

QUEENSLAND MUSEUM

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T H E C O R A L S E A

A S T O R Y O F M O V E M E N T

TEACHER RESOURCE AND CURRICULUM LINKS
SECONDARY

EXHIBITION PARTNER



QUEENSLAND MUSEUM
Centre of Excellence for
Ancient, Indigenous
and Heritage

TECHNOLOGY PARTNER

PROJECT DIG

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These teacher notes were developed by Queensland Museum Lifelong Learning and are intended to support teachers when planning a class visit to the *Connections Across the Coral Sea* exhibition. Learning resources produced by Queensland Museum cannot be reproduced or used for commercial purposes in any form. Material remains the property of Queensland Museum or other therein acknowledged sources, and copyright laws apply.

Preface

Queensland Museum Acknowledgment of Country

We acknowledge our First Peoples – the traditional owners of the lands where we live and work, and recognise their continuing connection to land, water and community and pay respect to Elders – past, present and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people continue to play within the Queensland Museum Community.



What does this resource offer?

- A brief introduction to what makes this exhibition special.
- An exhibition map featuring key themes and experiences.
- Helpful weblinks for further learning for teachers and students.
- Curriculum links (tabulated by year level) to align the *Connections across the Coral Sea* exhibition with your unit of study.

Introduction

Welcome to *Connections across the Coral Sea*. Teachers and students will discover stories, language and artefacts from the seafaring cultures of southern New Guinea, Torres Strait and far North Queensland.



This exhibition offers a unique opportunity to explore the earliest movements and international and cross-cultural trade across the seas and waterways surrounding Australia's northern shores and islands.

This evidence has been captured through collaborating organisations and investigations using modern archaeological research, with ancient and contemporary knowledge shared by First Nations communities.

Themes explored in the exhibition include:

People and place – identities, stories, language, culture, movement, interaction

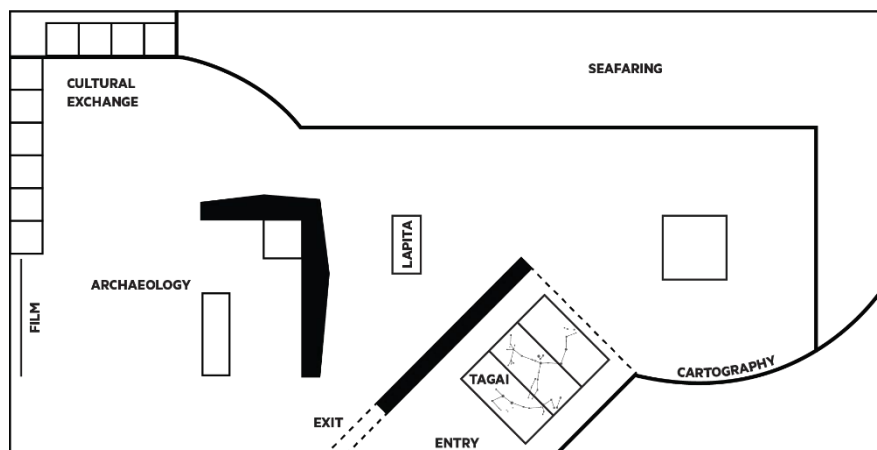
Everyday life – trade and exchange, transportation, personal effects, diet, tools

Art and design – design (decorative/functional elements), materials, changes and influences

Beliefs – symbols, customs, ritual, ceremony, spiritual connection

Connecting with the past – archaeology, science, technology, research

This exhibition is located on Level 2, Queensland Museum, South Brisbane.



Student Resources

Teachers may also download the Secondary *Student Explorer workbook*: a printable, four-page booklet.

This workbook features engagement tasks for visiting students to guide exhibition exploration.

Introduction to Exhibition project

Connections across the Coral Sea highlights the rich relationships of First Nations communities through trade, customs and connections.

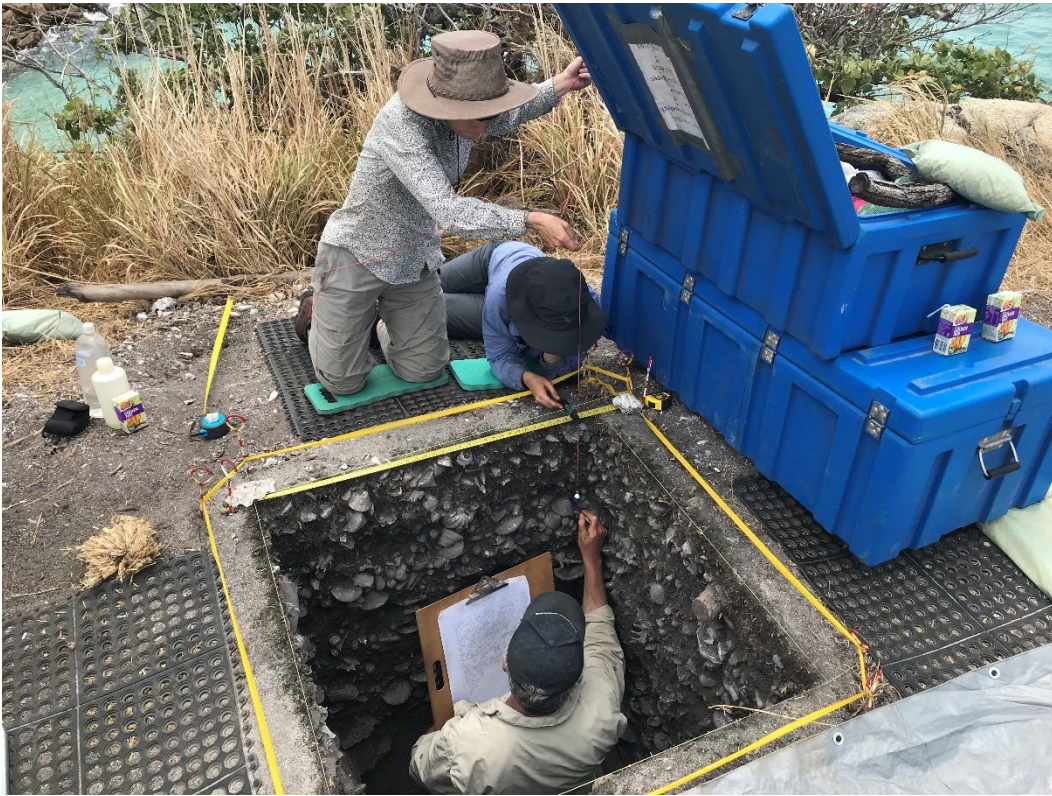
This project draws together archaeological and anthropological research, authentic evidence drawn from artefacts and excavations, and the knowledge and stories of First Nations people to tell the rich history of this fascinating part of the world.

The exhibition explores the concept of the Coral Sea Cultural Interaction Sphere (CSCIS) – a framework to investigate relationships across and between different cultures in the region.

We invite you and your students to explore the exhibition, to understand more about cultures, movements, sciences and technologies of First Nations peoples.

Connections across the Coral Sea reveals the latest archaeological research around the earliest movements and trade between the seafaring cultures of Papua New Guinea, Torres Strait and the northeast coast of Queensland.

This project was supported by the ARC Centre of Excellence for Australian Biodiversity and Heritage (CABAH), Project DIG and First Nations Communities.



Teacher information

I want extended learnings around this topic for myself and/or my students. Where do I start?

Teacher Previews: We recommend a pre-excursion site visit if possible.

Teachers and educators are entitled to free visits to all Queensland Museum exhibitions.

Connections Across the Coral Sea is free to enter, but entry to ticketed spaces can be arranged via our Group Bookings Office (details below).

Online resources: Queensland Museum Network has a large collection of learning resources that you can access free of charge on the [Learning Resources platform](#). Features include collection items available to borrow via QM Loans.

Bite-sized blogs: If you or your students enjoy learning what keeps Museum staff busy, go to <https://blog.qm.qld.gov.au/> or refer to a list of blogs supporting exhibition themes on [insert link to *Visiting with a school or group* page] that have been selected for you.

Supporting information: Browse our curator-recommended external (non Queensland Museum) web sites

- [History of Lizard Island | Great Barrier Reef Resort](#)
- [Nature, culture and history | Lizard Island National Park | Parks and forests | Department of Environment and Science, Queensland \(des.qld.gov.au\)](#)
- [GBRMPA - Traditional Owners of the Great Barrier Reef](#)
- [A shell midden packed with thousands of years of history offers a window to Australia's past | Australian Research Council](#)

How do I book an excursion to *Connections across the Coral Sea*?

Bookings are essential for all group visitors to Queensland Museum.

Book your visit: [Book online](#) or contact our Booking Officers via email at education@qm.qld.gov.au to discuss or request your class visit.

Browse our [Schools and Groups pages](#) to identify other experiences and make the most of your visit.

You can conduct a self-led visit to the exhibition, or request a free, staff-led introduction. This added extra is scheduled for Term 4 2022 and Term 1 2023 (subject to availability).

Australian Curriculum Links

This exhibition links to the Australian Curriculum for Years 7-10 and QCAA Senior Secondary. Learning areas are bookmarked to the relevant table in this document.

- 7-10 [History](#) | Senior Secondary [Ancient History](#) | [Aboriginal and Torres Strait Islander Studies](#)
- 7-10 [Geography](#)
- 7-10 [Civics and Citizenship](#)
- 7-10 [Economics and Business](#) | Senior Secondary [Economics](#)
- 7-10 [Design and Technologies](#)
- 7-10 [Visual Arts](#) | Senior Secondary [Visual Arts](#)
- 7-10 [Science](#) | Senior Secondary [Biological Sciences](#)

Specific links are provided below to assist with excursion planning and support self-led exploration of the exhibition. *Connections across the Coral Sea* also links to the general capabilities in the Australian Curriculum and the Aboriginal and Torres Strait Islander histories and cultures cross-curriculum priority.

Year 7-10 Australian Curriculum Links

HISTORY	
Inquiry Questions	
Year 7	<ul style="list-style-type: none"> • How do we know about the ancient past?
Knowledge and Understanding	
Content Description	Elaboration/s
<p>Year 7</p> <p>The evidence for the emergence and establishment of ancient societies (including art, iconography, writing tools and pottery) (ACOKFH002)</p> <p>How historians and archaeologists investigate history, including excavation and archival research (ACDSEH001)</p> <p>The range of sources that can be used in an historical investigation, including archaeological and written sources (ACDSEH029)</p> <p>The nature of sources for ancient Australia and what they reveal about Australia's past in the ancient period, such as the use of resources (ACDSEH031)</p>	<ul style="list-style-type: none"> • identifying different approaches to historical investigation such as the use of excavation and stratigraphy, oral history and use of data derived from radiocarbon dating • listing a range of sources (both archaeological and written) required in an historical investigation to develop a response to the question(s) being asked • generating a range of questions to investigate a source (for example, a shell midden in ancient Australia – where it was found, how long it was used for, what it reveals about technology and the use of environmental resources) •

Historical Skills	
Content Description	Elaboration/s
<p>Year 7</p> <p>Chronology, terms and concepts: Use historical terms and concepts (ACHHS206)</p> <p>Historical questions and research: Identify a range of questions about the past to inform a historical inquiry (ACHHS207)</p> <p>Identify and locate relevant sources, using ICT and other methods (ACHHS208)</p> <p>Analysis and use of sources: Identify the origin and purpose of primary and secondary sources (ACHHS209)</p> <p>Locate, compare, select and use information from a range of sources as evidence (ACHHS210)</p> <p>Draw conclusions about the usefulness of sources (ACHHS211)</p>	<ul style="list-style-type: none"> defining and using terms such as BC (Before Christ), AD (anno Domini), BCE (Before Common Era), and CE (Common Era); prehistory (before the period of textual recording) and history (the period beginning with named individuals and textual recording) defining and using concepts such as slavery, divine right, source (where a historian finds information) and evidence (the information that is used by the historian) posing questions of sources such as: 'Where does it come from?' 'How do we know?' 'What information does it provide?' 'What other sources might be needed?' identifying steps in the research process (for example, identifying information needed, locating that information, recording relevant information from sources) identifying information within a source that can be used as evidence to support an interpretation responding to questions about photographs, artefacts, stories, buildings and other sources to explain the past such as: 'Who wrote/produced this?' 'When?' 'Why?' 'What does it show about the past?' discussing the difficulties in identifying the origin and purpose of some sources differentiating between primary sources (those from the time of the event/person/site being investigated) and secondary sources (those that represent later interpretations) creating categories (that is, concepts) with which to organise information obtained from sources identifying a range of archaeological sources distinguishing between a fact and an opinion using strategies to detect whether a statement is fact or opinion, including word choices that may indicate an opinion is being offered (for example, the use of conditionals 'might', 'could', and other words such as 'believe', 'think', 'suggests')

GEOGRAPHY		
Inquiry Questions		
Year 7	<ul style="list-style-type: none"> How do people's reliance on places and environments influence their perception of them? What effect does the uneven distribution of resources and services have on the lives of people? 	
Year 8	<ul style="list-style-type: none"> How do the interconnections between places, people and environments affect the lives of people? 	
Knowledge and Understanding		
Content Description		Elaboration/s
Year 7	<p>The way that flows of water connects places as it moves through the environment and the way this affects places (ACHGK038)</p> <p>Economic, cultural, spiritual and aesthetic value of water for people, including Aboriginal and Torres Strait Islander Peoples and peoples of the Asia region (ACHGK041)</p>	<ul style="list-style-type: none"> investigating the environmental, economic and social uses of water and the effects of water as it connects people and places (for example, the effects of water diversion in the Snowy Mountains) exploring the multilayered meanings (material, cultural and spiritual wellbeing) associated with rivers, waterways, waterholes, seas, lakes, soaks and springs for Aboriginal and Torres Strait Islander Peoples
Year 8	<p>Spiritual, aesthetic and cultural value of landscapes and landforms for people, including Aboriginal and Torres Strait Islander Peoples (ACHGK049)</p>	<ul style="list-style-type: none"> exploring the multilayered meanings (material, cultural and spiritual wellbeing) associated with landscapes and landforms by Aboriginal and Torres Strait Islander Peoples investigating Aboriginal Dreaming stories and Legends of the Torres Strait concerning the formation, meaning and interconnection of landforms
Year 9	<p>The ways that places and people are interconnected with other places through trade in goods and services, at all scales (ACHGK067)</p>	<ul style="list-style-type: none"> investigating how and why places are interconnected regionally, nationally and globally through trade in goods and services
Year 10	<p>The Aboriginal and Torres Strait Islander Peoples' approaches to custodial responsibility and environmental management in different regions of Australia (ACHGK072)</p>	<ul style="list-style-type: none"> researching the role of Aboriginal and Torres Strait Islander Peoples in environmental management
Inquiry and Skills		
Content Description		Elaboration/s
Year 7 & 8	<p>Collecting, recording, evaluating and representing: Evaluate sources for their reliability and usefulness and select, collect and record relevant</p>	<ul style="list-style-type: none"> collecting geographical information from secondary sources (for example, thematic maps, weather maps, climate graphs,

	<p>geographical data and information, using ethical protocols, from appropriate primary and secondary sources (ACHGS048, ACHGS056)</p> <p>Interpreting, analysing and concluding: Apply geographical concepts to draw conclusions based on the analysis of the data and information collected (ACHGS052, ACHGS060)</p>	<p>compound column graphs and population pyramids, reports, census data and the media)</p> <ul style="list-style-type: none"> reviewing the results of an analysis to propose an answer to an inquiry question, using as an organiser at least one of the concepts of place, space, environment, interconnection, sustainability, scale or change
Year 9 & 10	<p>Collecting, recording, evaluating and representing: Evaluate sources for their reliability, bias and usefulness and select, collect, record and organise relevant geographical data and information, using ethical protocols, from a range of appropriate primary and secondary sources (ACHGS064, ACHGS073)</p> <p>Interpreting, analysing and concluding: Apply geographical concepts to synthesise information from various sources and draw conclusions based on the analysis of data and information, taking into account alternative points of view (ACHGS068, ACHGS077)</p>	<ul style="list-style-type: none"> collecting geographical information from secondary sources (for example, topographic maps, thematic maps, choropleth maps, weather maps, climate graphs, compound column graphs and population pyramids, scatter plots, tables, satellite images and aerial photographs, reports, census data and the media) testing conclusions by considering alternative points of view about an area of inquiry and providing a response using as organisers at least two of the concepts of place, space, environment, interconnection, sustainability, scale and change (Year 9) synthesising information from several sources through using as organisers at least two of the concepts of place, space, environment, interconnection, sustainability, scale and change (Year 10)

CIVICS AND CITIZENSHIP

Knowledge and Understanding

Year 7	<p>Citizenship, diversity and identity: How groups, such as religious and cultural groups, express their particular identities; and how this influences their perceptions of others and vice versa (ACHCK053)</p>	<ul style="list-style-type: none"> identifying the different ways that cultural and religious groups express their beliefs, identity and experiences (for example, through customs, practices, symbols, language, traditions and art, and virtual communities)
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ECONOMICS AND BUSINESS	
Inquiry Questions	
Year 7	<ul style="list-style-type: none"> Why is there a relationship between consumers and producers in the market?
Knowledge and Understanding	
Content Description	Elaboration/s
Year 7 The ways consumers and producers interact and respond to each other in the market (ACHEK017)	<ul style="list-style-type: none"> investigating the role and interactions of consumers and producers in the market (for example, using a simple circular flow of income model, demand, supply, price mechanism)
Year 8 The traditional markets of Aboriginal and Torres Strait Islander communities and their participation in contemporary markets (ACHEK028)	<ul style="list-style-type: none"> exploring traditional practices that enabled fast and expansive exchange in technology, ideas and rare and valuable goods within and between Aboriginal and Torres Strait Islander communities (for example, through trade, songlines and ceremony), and how this reinforced personal and group relationships
Economics and Business Skills	
Content Description	Elaboration/s
Year 7 Interpretation and analysis: Interpret data and information displayed in different formats to identify relationships and trends	<ul style="list-style-type: none"> interpreting tables, charts and graphs containing economic or business data to identify trends
Year 8 (ACHES023, ACHES034)	<ul style="list-style-type: none"> interpreting data in tables, charts and graphs to identify relationships

DESIGN AND TECHNOLOGIES	
Knowledge and Understanding	
Content Description	Elaboration/s
Year 7 & 8 Investigate the ways in which products, services and environments evolve locally, regionally and globally and how competing factors including social, ethical and sustainability considerations are prioritised in the development of technologies and designed solutions for preferred futures (ACTDEK029)	<ul style="list-style-type: none"> identifying and exploring properties and construction relationships of an engineered product or system, for example a structure that floats; a bridge to carry a load
Year 9 & 10 Investigate and make judgements on how the characteristics and properties of materials are combined with force, motion and energy to create engineered solutions (ACTDEK043)	<ul style="list-style-type: none"> explaining the way common machines combine properties of materials and force, motion and energy in, for example, cranes on building sites examining and explaining the interaction between material properties and function of a common system, such as car brakes

	Investigate and make judgements on how the characteristics and properties of materials, systems, components, tools and equipment can be combined to create designed solutions (ACTDEK046)	<ul style="list-style-type: none"> analysing the relationship between materials of properties, forces and safety in engineered systems such as bridges critiquing the effectiveness of the combinations of materials, forces, energy and motion in an engineered system such as a 3D printer critiquing the design of an existing product to identify environmental consequences of material selection
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VISUAL ARTS		
	Content Description	Elaboration/s
Year 7 & 8	<p>Experiment with visual arts conventions and techniques, including exploration of techniques used by Aboriginal and Torres Strait Islander artists, to represent a theme, concept or idea in their artwork (ACAVAM118)</p> <p>Develop ways to enhance their intentions as artists through exploration of how artists use materials, techniques, technologies and processes (ACAVAM119)</p>	<ul style="list-style-type: none"> combining and adapting materials, techniques, technologies and art making processes, reflecting upon techniques used by artists including Aboriginal and Torres Strait Islander artists Considering viewpoints – psychology: For example – Why and how does an artwork make you feel emotional? Can you apply a similar technique to your artwork? observing how artists select and apply different visual arts techniques to represent themes, concepts and ideas and considering how they could use these in their own art making Considering viewpoints – forms: For example – Why did the artist choose this style of representation? What other forms and styles suit this message? Considering viewpoints – meanings and interpretations: For example – Can you identify implied meaning from the symbols and codes within the artwork? What is a universal symbol that reflects contemporary youth culture, as you understand it? How important is it for symbols to translate across language? Considering viewpoints – critical theories: For example – Can you identify explicit and implicit meanings in artworks? What metaphor could you use to enhance the meaning of your artwork?
Year 9 & 10	Conceptualise and develop representations of themes, concepts or subject matter to experiment with their developing personal style, reflecting on the styles of artists, including Aboriginal and Torres Strait Islander artists (ACAVAM125)	<ul style="list-style-type: none"> developing representations by combining and adapting materials, techniques, technologies and art making processes exploring and applying ideas inspired by the style of other artists in their own artworks exploring and reflecting on the connections between their own artworks and artworks from different contexts, including Aboriginal and Torres Strait Islander artworks, for example, maintaining a reflective journal of their developing artwork

	<p>Present ideas for displaying artworks and evaluate displays of artworks (ACAVAM129)</p>	<ul style="list-style-type: none"> visiting galleries, art museums and public art displays, in formal and informal settings, to research the role of the curator and the elements of good display/exhibition, which they then apply to their own ideas for an exhibition of their own or others' artworks Considering viewpoints – philosophies and ideologies: For example – How does this artwork change your opinion on this issue? What art theory would you use to analyse this work? developing representational ideas as images, objects and spaces to highlight the interconnection of making and display, and how the artwork establishes interaction between the artist and the audience applying ethical understandings to innovation and invention of theme, concept or subject matter when making their collection of visual artworks for display, and consider exhibitions that include Aboriginal and Torres Strait Islander artworks
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SCIENCE		
Science Understanding		
Biological Sciences		
	Content Description	Elaboration/s
Year 7	<p>Classification helps organise the diverse group of organisms (ACSSU111)</p>	<ul style="list-style-type: none"> considering the reasons for classifying such as identification and communication grouping a variety of organisms on the basis of similarities and differences in particular features classifying using hierarchical systems such as kingdom, phylum, class, order, family, genus, species using scientific conventions for naming species
Year 10	<p>The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence (ACSSU185)</p>	<ul style="list-style-type: none"> outlining processes involved in natural selection including variation, isolation and selection describing biodiversity as a function of evolution investigating changes caused by natural selection in a particular population as a result of a specified selection pressure such as artificial selection in breeding for desired characteristics evaluating and interpreting evidence for evolution, including the fossil record, chemical and anatomical similarities, and geographical distribution of species

Earth and Space Sciences		
	Content Description	Elaboration/s
Year 7	Predictable phenomena on Earth, including seasons and eclipses, are caused by the relative positions of the sun, Earth and the moon (ACSSU115)	<ul style="list-style-type: none"> researching knowledges held by Aboriginal and Torres Strait Islander Peoples regarding the phases of the moon and the connection between the lunar cycle and ocean tides (OI.3, OI.5) Investigating Aboriginal and Torres Strait Islander Peoples' calendars and how they are used to predict seasonal changes (OI.3, OI.5) investigating natural phenomena such as lunar and solar eclipses, seasons and phases of the moon
Science Inquiry Skills		
	Content Description	Elaboration/s
Year 7	Questioning and predicting: Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge (ACSIS124)	<ul style="list-style-type: none"> recognising that the solution of some questions and problems requires consideration of social, cultural, economic or moral aspects rather than or as well as scientific investigation
	<p>Processing and analysing data and information: Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate (ACSIS129)</p> <p>Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence (ACSIS130)</p>	<ul style="list-style-type: none"> understanding different types of graphical and physical representation and considering their advantages and disadvantages describing the trends shown in collected data acknowledging, analysing and interpreting data and information from Aboriginal and Torres Strait Islander Peoples' understandings of Earth's systems and cycles comparing and contrasting data from a number of sources in order to create a summary of collected data identifying data which provides evidence to support or negate the hypothesis under investigation referring to relevant evidence when presenting conclusions drawn from an investigation

	<p>Evaluating: Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements (ACSIS131)</p>	<ul style="list-style-type: none"> discussing investigation methods with others to share ideas about the quality of the inquiry process
Year 8	<p>Questioning and predicting: Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge (ACSIS139)</p>	<ul style="list-style-type: none"> considering whether investigation using available resources is possible when identifying questions or problems to investigate recognising that the solution of some questions and problems requires consideration of social, cultural, economic or moral aspects rather than or as well as scientific investigation using information and knowledge from their own investigations and secondary sources to predict the expected results from an investigation
	<p>Processing and analysing data and information: Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate (ACSIS144)</p> <p>Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence (ACSIS145)</p>	<ul style="list-style-type: none"> explaining the strengths and limitations of representations such as physical models, diagrams and simulations in terms of the attributes of systems included or not included drawing conclusions based on a range of evidence including primary and secondary sources
	<p>Evaluating: Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements (ACSIS146)</p>	<ul style="list-style-type: none"> discussing investigation methods with others to share ideas about the quality of the inquiry process
Year 9	<p>Processing and analysing data and information: Use knowledge of scientific concepts to draw conclusions that are consistent with evidence (ACSIS170)</p>	<ul style="list-style-type: none"> consulting Aboriginal and Torres Strait Islander Peoples' histories and cultures that reveal scientific information about the past acknowledging and identifying the relationship between First Peoples' knowledges and contemporary science and the co-contributions in arriving at shared understanding when working "both-ways" suggesting more than one possible explanation of the data presented
	<p>Evaluating: Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific</p>	<ul style="list-style-type: none"> identifying gaps or weaknesses in conclusions (their own or those of others) identifying alternative explanations that are also consistent with the evidence

	ways to improve the quality of the data (ACSIS171)	
Year 10	Questioning and predicting: Formulate questions or hypotheses that can be investigated scientifically (ACSIS198)	<ul style="list-style-type: none"> evaluating information from secondary sources as part of the research process
	Processing and analysing data and information: Use knowledge of scientific concepts to draw conclusions that are consistent with evidence (ACSIS204)	<ul style="list-style-type: none"> using primary or secondary scientific evidence to support or refute a conclusion
	Evaluating: Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data (ACSIS205) Critically analyse the validity of information in primary and secondary sources and evaluate the approaches used to solve problems (ACSIS206)	<ul style="list-style-type: none"> evaluating the strength of a conclusion that can be inferred from a particular data set identifying alternative explanations that are also consistent with the evidence acknowledging the need to critically analyse scientific literature for potential cultural bias towards Aboriginal and Torres Strait Islander Peoples

Year 11-12 Queensland Senior Syllabus Links

This exhibition links to the QCAA Senior Syllabus and underpinning 21st Century skills in the subject areas of:

- Aboriginal and Torres Strait Islander Studies
- Ancient History
- Biology
- Economics
- Visual Art

Aligned Curriculum content is listed below to assist with excursion planning and support self-led exploration of the exhibition.

ABORIGINAL AND TORRES STRAIT ISLANDER STUDIES
Unit 1: Culture, identity and connections
Unit Objectives
<ul style="list-style-type: none"> • define and use terminology relating to culture, identity and connections within Aboriginal societies and Torres Strait Islander societies • demonstrate an understanding of Aboriginal societies and Torres Strait Islander societies using a holistic approach to identify and explain characteristics of, and influences on, these societies • analyse worldviews of Aboriginal peoples and Torres Strait Islander peoples that relate to viewpoints on culture, identity and connections within and across societies, and provide reasons for such viewpoints • consider and organise information from sources related to culture, identity and connections within and across Aboriginal societies and Torres Strait Islander societies • evaluate the significance of cultural interactions through assessing the influence of exchanges within or across Aboriginal peoples and Torres Strait Islander peoples
Culture, identity and connections
Subject matter
<ul style="list-style-type: none"> • define and use terminology, including <ul style="list-style-type: none"> - Country/Place - culture - identity - land - language - relationships - spiritualities - time • explain ways that individuals and groups identify, including <ul style="list-style-type: none"> - collective terms, for example <ul style="list-style-type: none"> ▪ Aboriginal peoples: clan, kin, regional names (e.g. Koorie, Murri), language names (e.g. Badulgal, Gungarri, Kooma) ▪ Torres Strait Islander peoples: clan, regional names (e.g. Eastern Islanders, Western Islanders), language names (e.g. Masigeg, Ugaram, Ugarem Le) - kinship - land - language - totems • understand cultural protocols with respect to Aboriginal peoples and Torres Strait Islander peoples, including

- community relationships
- identify and analyse worldviews related to Aboriginal peoples and Torres Strait Islander peoples, including
 - culture is dynamic and contextualised with respect to particular times, places and relationships
 - identity is the interconnection between land, language, culture, time, place and relationships
 - land, incorporating sea, sky, air and waterways, is fundamental to spirituality, e.g. The Rainbow Serpent, Malo's Law/Lore, Stars of Tagai
 - language is diverse and expressed in different ways, e.g. through art, ceremony, dance, oral traditions, song, symbols
 - time is conceptualised in diverse ways (rather than chronologically), e.g. The Dreaming/Dreamings by Aboriginal peoples, Augadth Time/Zogo Time by Torres Strait Islander peoples
 - place is significant and defined, e.g. Country/Place
 - relationships incorporate many dimensions, such as spiritual, environmental and cultural, as well as between people, e.g. trade
- consider and organise information from sources on culture, identity and connections related to Aboriginal societies and Torres Strait Islander societies
- evaluate the significance of connections between culture, identity, land, language, time and place for Aboriginal peoples and Torres Strait Islander peoples

ANCIENT HISTORY

Unit 1: Investigating the ancient world

Unit Objectives

- comprehend terms, concepts and issues in relation to archaeology and ancient societies
- devise historical questions and conduct research in relation to archaeology and the features of an ancient society
- analyse evidence from historical sources to show understanding about the ancient world
- synthesise evidence from historical sources to form a historical argument in relation to archaeology and ancient societies
- evaluate evidence from historical sources to make judgments about the ancient world

Topic 1: Digging up the past

Contextual study

- comprehend terms, concepts and issues in relation to
 - differences between primary and secondary sources as well as literary and non-literary sources
 - ways in which archaeological sites have been discovered
 - various methods of excavation, including grid excavation
 - ways in which evidence from the ancient world has been lost and rediscovered
- analyse evidence from historical sources to show understanding about
 - problems of authenticity, e.g. the identification and origin of ancient artefacts, human remains and documents
 - the condition of artefacts and the impact on their use as evidence
 - methods and results of scientific analysis (forensic techniques) and modern preservation of remains

Depth study

- comprehend terms, concepts and issues in relation to
 - methods of authentication, e.g. scientific and comparative dating techniques for documents and objects, and cross-referencing of ancient sources
 - the nature of the site/s, and the condition and extent of the remains
 - the role of museums in acquiring, collecting and storing artefacts/cultural materials
- analyse evidence from historical sources to show understanding about archaeological issues
- devise historical questions and conduct research
- synthesise evidence from historical sources to form a historical argument
- evaluate evidence from historical sources to make judgments about archaeological sites and issues, e.g.
 - the nature and significance of cultural property for the society to which it belongs, and arguments for and against the return of cultural property to descendants or peoples who claim ownership
 - the condition of human remains and how they were preserved, discovered and/or removed from where they were found; issues of conservation and preservation of the site/s, e.g. factors that threaten the integrity or survival of the ancient site (environmental factors, war, terrorism, pillaging, poverty); effectiveness and appropriateness of methods used to preserve, conserve and/or reconstruct the site/s; relevant national or international charters or conventions (e.g. UNESCO's Charters) and international efforts to protect sites of World Heritage significance
 - ethical issues relevant to the treatment, display and ownership of remains, e.g. the use of destructive methods of scientific analysis
 - the reconstruction of ancient site/s, e.g. painting, historical fiction, film, documentaries, museum displays, and virtual worlds, and understanding their use for propaganda

- contributions of museums to an understanding of ancient ways of life and the question of whose past is represented in museum displays and exhibitions

Concluding study

- comprehend terms, concepts and issues around the discovery, treatment and preservation of archaeological evidence
- evaluate evidence from historical sources to make judgments about modern cultural depictions of archaeology and archaeologists, e.g. in literature or films such as the *Indiana Jones* series and *The Mummy*

Topic 3: Art and architecture

Contextual study

- comprehend terms, concepts and issues in relation to
 - the geographical location, the nature of the environment and its influence on the society

Depth study

- comprehend terms, concepts and issues in relation to
 - the social structure, e.g. main social hierarchies, role and status of women and children, and attitude/s towards women, children and education
 - political institutions, e.g. organisation, the role and function of key political institutions and political positions, and key legal structures
 - economic activities, e.g. the nature and importance of economic activity, the organisation of free and indentured labour, and economic exchange
- devise historical questions and conduct research
- analyse evidence from historical sources to show understanding
- synthesise evidence from historical sources to form a historical argument
- evaluate evidence from historical sources to make judgments about
 - the nature of sources for art and architecture
 - themes and styles of art
 - the role and significance of art and architecture, public and private
 - evidence from the spread of particular forms of art and architecture in the ancient world through trade, the movement of peoples and conquest

Topic 5: Technology and engineering

Contextual study

- comprehend terms, concepts and issues in relation to
 - the geographical location, the nature of the environment and its influence on the society

Depth study

- comprehend terms, concepts and issues in relation to
 - the social structure, e.g. main social hierarchies, role and status of women and children and attitude/s towards women, children and education
 - political institutions, e.g. organisation, the role and function of key political institutions and political positions and key legal structures
 - economic activities, e.g. the nature and importance of economic activity, the organisation of free and indentured labour and economic exchange
- devise historical questions and conduct research
- analyse evidence from historical sources to show understanding
- synthesise evidence from historical sources to form a historical argument
- evaluate evidence from historical sources to make judgments about
 - key archaeological and written sources on technology and engineering for the society selected

- the nature of sources for technology and engineering
- technological developments in the construction material and methods related to buildings, structures and statues
- forms of technology and their impact on households and economic life, e.g. metallurgy, pottery, surgical tools, transport, water supply and sanitation
- use of technology in ancient times to access resources and control the environment

Concluding study

- evaluate evidence from historical sources to make judgments about the impact and legacy of technological innovations

Topic 7: Beliefs, rituals and funerary practices

Contextual study

- comprehend terms, concepts and issues in relation to
 - the geographical location, the nature of the environment and its influence on the society

Depth study

- comprehend terms, concepts and issues in relation to
 - the social structure, e.g. main social hierarchies, role and status of women and children and attitude/s towards women, children and education
 - political institutions, e.g. organisation, the role and function of key political institutions and political positions and key legal structures
 - economic activities, e.g. the nature and importance of economic activity, the organisation of free and indentured labour and economic exchange
- devise historical questions and conduct research
- analyse evidence from historical sources to show understanding
- synthesise evidence from historical sources to form a historical argument
- evaluate evidence from historical sources to make judgments about
 - key archaeological and written sources on beliefs, rituals and funerary practices for the society selected
 - the nature of sources for beliefs, rituals and funerary practices dominant beliefs and rituals
 - the influence and significance of beliefs and rituals

Concluding study

- evaluate evidence from historical sources to make judgments about the legacy of beliefs, rituals and funerary practices for the selected society and modern times

BIOLOGY

Unit 3: Biodiversity and the interconnectedness of life

Unit Objectives

- describe and explain biodiversity and ecosystem dynamics
- apply understanding of biodiversity and ecosystem dynamics
- analyse evidence about biodiversity and ecosystem dynamics
- interpret evidence about biodiversity and ecosystem dynamics

Topic 1: Describing biodiversity

Subject matter

Biodiversity

- recognise that biodiversity includes the diversity of species and ecosystems
- determine diversity of species using measures such as species richness, evenness (relative species abundance), percentage cover, percentage frequency and Simpson's diversity index
- use species diversity indices, species interactions (predation, competition, symbiosis, disease) and abiotic factors (climate, substrate, size/depth of area) to compare ecosystems across spatial and temporal scales
- explain how environmental factors limit the distribution and abundance of species in an ecosystem

Classification processes

- recognise that biological classification can be hierarchical and based on different levels of similarity of physical features, methods of reproduction and molecular sequences
- describe the classification systems for
 - similarity of physical features (the Linnaean system)
 - methods of reproduction (asexual, sexual — K and r selection)
 - molecular sequences (molecular phylogeny — also called cladistics)
- define the term clade
- recall that common assumptions of cladistics include a common ancestry, bifurcation and physical change

Topic 2: Ecosystem dynamics

Subject matter

Functioning ecosystems

- define ecological niche in terms of habitat, feeding relationships and interactions with other species
- understand the competitive exclusion principle
- analyse data to identify species (including microorganisms) or populations occupying an ecological niche
- define keystone species and understand the critical role they play in maintaining the structure of a community
- analyse data (from an Australian ecosystem) to identify a keystone species and predict the outcomes of removing the species from an ecosystem

Changing ecosystems

- analyse data from the fossil record to observe past ecosystems and changes in biotic and abiotic components
- predict the impact of human activity on the reduction of biodiversity and on the magnitude, duration and speed of ecosystem change

ECONOMICS

Unit 1: Markets and Models

Unit Objectives

- comprehend economic concepts, principles and models of the economic problem, economic flows and market forces
- select data and economic information from sources relevant to economic problems, economic flows and/or market forces
- analyse economic issues that involve economic problems, economic flows and/or market forces

Topic 1: The basic economic problem

Subject matter

- describe key concepts using economic terminology, including the ceteris paribus assumption, choice, economic growth, economic resources, efficiency, factors of production, opportunity cost, production possibility curve (frontier), productivity and scarcity
- describe the basic economic problem of relative scarcity and the need for decision-making by individuals, businesses and governments at local, state, national and international levels
- explain the concept of models in economics and how making assumptions aims to simplify and identify complex economic relationships
- identify assumptions and use the production possibility curve to explain, by illustrating in diagrammatic form, the concepts of scarcity, choice, opportunity cost, trade-offs, underutilisation of resources, efficiency, productivity, unemployment and economic growth
- analyse and evaluate the production possibility curve to show the effects of different economic events, e.g. improvements in health, education or productivity of labour, asymmetric technology advances, war and famine
- explain
 - ways that an economy attempts to solve the economic problem by considering the three basic economic questions — ‘what and how much to produce’, ‘how to produce’ and ‘for whom to produce’
 - the distinction between efficiency (use of resources) and equity (who owns the resources)

Topic 3: Market forces

Subject matter

- describe key concepts using economic terminology, including consumer sovereignty, elasticity, equilibrium, the law of demand and the law of supply
- explain
 - the concepts of a market and of consumer sovereignty
 - and apply the theory of demand and supply to determine market equilibrium, and express in diagrammatic forms
 - the significance of the ceteris paribus assumption with respect to the law of demand and supply
- explain
 - price elasticity of demand and the difference between elastic, inelastic and unitary elasticity, construct appropriate diagrams and apply to various situations
 - the factors affecting elasticity of demand, including necessities and luxuries, the existence of substitutes, the proportion of income spent on the good, and the length of time following a price change
- explain price elasticity of supply, and elasticities of demand (income and cross)

VISUAL ART

Unit 1: Art as lens

Unit Objectives

- implement ideas and representations to generate individual solutions for the depiction of the material world
- apply literacy skills to communicate understanding of visual language, expression and meaning in the work of self and others
- evaluate art practices, traditions, cultures, and theories to explore diverse figurative and non-figurative representations of the material world justify representation of artists' personal viewpoints
- experiment in response to artists' contemporary representations of people, place and objects
- create meaning through the knowledge and understanding of a range of two-dimensional, three-dimensional and time-based materials, techniques, technologies and art processes

Area of study: Developing

Subject matter

- develop new and expressive forms of representation as they generate solutions to visual problems
- implement ideas for visual responses that explore
 - direct observation to visually represent people, places, objects through techniques such as drawing, photographs, collecting, painting, collage, printmaking, video and animation
 - ways of looking at and representing people, places and objects to extend subject matter from realism to innovative abstraction using a range of processes, such as deconstruction, distortion, stylisation and reduction
- implement investigation of diverse art practices through teacher-facilitated inquiry questions
- create visual responses to communicate personal and contemporary ideas and become familiar with visual language, materials, techniques, processes and technologies of
 - three-dimensional artworks, such as colour, texture, form, surface, scale, mass, movement, volume, unity, symmetry and repetition

Area of study: Researching

Subject matter

- research visual communication of diverse art-making lenses or viewpoints as they react to stimulus
- analyse and compare past and present artworks through the contemporary context to interpret 21st century art ideas and issues, and how these challenge engagement, communication and meaning; through
 - making, students can test boundaries of traditional art practices; they reconceptualise, modify and explore appropriation of artworks and images; and investigate the impact and place of new technologies on art practices and experiences
 - responding, students examine new or different meaning and significance that may be assigned to artworks of the past; and question and re-evaluate traditionally held values and assumptions of art and representation
- analyse and compare artworks through the personal context to interpret emotions, sensory experiences, personal philosophy, beliefs and ideas, and how these contribute to engagement, communication and meaning through
 - making, students investigate their responses to the world around them, their personal interests, experiences and philosophies, and the impact these have on symbolism and practices
 - responding, students examine how artists are influenced by life and experiences, and consider how their own feelings and background influence their physical and emotional reactions as audience

- analyse and interpret artworks in teacher-directed, reverse chronology case studies to investigate and compare historical influences on contemporary artists and approaches

Area of study: Reflecting

Subject matter

- reflect on the impact of different lenses that filter and distort representations in artworks as they consider ideas and information, media, techniques and processes
- evaluate
 - how artists assign and represent symbolic value on various people, places, objects through traditional and non-traditional approaches in artworks
 - visual language, processes and intentions in artworks that purposely distort representations to emphasise and communicate the artists' viewpoint
- justify
 - individual art practice by documenting process to make meaningful connections and inform progress
 - how artists apply lenses to represent and communicate personal values and viewpoints in artworks
- participate in an authentic experience as artist or audience to reflect on diverse art practices, traditions, cultures and theories. Experiences that can be offered include
 - excursions, such as gallery visits

