to complete a task or project. When sharing ideas and communicating in online environments they develop an understanding of why it is important to consider the feelings of their audiences and apply safe practices and social protocols agreed by the class that demonstrate respectful behaviour.

Grades 3 and 4 Achievement Standard

By the end of Grade 4, students describe how a range of digital systems (hardware and software) and their peripheral devices can be used for different purposes. They explain how the same data sets can be represented in different ways.

Students define simple problems, design and implement digital solutions using algorithms that involve decision-making and user input. They explain how the solutions meet their purposes. They collect and manipulate different data when creating information and digital solutions. They safely use and manage information systems for identified needs using agreed protocols and describe how information systems are used

Grades 3 and 4 Content Descriptions

Digital Technologies Knowledge and Understanding	Digital Technologies Processes and Production Skills
<p>Explore and use a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)</p> <p>Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)</p>	<p>Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)</p> <hr/> <p>Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)</p> <hr/> <p>Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)</p> <hr/> <p>Explain how developed solutions and existing information systems meet common personal, school or community needs, and envisage new ways of using them (ACTDIP012)</p> <hr/> <p>Work with others to plan the creation and communication of ideas and information safely, applying agreed ethical and social protocols (ACTDIP013)</p>

Grade 4 Curriculum

Health and Physical Education

Grades 3 and 4

Grades 3 and 4 Band Description

The Grade 3 and 4 curriculum further develops students' knowledge, understanding and skills in relation to their health, wellbeing, safety and participation in physical activity. In these years, students begin to explore personal and social factors that support and contribute to their identities and emotional responses in varying situations. They also develop a further understanding of how their bodies grow and change as they get older.

The content explores knowledge, understanding and skills that supports students to build and maintain respectful relationships, make health-enhancing and safe decisions, and interpret health messages from different sources to take action to enhance their own health and wellbeing.

The curriculum in Grade 3 and 4 builds on previous learning in movement to help students develop greater proficiency across the range of fundamental movement skills. Students combine movements to create more complicated movement patterns and sequences. Through participation in a variety of physical activities, students further develop their knowledge about movement and how the body moves. They do this as they explore the features of activities that meet their needs and interests and learn about the benefits of regular physical activity.

The Grade 3 and 4 curriculum also provides opportunities for students to develop through movement personal and social skills such as leadership, communication, collaboration, problem-solving, persistence and decision making.

The focus areas to be addressed in Grade 3 and 4 include, but are not limited to:

- alcohol and other drugs (AD)
- food and nutrition (FN)
- health benefits of physical activity (HBPA)
- mental health and wellbeing (MH)
- relationships and sexuality (RS)
- safety (S)
- active play and minor games (AP)
- challenge and adventure activities (CA)
- fundamental movement skills (FMS)
- games and sports (GS)
- lifelong physical activities (LLPA)

rhythmic and expressive movement activities

Grades 3 and 4 Achievement Standard

By the end of Grade 4, students recognise strategies for managing change. They examine influences that strengthen identities. They investigate how emotional responses vary and understand how to interact positively with others in different situations. Students interpret health messages and discuss the influences on healthy and safe choices. They understand the benefits of being fit and physically active. They describe the connections they have to their community and identify resources available locally to support their health, safety and physical activity.

Students apply strategies for working cooperatively and apply rules fairly. They use decision-making and problem-solving skills to select and demonstrate strategies that help them stay safe, healthy and active. They refine fundamental movement skills and movement concepts and strategies in different physical activities and to solve movement challenges. They create and perform movement sequences using fundamental movement skills and the elements of movement

Grades 3 and 4 Content Descriptions

Personal, Social and Community Health	Movement and Physical Activity
<p data-bbox="129 454 456 483">Being healthy, safe and active</p> <p data-bbox="129 504 743 562">Examine how success, challenge and failure strengthen personal identities (ACPPS033)</p> <p data-bbox="129 624 679 683">Explore strategies to manage physical, social and emotional change (ACPPS034)</p> <p data-bbox="129 745 786 804">Describe and apply strategies that can be used in situations that make them feel uncomfortable or unsafe (ACPPS035)</p> <p data-bbox="129 866 748 925">Identify and practise strategies to promote health, safety and wellbeing (ACPPS036)</p>	<p data-bbox="826 454 1007 483">Moving our body</p> <p data-bbox="837 504 1485 562">Practise and refine fundamental movement skills in different movement situations (ACPMP043)</p> <p data-bbox="837 624 1425 683">Perform movement sequences which link fundamental movement skills (ACPMP044)</p> <p data-bbox="837 745 1425 804">Practise and apply movement concepts and strategies (ACPMP045)</p>
<p data-bbox="129 987 727 1016">Communicating and interacting for health and wellbeing</p> <p data-bbox="129 1037 775 1095">Describe how respect, empathy and valuing difference can positively influence relationships (ACPPS037)</p> <p data-bbox="129 1158 738 1216">Investigate how emotional responses vary in depth and strength (ACPPS038)</p> <p data-bbox="129 1279 764 1337">Discuss and interpret health information and messages in the media and on the Internet (ACPPS039)</p>	<p data-bbox="826 987 1106 1016">Understanding movement</p> <p data-bbox="837 1037 1414 1095">Examine the benefits of physical activity and physical fitness to health and wellbeing (ACPMP046)</p> <p data-bbox="837 1158 1449 1247">Combine the elements of effort, space, time, objects and people when performing movement sequences (ACPMP047)</p>
<p data-bbox="129 1397 635 1426">Contributing to healthy and active communities</p> <p data-bbox="129 1447 778 1505">Describe strategies to make the classroom and playground healthy, safe and active spaces (ACPPS040)</p> <p data-bbox="129 1568 778 1688">Participate in outdoor games and activities to examine how participation promotes a connection between the community, natural and built environments, and health and wellbeing (ACPPS041)</p> <p data-bbox="129 1751 770 1809">Research own heritage and cultural identities, and explore strategies to respect and value diversity (ACPPS042)</p>	<p data-bbox="826 1397 1134 1426">Learning through movement</p> <p data-bbox="837 1447 1433 1505">Adopt inclusive practices when participating in physical activities (ACPMP048)</p> <p data-bbox="837 1568 1477 1626">Apply innovative and creative thinking in solving movement challenges (ACPMP049)</p> <p data-bbox="837 1688 1449 1747">Apply basic rules and scoring systems, and demonstrate fair play when participating (ACPMP050)</p>

Grade 4 Curriculum

The Arts – Visual Arts

Grades 3 and 4

Grades 3 and 4 Band Description

In Grades 3 and 4, learning in Visual Arts builds on the experience of the previous band. It involves students making and responding to visual arts independently, and collaboratively with their classmates and teachers.

Students extend their awareness of how and why artists, craftspeople and designers realise their ideas through different visual representations, practices, processes and viewpoints. They explore and experiment with a greater diversity of materials, techniques and technologies. They further enhance their perceptual skills by observing closely the visual detail of the world around them and applying these observations through different practical applications of art making. Through observational, imaginative, cognitive and sensory investigations, students become more knowledgeable and discerning about their practices as a visual artist. They can determine and execute an individual approach to a theme or subject matter. They explore, predict outcomes, test and explain their experimentation. They use different physical and digital materials and techniques, technologies and processes in visual arts forms, such as painting, drawing, sculpture, design and digital media.

As they experience visual arts, students draw on artworks from a range of cultures, times and locations. They explore the influences of Aboriginal and Torres Strait Islander Peoples, and of the Asia region. Students learn about visual arts in their community. They also learn about visual arts from more distant locations that may be represented in their community. Students also explore different styles of art made by Aboriginal and Torres Strait Islander artists.

As they make and respond to visual artworks as artists and audiences, students explore visual representations based on their investigations of past histories, their heritage, and significant events and celebrations within their community. They make connections between their own artistic intentions and those of other artists, observing and identifying ideas and symbols used and adapted by artists in their artworks.

Students learn about safe visual arts practices. Their understanding of the roles of artists and audiences builds upon their experience from the previous band.

Grades 3 and 4 Achievement Standard

By the end of Grade 4, students describe and discuss similarities and differences between artworks they make, present and view. They discuss how they and others use visual conventions in artworks. Students collaborate to plan and make artworks that are inspired by artworks they experience. They use visual conventions, techniques and processes to communicate their ideas.

Grades 3 and 4 Content Descriptions

Explore ideas and artworks from different cultures and times, including artwork by Aboriginal and Torres Strait Islander artists, to use as inspiration for their own representations

Use materials, techniques and processes to explore visual conventions when making artworks

Present artworks and describe how they have used visual conventions to represent their ideas

Identify intended purposes and meanings of artworks using visual arts terminology to compare artworks, starting with visual artworks in Australia including visual artworks of Aboriginal and Torres Strait Islander Peoples

In this band students develop their knowledge of how ideas and intentions are communicated in and through visual arts. They build on and refine their knowledge, understanding and skills through visual arts practices focusing on:

Representation

Subject matter - such as past histories, heritage, significant events and community celebrations

Forms - drawing, design, painting, sculpture, printmaking, photography and film

Styles - figurative, realism, expressionistic, impressionistic and others

Techniques - photo-montage, weaving, block printing, digital imaging, wrapping, pottery and others

Visual conventions - identifying, using and interpreting a selection of design elements and design principles

Materials - understanding qualities and properties of a range of materials

Technologies - traditional and digital

Practices

Spaces - recognising the meaning of studio, and adopting appropriate behaviour in the studio as a specialised space, for example, cleaning up, organising materials, naming work and exhibiting work

Skills

- investigative – researching, discovering and reinterpreting artworks from various viewpoints as artist and audience
- observational – seeing, noticing and viewing critically
- practical – use of visual arts materials, equipment and instruments

Processes

- investigating, determining, conceiving, experimenting, questioning, predicting, testing, evaluating, comparing, analysing, observing, identifying and connecting

Viewpoints

- contexts – recognising artists and artworks from the past, and from different cultures, particularly Aboriginal and Torres Strait Islander Peoples, and from Asia

Grade 4 Curriculum

The Arts – Music

Grades 3 and 4

Grades 3 and 4 Band Description

In Grades 3 and 4, learning in Music builds on the experience of the previous band. It involves students making and responding to music independently and collaboratively with their classmates and teachers.

Students extend their understanding of the elements of music as they develop their aural skills. They match pitch and show the direction of a tune with gesture or drawings. They recognise difference between notes moving by step and by leap. They recognise and discriminate between rhythm and beat.

As they experience music, students draw on music from a range of cultures, times and locations. They explore the music and influences of Aboriginal and Torres Strait Islander Peoples, and those of the Asia region. Students learn about music in their community. They also learn about music from more distant locations that may be represented in their community. Students learn that Aboriginal and Torres Strait Islander music uses rhythm, pitch, dynamics and form to share stories.

As they make and respond to music, students explore meaning and interpretation, forms, and elements including rhythm, pitch, dynamics and expression, form and structure, timbre and texture. They explore social and cultural contexts of music. They make personal evaluations of their own and others' music.

Students maintain safety in using instruments and technologies and in interaction with others. Their understanding of the role of the artist and of the audience builds upon their experience from the previous band. As an audience, students focus their attention on the performance and respond to the music. They consider why and how audiences respond.

Years 3 and 4 Achievement Standard

By the end of Grade 4, students describe and discuss similarities and differences between music they listen to, compose and perform. They discuss how they and others use the elements of music in performance and composition.

Students collaborate to improvise compose and arrange sound, silence, tempo and volume in music that communicates ideas. They demonstrate aural skills by singing playing instruments with accurate pitch, rhythm and expression..

Grades 3 and 4 Content Descriptions

Develop aural skills by exploring, imitating and recognising elements of music including dynamics, pitch and rhythm patterns

Practise singing, playing instruments and improvising music, using elements of music including rhythm, pitch, dynamics and form in a range of pieces, including in music from the local community

Create, perform and record compositions by selecting and organising sounds, silence, tempo and volume

Identify intended purposes and meanings as they listen to music using the elements of music to make comparisons, starting with Australian music, including music of Aboriginal and Torres Strait Islander Peoples

In this band students develop their knowledge of how ideas and intentions are communicated in and through Music. They build on and refine their knowledge, understanding and skills through music practices focusing on:

Elements of music

Rhythm

- simple metres , crotchet , crotchet rest , quaver , semiquaver
- dotted crotchet , quavers in groups of 3 and identical rests in repertoire studied,
- ostinato, tempo changes (faster and slower)

Pitch

- pentatonic patterns, melodic shape, recognising steps and leaps, treble clef, staff

Dynamics and expression

- very soft (pianissimo) pp and very loud (fortissimo) ff, gradually getting louder (crescendo), gradually getting softer (decrescendo), smoothly, short and detached

Form

- question and answer (call and response), repeat signs, binary (AB) and ternary (ABA) forms

Timbre

- recognising familiar instrumental timbres in isolation and combination

Texture

- combining two or more rhythmic or melodic patterns which occur simultaneously in different voices

Skills (including aural skills)

- matching pitch and showing the direction of a tune with gesture or drawings
- recognising the differences between notes moving by steps and leaps
- discriminating between rhythm and beat
- demonstrating beat and tempo changes
- matching and varying dynamics
- varying instrumental timbres to create expressive effects using instruments and voices safely and correctly in the classroom
- taking on different roles in group music making, for example, accompaniment, lead
- using technology as a tool for music making and performance.

Grade 4 Curriculum

Indonesian Language

Australian Curriculum: English (Grade 4)

	Sub-strands	Content Descriptions	Achievement Standard <i>(organised by reading and viewing, writing, speaking and listening)</i>
Language	Language variation and change	<ul style="list-style-type: none"> Understand that Standard Australian English is one of many social dialects used in Australia, and that while it originated in England it has been influenced by many other languages (ACELA1487) 	<p>Reading and viewing</p> <p>By the end of Year 4, students understand that texts have different structures depending on the purpose and audience. They explain how language features, images and vocabulary are used to engage the interest of audiences. They describe literal and implied meaning connecting ideas in different texts. They express preferences for particular texts, and respond to others' viewpoints.</p> <p>Writing</p> <p>Students use language features to create coherence and add detail to their texts. They understand how to express an opinion based on information in a text. They create texts that show understanding of how images and detail can be used to extend key ideas. Students create structured texts to explain ideas for different audiences. They demonstrate</p>
	Language for interaction	<ul style="list-style-type: none"> Understand that social interactions influence the way people engage with ideas and respond to others for example when exploring and clarifying the ideas of others, summarising students' own views and reporting them to a larger group (ACELA1488) Understand differences between the language of opinion and feeling and the language of factual reporting or recording (ACELA1489) 	
	Text structure and organisation	<ul style="list-style-type: none"> Understand how texts vary in complexity and technicality depending on the approach to the topic, the purpose and the intended audience (ACELA1490) Understand how texts are made cohesive through the use of linking devices including pronoun reference and text connectives (ACELA1491) Recognise how quotation marks are used in texts to signal dialogue, titles and quoted (direct) speech (ACELA1492) Identify features of online texts that enhance readability including text, navigation, links, graphics and layout (ACELA1793) 	
	Expressing and developing ideas	<ul style="list-style-type: none"> Understand that the meaning of sentences can be enriched through the use of noun groups/phrases and verb groups/phrases and prepositional phrases (ACELA1493) Investigate how quoted (direct) and reported (indirect) speech work in different types of text (ACELA1494) Understand how adverbs and prepositional phrases work in different ways to provide circumstantial details about an activity (ACELA1495) Explore the effect of choices when framing an image, placement of elements in the image, and salience on composition of still and moving images in a range of types of texts (ACELA1496) Incorporate new vocabulary from a range of sources into students' own texts including vocabulary encountered in research (ACELA1498) Understand how to use strategies for spelling words, including spelling rules, knowledge of morphemic word families, spelling generalisations, and letter combinations including double letters (ACELA1779) Recognise homophones and know how to use context to identify correct spelling (ACELA1780) 	
Literacy	Texts in context	<ul style="list-style-type: none"> Identify and explain language features of texts from earlier times and compare with the vocabulary, images, layout and content of contemporary texts (ACELY1686) 	
	Interacting with others	<ul style="list-style-type: none"> Interpret ideas and information in spoken texts and listen for key points in order to carry out tasks and use information to share and extend ideas and information (ACELY1687) Use interaction skills such as acknowledging another's point of view and linking students' response to the topic, using familiar and new vocabulary and a range of vocal effects such as tone, pace, pitch and volume to speak clearly and coherently (ACELY1688) Plan, rehearse and deliver presentations incorporating learned content and taking into account the 	

Australian Curriculum: English (Grade 4)

	Sub-strands	Content Descriptions	Achievement Standard <i>(organised by reading and viewing, writing, speaking and listening)</i>
		particular purposes and audiences (ACELY1689)	understanding of grammar, select vocabulary from a range of resources and use accurate spelling and punctuation, editing their work to improve meaning.
	Interpreting, analysing and evaluating	<ul style="list-style-type: none"> Identify characteristic features used in imaginative, informative and persuasive texts to meet the purpose of the text (ACELY1690) Read different types of texts by combining contextual, semantic, grammatical and phonic knowledge using text processing strategies, for example monitoring meaning, cross checking and reviewing (ACELY1691) Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts (ACELY1692) 	Speaking and listening Students listen for key points in discussions. They use language features to create coherence and add detail to their texts. They understand how to express an opinion based on information in a text. They create texts that show understanding of how images and detail can be used to extend key ideas. Students create structured texts to explain ideas for different audiences. They make presentations and contribute actively to class and group discussions, varying language according to context.
	Creating texts	<ul style="list-style-type: none"> Plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features (ACELY1694) Reread and edit for meaning by adding, deleting or moving words or word groups to improve content and structure (ACELY1695) Write using clearly-formed joined letters, and develop increased fluency and automaticity Use a range of software including word processing programs to construct, edit and publish written text, and select, edit and place visual, print and audio elements (ACELY1696) 	
Literature	Literature and context	<ul style="list-style-type: none"> Make connections between the ways different authors may represent similar storylines, ideas and relationships (ACELT1602) 	
	Responding to literature	<ul style="list-style-type: none"> Discuss literary experiences with others, sharing responses and expressing a point of view (ACELT1603) Use metalanguage to describe the effects of ideas, text structures and language features of literary texts (ACELT1604) 	
	Examining literature	<ul style="list-style-type: none"> Discuss how authors and illustrators make stories exciting, moving and absorbing and hold readers' interest by using various techniques, for example character development and plot tension (ACELT1605) Understand, interpret and experiment with a range of devices and deliberate word play in poetry and other literary texts, for example nonsense words, spoonerisms, neologisms and puns (ACELT1606) 	
	Creating literature	<ul style="list-style-type: none"> Create literary texts that explore students' own experiences and imagining (ACELT1607) Create literary texts by developing storylines, characters and settings (ACELT1794) 	

Australian Curriculum: English (Grade 4)

Sub- strands	Content Descriptions		Achievement Standard <i>(organised by reading and viewing, writing, speaking and listening)</i>
General Capabilities <ul style="list-style-type: none"> • Literacy • Numeracy • Information and communication technology (ICT) capability • Critical and creative thinking • Ethical behaviour • Personal and social capability • Intercultural understanding 	Cross-Curriculum Priorities <ul style="list-style-type: none"> • Aboriginal and Torres Strait Islander histories and cultures • Asia and Australia's engagement with Asia • Sustainability 	Notes:	

Australian Curriculum: Mathematics - (Grade 4)

Proficiencies	Examples in this year	Achievement Standard <i>(organised by Strands)</i>
Understanding	making connections between representations of numbers, partitioning and combining numbers flexibly, extending place value to decimals, using appropriate language to communicate times, using informal units for comparing, and describing properties of symmetrical shapes	<p>Number and Algebra</p> <p>By the end of Year 4, students choose appropriate strategies for calculations involving multiplication and division. They recognise common equivalent fractions in familiar contexts and make connections between fraction and decimal notations up to two decimal places. Students solve simple purchasing problems. They identify unknown quantities in number sentences. They describe number patterns resulting from multiplication. Students use the properties of odd and even numbers. They recall multiplication facts to 10 x 10 and related division facts. Students locate familiar fractions on a number line.</p>
Fluency	recalling multiplication tables, communicating sequences of simple fractions, using instruments to measure accurately, creating patterns with shapes and their transformations, and collecting and recording data	
Problem solving	formulating, modelling and recording authentic situations involving operations, comparing large numbers and time durations, and using properties of numbers to continue patterns	
Reasoning	using generalising from number properties and results of calculations, deriving strategies for unfamiliar multiplication and division tasks, comparing angles, communicating information using graphical displays and evaluating the appropriateness of different displays	
Sub-strands	Content Descriptions	

Australian Curriculum: Mathematics - (Grade 4)

Number and Algebra	Number and place value	<ul style="list-style-type: none"> Investigate and use the properties of odd and even numbers (ACMNA071) Recognise, represent and order numbers to at least tens of thousands (ACMNA072) Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems (ACMNA073) Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 (ACMNA074) Recall multiplication facts up to 10×10 and related division facts (ACMNA075) Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder (ACMNA076) 	<p>They continue number sequences involving multiples of single digit numbers. Students use scaled instruments to measure temperatures, lengths, shapes and objects. They convert between units of time.</p> <p>Measurement and geometry</p> <p>Students compare areas of regular and irregular shapes using informal units. They solve problems involving time duration. They interpret information contained in maps. Students create symmetrical shapes and patterns. They classify angles in relation to a right angle.</p>
	Fractions and decimals	<ul style="list-style-type: none"> Investigate equivalent fractions used in contexts (ACMNA077) Count by quarters halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line (ACMNA078) Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation (ACMNA079) 	<p>Statistics and probability</p>
	Real numbers		<p>Students identify dependent and independent events. They describe different methods for data collection and representation, and evaluate their effectiveness. Students list the probabilities of everyday events. They</p>
	Money and financial mathematics	<ul style="list-style-type: none"> Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies (ACMNA080) 	

Australian Curriculum: Mathematics - (Grade 4)

	Patterns and algebra	<ul style="list-style-type: none"> • Explore and describe number patterns resulting from performing multiplication (ACMNA081) • Solve word problems by using number sentences involving multiplication or division where there is no remainder (ACMNA082) • Use equivalent number sentences involving addition and subtraction to find unknown quantities (ACMNA083) 	construct data displays from given or collected data .
	Linear and non-linear relationships		
Measurement and geometry	Using units of measurement	<ul style="list-style-type: none"> • Use scaled instruments to measure and compare lengths, masses, capacities and temperatures (ACMMG084) • Compare objects using familiar metric units of area and volume (ACMMG290) • Convert between units of time (ACMMG085) • Use am and pm notation and solve simple time problem (ACMMG086) 	
	Shape	<ul style="list-style-type: none"> • Compare the areas of regular and irregular shapes by informal means (ACMMG087) • Compare and describe two dimensional shapes that result from combining and splitting common shapes, with and without the use of digital technologies (ACMMG088) 	
	Geometric reasoning	<ul style="list-style-type: none"> • Compare angles and classify them as equal to, greater than or less than a right angle (ACMMG089) 	
	Location and transformation	<ul style="list-style-type: none"> • Use simple scales, legends and directions to interpret information contained in basic maps (ACMMG090) • Create symmetrical patterns, pictures and shapes with and without digital technologies (ACMMG091) 	
	Pythagoras and trigonometry		

Australian Curriculum: Mathematics - (Grade 4)

Statistics and probability	Chance	<ul style="list-style-type: none"> Describe possible everyday events and order their chances of occurring (ACMSP092) Identify everyday events where one cannot happen if the other happens (ACMSP093) Identify events where the chance of one will not be affected by the occurrence of the other (ACMSP094) 	
	Data representation and interpretation	<ul style="list-style-type: none"> Select and trial methods for data collection, including survey questions and recording sheets (ACMSP095) Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (ACMSP096) Evaluate the effectiveness of different displays in illustrating data features including variability (ACMSP097) 	
General Capabilities <ul style="list-style-type: none"> Literacy Numeracy Information and communication technology (ICT) capability Critical and creative thinking Ethical behaviour Personal and social capability Intercultural understanding 		Cross-Curriculum Priorities <ul style="list-style-type: none"> Aboriginal and Torres Strait Islander histories and cultures Asia and Australia’s engagement with Asia Sustainability 	Notes: