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Rationale and Aims

Rationale

Geography is a structured way of exploring, analysing and explaining the characteristics of the places that make up our world, through perspectives based on the concepts of place, space and environment.

A study of geography develops students' curiosity and wonder about the diversity of the world's places and their peoples, cultures and environments. Students examine why places have their particular environmental and human characteristics, explore the similarities and differences between them, investigate their significance and meanings to people, explain how they change over time, and evaluate their futures.

Students of geography investigate the effects of location and distance on the characteristics of places, the consequences of the interconnections between places, the significance of spatial distributions, and the management of the space that is the surface of the earth.

Geography emphasises the role of the environment in supporting human life, the important interrelationships between people and environments, and the different understandings of these relationships.

Geography uses an inquiry approach to assist students to make meaning of their world. It teaches them how to ask distinctively geographical questions; to plan an inquiry and collect and evaluate information; to process, analyse and interpret that information and reach conclusions based on evidence and logical reasoning; to evaluate and communicate their findings; and to reflect on their inquiry and respond to what they have learned. Fieldwork, the mapping and interpretation of spatial distributions, and the use of spatial technologies are fundamental geographical skills. Through their inquiries students also develop a wide range of general skills and capabilities, including information and communication technology (ICT) skills, an appreciation of different perspectives, an understanding of ethical principles, a capacity for teamwork and an ability to think critically and creatively. These skills and capabilities can be applied in everyday life and to a variety of careers.

Students of geography use the subject's concepts to integrate knowledge from the natural sciences, social sciences and humanities and to build on their broad and holistic understanding of the world. They also gain the understanding and ability to question why the world is the way it is, to reflect on their relationships with and responsibilities to that world, and to actively participate in shaping sustainable futures.

Aims

The draft *Australian Curriculum: Geography* aims to ensure that students develop:

- a sense of wonder and curiosity about places, people, cultures and environments throughout the world
- a deep geographical knowledge of their own place, Australia, our region and the world
- the ability to think geographically, based on an understanding of the concepts of place, space, environment, interconnection, sustainability, scale and change
- the capacity to be competent, critical and creative users of geographical inquiry methods and skills
- as informed, responsible and active citizens who can contribute to the development of a sustainable world

Organisation

Content structure for Foundation to Year 12

Strands

The draft *Australian Curriculum: Geography* is organised into two interrelated strands: **Geographical Knowledge and Understanding** and **Geographical Inquiry and Skills**.

Geographical Knowledge and Understanding

This strand includes a study of environmental and human aspects of geography at local, national, regional and global scales. This strand involves the investigation of the facts, generalisations, principles, theories and models developed in geography. The geography curriculum recognises that this knowledge is dynamic and its interpretation can be contested, that people can come to different conclusions about the same questions, and that opinions and conclusions must be supported by evidence and logical argument.

This strand involves students developing the ability to see the relationships between geographical concepts (place, space, environment, interconnection, sustainability, scale and change), to construct explanatory frameworks to illustrate relationships, and to synthesise them into an integrated whole. It is also about applying this geographical knowledge to new situations or to solve problems by thinking and planning for action.

Geographical Inquiry and Skills

This strand promotes a process of inquiry by which students learn new geographical knowledge and deepen their understanding. This is developed through investigations that involve observations or questions (for example, about environmental, social, cultural and economic features) the collection and interpretation of information to develop conclusions; and reflection on the overall process. Inquiries may be undertaken by individual students, or collaboratively, and may vary in scale, geographic context, and the time taken for the investigation.

There is an emphasis on the techniques that geographers use in the field and in the classroom. Students learn to think critically about the methods used to obtain information and to analyse and interpret the information in order to communicate their findings.

Key skills which are progressively developed throughout the F-12 draft *Australian Curriculum: Geography* include (but are not limited to) formulating a question and research action plan that is of a specific geographical nature, developing observation recording skills including diagrams such as field sketches, interpreting and developing maps, tables, photographs, satellite images, diagrams, graphs and other data, using a variety of spatial technologies and communicating with appropriate and relevant geographical vocabulary.

The process of geographical inquiry and the associated geographical skills are described in the curriculum under five headings, which represent the stages of a complete investigation.

Over each two-year band, students should learn the methods and skills specified. Every investigation need not follow every step; the inquiry process may follow loops, in which students go back to an earlier stage to ask more questions or to undertake more analysis. Furthermore, not all inquiry requires the collection and processing of information, as the starting point could be a concept, or an ethical or aesthetic issue, which can be explored verbally. Many inquiries should start from the observations, questions and curiosity of students.

***Observing and questioning*:** Developing questions about something that has been observed, experienced or thought about.

***Planning, collecting and evaluating*:** Deciding how to investigate a question or find an answer to a problem, and identifying possible answers to test; collecting information from a variety of primary sources and secondary sources, such as text-based resources, statistics, images, maps, aerial photographs, satellite images, samples and objects, fieldwork, sketches, interviews, and reports; and evaluating information for reliability and bias.

***Processing, analysing, interpreting and concluding*:** Making sense of the information gathered through textual analysis and interpretation, by processing it into maps, tables, graphs and diagrams. Identifying order, diversity, trends, patterns, anomalies, generalisations and cause and effect relationships, using quantitative and qualitative methods appropriate to the type of inquiry; and interpreting the results of this analysis and developing conclusions.

***Communicating*:** Communicating the results of investigations using combinations of communication methods (verbal, audio, graphical, visual, mapping and text-based), which are appropriate to the subject matter, purpose and audience.

***Reflecting and responding*:** Reflecting on the findings of the investigation and relating these findings to existing knowledge; reflecting on the process of the inquiry, and on the strengths and weaknesses of the method of investigation chosen; deciding what action is needed in response to the results of the investigation, by applying the criteria of environmental sustainability, economic costs and benefits, and social justice; and reflecting on the actions.

Relationship between the strands

The two strands are integrated in the development of a teaching and learning program. The *Geographical knowledge and understanding* strand is developed year by year and provides the contexts through which particular skills are developed. The *Geographical inquiry and skills* strand is developed in bands of schooling (at Foundation and then at two-year intervals).

Concepts for geographical understanding

A number of major concepts underlie a geographical way of investigating and understanding the world. These are high level ideas that can be applied across the subject to identify a question, guide an investigation, organise information, suggest an explanation or assist decision making. They are the key ideas involved in teaching students to think geographically. The seven major concepts in the draft *Australian Curriculum: Geography* are place, space, environment, interconnection, sustainability, scale and change.

Place

A place is a specific part of the earth's surface that has been named and given meanings by people, although these meanings may differ. Places range in size from the home and local area to a major world region, and they are interconnected with other places in complex ways. The concept of place, however, goes well beyond the study of places. It is about a way of understanding, explaining and thinking. In the draft *Australian Curriculum: Geography* students develop an understanding of place by:

- progressing from describing the characteristics of places to explaining them. These characteristics include population, climate, economy, landforms, built environment, soils and vegetation, communities, water resources, cultures, minerals, landscape, and recreational and scenic quality. Some characteristics are tangible, such as rivers and buildings, while others are intangible, such as wilderness and socioeconomic status
- exploring people's aesthetic, emotional, cultural and spiritual connections with places; the role of places in their own feelings of identity, sense of place and belonging; and the ways they experience and use places
- recognising that places may be altered and remade by people, and that changes promoted by one group may be contested by others
- using the uniqueness of places to explain why the outcomes of environmental and human processes may vary, and why similar problems may require different strategies in different places.

Space

Space in geography, is the three-dimensional surface of the earth. While history studies change over time, geography studies difference across space and the rich diversity of environments, peoples, cultures and economies that exist together on the surface of the earth. In the draft *Australian Curriculum: Geography* students develop a progressively deeper understanding of the role of space by:

- investigating the spatial distribution of geographical phenomena and explaining them, often by looking for a similarity between several distributions

- learning how to evaluate the environmental, economic, social and political consequences of particular spatial distributions
- studying the influence of absolute and relative location on the characteristics of places and on people's lives
- recognising that improvements in transport and communication systems have greatly reduced the time taken to send goods, capital and information between places, which has increased the speed at which economic and cultural impacts spread around the world
- investigating the ways that space is structured, organised and managed by people for different purposes
- recognising that people perceive and use spaces differently, and may feel accepted and safe in some and unwelcome or unsafe in others
- exploring the ways space is represented, such as by maps, art, literature, films, songs, stories and dance, and how these representations influence people's perceptions.

Environment

The term environment, means our living and non-living surroundings. The features of the environment can be classified as natural, managed (as with farmland or a planted forest) or constructed. The concept of environment, however, is also about a way of understanding, explaining and thinking about the world. In the draft *Australian Curriculum: Geography* students develop an understanding of the concept of environment by:

- recognising the environment as a source of raw materials and ecosystem services (defined as environmental benefits for which humans do not pay, such as genetic diversity, pollination, nutrient cycling, protection from ultraviolet radiation and natural water purification)
- investigating the structure and functioning of this environment, through studies of some of the basic elements of weather, climate, hydrology, geomorphology, biogeography and soils
- examining the ways that people use, alter and manage environments
- exploring different worldviews about the relationship between humans and the environment, and applying the idea of stewardship to their responsibilities towards the environment
- investigating the effects of the environment on people and places through the opportunities and constraints it presents for economic development and human settlement
- reflecting on the extent to which the environment contributes to their sense of identity.

Interconnection

The concept of interconnection, in geography, emphasises that no object of geographical study can be viewed in isolation. It is about the ways that geographical phenomena are connected to each other through environmental processes, the movement of people, flows of trade and investment, the purchase of goods and services, cultural influences, the exchange of ideas and information, political power, international agreements and other types of interaction across space. These interconnections are complex, often reciprocal or interdependent, and have a strong influence on the characteristics of places. In the draft *Australian Curriculum: Geography* students use the concept of interconnection when:

- investigating how individual geographical phenomena are connected to each other within the one place, or between places
- exploring the networks that channel the interconnections between places, and which can advantage some places and disadvantage others
- learning to see their own locality in a wider national and global context, and gaining an understanding of the external factors that influence the locality's present and future
- using processes (sequences of cause and effect relationships) such the water cycle, urbanisation, weathering, erosion and deposition as explanations
- using the concept of a system, which is a group of interacting objects, materials or processes that form an integrated whole, to organise and understand relationships
- thinking broadly and deeply in their geographical investigations and looking for holistic and integrated explanations of phenomena, which helps students to see the areas of geography as connected rather than separate bodies of knowledge.

Sustainability

The concept of sustainability, in geography, is about the capacity of something to be maintained indefinitely into the future, for example, an ecosystem, a fishery, a water resource, a community, a way of life or the life support systems of the planet. As a concept in the curriculum, it is used to frame questions, evaluate the findings of investigations, guide decisions and plan actions about environments, places and communities. In the draft *Australian Curriculum: Geography* students develop an understanding of the concept of sustainability by:

- investigating the environmental functions that support human life and human activities
- studying the environmental processes that maintain these functions or cause their degradation, and assess their sustainability
- exploring the underlying attitudinal, demographic, social, economic and political causes and consequences of unsustainable situations

- investigating what is needed to achieve the goal of sustainability
- understanding why sustainability issues vary from place to place, and why different strategies may be needed to address similar issues in different places.

Scale

Scale is the hierarchy of divisions of spaces, from the personal to the local, national, regional[1] and global. Hierarchy of scales is one in which influences can work in both directions and levels can be bypassed. For example, local events can have global outcomes, as in the effects of local actions on global climate, and global changes can have local outcomes, as in the effects of global climate change on local agriculture. In the draft *Australian Curriculum: Geography* students use the concept of scale when:

- deciding on the appropriate level for an inquiry, as different questions require work at different scales
- testing relationships by repeating an investigation at a different scale, because generalisations made and relationships found at one level may be different at a higher or lower level of scale
- looking for relationships between phenomena at different scales, such as the influence of national economic policies on local economies, or of climate change on local environments
- observing that the scale at which things happen has changed over time. For example, manufacturing activities which were previously organised at a national scale now operate at a global scale, Australian cities compete for investment and tourists with cities around the world, and the holiday destinations of Australians are increasingly global. Furthermore, new forms of electronic communication are giving young people a different and more fluid perception of scale.

[1] Regional can mean both an area in between the local and the national, as in the New England region of New South Wales or the Wheatbelt region of Western Australia, or an area in between the national and the global, such as a large environmental feature, a large economic or cultural region, or a group of countries eg Asia.

Change

An awareness of change over time and space is important in helping students to understand what is happening around them, and to see their world as dynamic. In the draft *Australian Curriculum: Geography* students use the concept of change when:

- explaining the causes of geographical phenomena, by investigating how they have sequentially developed over space or in particular places
- mapping the movement of some features, such as a shift in a river channel, the retreat of a coastline or the relocation of a major facility
- investigating the typically uneven spatial pattern of technological, economic and social change, and the consequences of this unevenness
- using their growing understanding of the current processes of change to predict change in the future, to identify what would be needed to achieve particular preferred futures, and to consider how to mitigate or adapt to any unwanted changes.

Geography across Foundation to Year 12

Complementing the year-by-year description of the curriculum, this document provides advice on the nature of learners and the relevant curriculum across the following groupings:

Foundation–Year 2: typically students from 5 to 8 years of age

Years 3–4: typically students from 8 to 10 years of age

Years 5–6: typically students from 10 to 12 years of age

Years 7–10: typically students from 12 to 15 years of age

Senior secondary years: typically students from 15 to 18 years of age.

Foundation–Year 2

Curriculum focus: Exploring local and more distant places

Young students are curious about their personal world and are interested in exploring it. In Foundation to Year 2 the curriculum focuses on exploring the geography of their lives and their own place, to get students thinking about aspects of place, space and environment. They observe, describe and classify the features of their place, using models, maps, sounds, stories and drawings. Learning about their own place, and building a connection with it, also contributes to their sense of identity and belonging. While the local place should be the initial focus for learning, young students are also aware of and interested in more distant places and the curriculum provides opportunities to build on this curiosity. Students find out about the ways they are connected to places throughout the world through family and cultural groups in their community, the origin of familiar products, travel and world events.

Students' spatial thinking starts by learning about direction and distance, and about the ways that familiar things can be arranged in space for different purposes. They become aware of the distances between places and how distance constrains their activities. Students are introduced to the concept of environment through the exploration of the natural and built environment of their own and other places, by finding out about the environmental resources they use and where these come from, and by recognising that weather varies from place to place. They become aware of why the environment needs to be cared for.

Specific geographical skills which are introduced throughout the early years include creating, interpreting and using a map, using directional language, understanding scale and distance, and recording data related to weather.

Years 3–4

Curriculum focus: Investigating places

In Years 3–4 students are able to ask more complex geographical questions, and to contribute to planning their geographical inquiries and learning. They can provide reasons for what they think, and justify their conclusions. The curriculum focus shifts from exploration to more purposeful investigation. Students learn ways to describe and compare places, about different cultures, and to investigate how people perceive and think about places. They are aware of a larger number of places, and may have travelled to some of them. Their spatial knowledge is developed through studies of the major divisions of the earth's surface, of the location and main characteristics of the States, Territories and major cities of Australia, and of ways of explaining a spatial distribution. In conjunction with the history curriculum, they investigate several aspects of Aboriginal Peoples' and Torres Strait Islander Peoples' life before European colonial presence. Their environmental understanding is developed through studies of landforms, weather and their personal environmental impact. In their investigations, students collaborate to collect and record evidence, analyse, draw conclusions and communicate their findings, using appropriate geographical vocabulary.

Specific geographical skills in Years 3-4 build on those skills which are included in the early years and also include the introduction of the use of spatial technologies, map projections and the use of scale.

Years 5–6

Curriculum focus: Analysing and managing places

In Years 5–6, students become more complex, critical, analytical and evaluative in their thinking. They are increasingly aware of their wider community, and are learning to take on individual and group responsibilities. The curriculum focus is on analysing and managing places, and students should be involved in at least one investigation of a local environmental, social or planning issue and how it is managed. Their study of places near and far continues to expand, to those well beyond their immediate experience. They learn that places can be described and classified by their functions, gain a more complex view of how places are connected, and explore how to explain their characteristics. In Year 6 the study of scale shifts to the global, with an initial investigation of the distribution of the world's population, wealth and health. In their studies of the environment, students build their knowledge of weather into the concept of climate and its influence, and are introduced to the concept of environmental sustainability. Climate and weather are also considered in a study of bushfires and their management.

Specific geographical skills in Years 5-6 continue to build upon the skills introduced in the early years and throughout Years 3-4. They also include interpreting spatial distribution, and developing and interpreting graphs and charts related to climate and weather.

Years 7–10

Curriculum focus: regional and global places in an environmental and human geography context

As students move into adolescence they undergo a range of physical, cognitive, emotional and social changes. They develop a stronger sense of their individual identity, and often begin to question established conventions, practices and values. While often absorbed in their own lives, the interest of students also extends well beyond their own communities and they begin to develop concerns about wider issues. They are able to work with more abstract concepts, to consider increasingly complex ideas, and are keen to debate alternative answers and interpretations. The curriculum in Years 7–10 is designed to build on students' interests in much wider explorations of the world and ideas about the world. There is also a focus on citizenship, through studies of local, national and global issues that students can think about and identify actions that they could take.

In Years 7–10 students learn about the basic patterns, processes and principles that help them to understand the geography of their world. One sequence of topics focuses on environmental geography — on the environmental characteristics of places, environmental processes, and the human significance of the biophysical environment. It progressively develops students' understanding of the environmental functions that support human life and economic activity, and of the meaning of sustainability. The sequence begins with a study of environmental resources, with a focus on water, and continues with units on geomorphology and landscapes, and on biomes and food production. It ends with a unit on applying geographical skills, including spatial technologies, to the study of some major environmental challenges.

The second sequence of topics focuses on the human characteristics of places. It starts with a study of the distribution of population and settlement, which students investigate through the theme 'Why people live where they do?'. The sequence continues with an exploration of personal and community geographies. This further develops students' understanding of the concepts of place and space, through studies of communities and their populations, and of the effects of the internet on the connections between people and places. This unit also encourages students to think about ways of improving their local area, through studies of liveability. The Year 9 unit in this sequence introduces students to some basic ideas on the location of economic activities, through a study of the ways that their purchases of consumer goods link them to other places in the world. This theme then broadens out to explore a range of local-global connections. The sequence ends with a study of the geography of human well-being, which integrates population and economic geography around inequalities between places in human development and welfare at the global, national and local levels.

While Years 7–10 are organised around sequences of units that start with environmental or human topics, they should not be seen as separate streams of physical and human geography, as each unit integrates ideas from the two branches of geography.

Specific geographical skills across Years 7-10 build on those skills taught in Years F-6. Across Years 7-10 there is a greater emphasis on skills associated with processing, analysing and interpreting geographical data and information to draw conclusions in an inquiry.

Senior secondary years

The senior secondary curriculum has two main aims.

One aim is to enable students to extend their knowledge and understanding of geography by examining themes from previous years in much greater depth, or by exploring new areas. The curriculum content of the senior years has the potential to raise significant questions to challenge students. The senior years also have an applied focus on trends, planning, management and futures, appropriate for students nearing the end of their school years and approaching adulthood.

A second aim is to further develop students' knowledge of and ability to apply geographical inquiry, through a more advanced study of methods and skills, an exploration of more advanced ways of understanding and explaining, and a deeper engagement in decision making, evaluation and the discussion of ethics and values. A particular emphasis is placed on the use of spatial technologies in analysis, representation and modelling, and on more advanced methods of quantitative analysis and qualitative analysis.

The first unit examines global land cover change and its effects on the environment, including interrelationships with climate change and the oceans. It then investigates the ways people seek to reverse the negative effects of land cover change, such as revegetation programs, wetland restoration and urban environmental programs. The second unit focuses on the economic, social and environmental sustainability of urban and rural places. The third unit studies environments at risk from human activities, and environments that have risks for humans. The final unit explores different ways of thinking about globalisation and its effects on places and spaces.

Curriculum for Foundation to Year 10

Year level descriptions

Year level descriptions provide an overview of the content that is being studied at that year level. They also emphasise the interrelated nature of the two strands and the expectation that planning will involve integration of content from across the strands.

Content descriptions

The draft *Australian Curriculum: Geography* includes content descriptions at each year level. These set out the knowledge, understandings and skills that teachers are expected to teach and students are expected to learn. However, they do not prescribe approaches to teaching. The content descriptions have been written to ensure that learning is appropriately ordered and that unnecessary repetition is avoided. However, a concept or skill introduced at one year level may be revisited, strengthened and extended at later year levels.

Content elaborations

Content elaborations are provided in Foundation to Year 10 to illustrate and exemplify content and to assist teachers in developing a common understanding of the content descriptions. They are *examples only* and are not intended to be comprehensive content points that all students need to be taught.

Achievement standards

The achievement standards describe what students are typically able to understand and able to do. They describe expected achievement. Across Years Foundation to 10 the set of achievement standards describe a broad sequence of expected learning.

Achievement standards emphasise the depth of conceptual understanding, the sophistication of skills and the ability to apply essential knowledge expected of students.

Achievement standards will be accompanied by sets of annotated student work samples, as support material that illustrates actual achievement in relation to the achievement standard.

Diversity of Learners

The Australian Curriculum has been developed to ensure that curriculum content and achievement standards establish high expectations for all students. Every student is entitled to enriching learning experiences across all areas of the curriculum. Students in Australian classrooms have multiple, diverse and changing needs that are shaped by individual learning histories and abilities as well as cultural and language backgrounds and socioeconomic factors.

Students with Disability

The objectives of the Australian Curriculum are the same for all students. The curriculum should offer students with special education needs rigorous, relevant and engaging learning experiences. ACARA is committed to the development of a high-quality curriculum for all, while understanding the diverse and complex nature of students with disability. ACARA acknowledges the Disability Discrimination Act (1992) (DDA) and the Disability Standards for Education (2005), and its obligation as an education and training service provider to articulate the rights of students with disability to access, participate and achieve in the curriculum on the same basis as students without disability.

Students with disability can engage with the curriculum provided appropriate adjustments are made, if required, by teachers to instructional processes, the learning environment and to the means through which students demonstrate their learning. Adjustments to the complexity or sophistication of the curriculum may also be required for some students.

The Australian Curriculum sets out the sequence of learning expected across the years of schooling, Foundation to Year 10. Schools and teachers are able to use the curriculum flexibility to plan programs that take into account the different abilities of all students. To support teachers when planning programs for students with disability, ACARA will, in the first instance, develop content descriptions, content elaborations and achievement standards for students who are working towards the Foundation achievement standard in the learning areas of English, Mathematics and Health and Physical Education. This work reinforces the significance of communication and the general capabilities of literacy, numeracy, and personal and social competence as key enablers of learning.

English as an additional language or dialect

Many students in Australian schools are learners of English as an additional language or dialect (EAL/D). Learners of EAL/D are students whose first language is a language other than Standard Australian English and who require additional support to assist them to develop English language proficiency. While many EAL/D learners do well in school, a significant group of these learners leave school without achieving their potential.

EAL/D students come from diverse backgrounds and may include:

- overseas- and Australian-born children whose first language is a language other than English
- Aboriginal and Torres Strait Islander students whose first language is an Indigenous language, including traditional languages, creoles and related varieties, or Aboriginal English.

EAL/D learners enter Australian schools at different ages and at different stages of English language learning and have various educational backgrounds in their first languages. For some, school is the only place they use English.

The aims of the *Australian Curriculum: Geography* are ultimately the same for all students. However, EAL/D learners are simultaneously learning a new language and the knowledge, understanding and skills of the geography curriculum through that new language. They require additional time and support, along with informed teaching that explicitly addresses their language needs, and assessments that take into account their developing language proficiency.

The *English as an Additional Language or Dialect: Teacher Resources* has been produced to support teachers as they develop teaching and learning programs using the Australian Curriculum. It describes four phases of language proficiency that will enable Geography teachers to identify the typical language skills and understandings of their EAL/D students. Advice for teachers about cultural and linguistic considerations related to the Geography curriculum and teaching strategies supportive of EAL/D students will help make the content of the Geography curriculum accessible to EAL/D students.

General Capabilities

The knowledge, skills and dispositions students need to succeed in life and work in the twenty-first century have been identified in the Australian Curriculum as general capabilities. There are seven general capabilities:

- literacy
- numeracy
- competence in information and communication technology (ICT)
- critical and creative thinking
- ethical behaviour
- personal and social competence
- intercultural understanding.

Throughout their schooling, students develop and use these capabilities in their learning across the curriculum, in co-curricular programs and in their lives outside school.

General capabilities and learning areas have a reciprocal relationship. Learning areas provide opportunities for students to develop and use general capabilities. Similarly, wherever general capabilities are made explicit in learning areas, they can enrich and deepen learning and help students see its interconnectedness. In the draft *Australian Curriculum: Geography* each of the seven general capabilities is embedded (where appropriate) in the content descriptions or elaborations. There are further opportunities to develop the general capabilities through appropriate teaching activities.

Literacy

Students become literate as they develop the skills to learn and communicate confidently at school and to become effective individuals, community members, workers and citizens. These skills include listening, reading, viewing, writing and speaking, and creating print, visual and digital materials accurately and purposefully within and across all learning areas.

The draft *Australian Curriculum: Geography* provides opportunities for the development of all these literacy skills. From the Foundation Year onwards, students use a wide variety of printed, visual and digital materials to help them learn about places, especially those they have never experienced, and they explore imagined places through stories and other literature. They learn how to evaluate these resources and to recognise how language can be used to manipulate meaning. They develop oral skills through discussion, role plays, debates and presentations. The development of skills in producing graphical and visual materials is achieved through work with maps, diagrams, photographs and remotely sensed and satellite images. Students also progressively practice geography's scientific and expressive modes of writing, along with the vocabulary of the discipline, and learn appropriate ways of

communicating information and ideas to different audiences.

Numeracy

Students become numerate as they develop the capacity to recognise and understand the role of mathematics in the world around them and the confidence, willingness and ability to apply mathematics to their lives in ways that are constructive and meaningful.

The draft *Australian Curriculum: Geography* provides opportunities to apply mathematical knowledge, understanding and skills in geographical analysis, by counting and measuring, constructing and interpreting tables and graphs, calculating and interpreting statistics, and using statistical analysis to test relationships between variables. In using maps, students work with the numerical concepts of grids, scale, distance, area and projections.

Information and communication technology (ICT) competence

Students develop ICT competence as they learn to use ICT effectively and appropriately when investigating, creating and communicating ideas and information at school, at home, at work and in their communities.

In addition, the draft *Australian Curriculum: Geography* provides opportunities for students to enhance their information and communication technology competence by exploring the effects of these technologies on places, on the location of economic activities and on people's lives, and to understand the geographical changes produced by the increasing use of technology

Critical and creative thinking

Students develop critical and creative thinking as they learn to use their knowledge and skills to generate new questions and find solutions for new problems. Students learn to think broadly and deeply, using reason and imagination to direct their thinking for different purposes. In the context of schooling, critical and creative thinking are integral to activities that require reason, logic, imagination and innovation.

The draft *Australian Curriculum: Geography* develops students' ability to think logically, critically and creatively. They learn how to think logically in evaluating and using evidence, testing explanations and analysing arguments, and to think deeply about questions that do not have straightforward answers. Senior secondary students learn decision-making methods and strategies to help them think analytically and logically. They learn the value and process of developing creative questions, the importance of speculation, and to be creative and imaginative in investigations and fieldwork. The curriculum also stimulates students to think creatively about the ways in which the places and spaces they use might be better designed, and about possible, probable and preferable futures.

Ethical behaviour

Students develop ethical behaviour as they learn to understand and act in accordance with ethical principles. This includes: understanding the role of ethical principles, values and virtues in human life, acting with moral integrity, acting with regard for others, and having a desire and capacity to work for the common good.

The draft *Australian Curriculum: Geography* provides opportunities for students to investigate current geographical issues and evaluate their findings against the criteria of environmental sustainability, economic viability and social justice. These criteria raise ethical questions about human rights and citizenship, such as who bears the costs and who gains the benefits, and about group and personal responsibilities. By exploring such questions, students develop informed values and attitudes and become aware of their own roles and responsibilities as citizens. When undertaking fieldwork, students learn about ethical procedures for investigating and working with people and places, including Aboriginal Peoples' and Torres Strait Islander Peoples'. When thinking about the biophysical environment, students consider their responsibilities to protect other forms of life that share the environment.

Personal and social competence

Students develop personal and social competence as they learn to understand and manage themselves, their relationships, lives, work and learning more effectively. This involves recognising and regulating their emotions, developing concern for and understanding of others, establishing positive relationships, making responsible decisions, working effectively in teams and handling challenging situations constructively.

The draft *Australian Curriculum: Geography* will use inquiry-based learning to develop students' capacity for self-management. This gives students a role in directing their own learning and in planning and carrying out investigations, and enables them to become independent learners who can apply geographical understanding and skills to decisions they will have to make in the future. Through working cooperatively with others in the classroom and in the field, students develop their interpersonal skills, and learn to appreciate the different insights and perspectives of other group members.

Intercultural understanding

Students develop intercultural understanding as they learn to understand themselves in relation to others. This involves students valuing their own cultures and beliefs and those of others, and engaging with people of diverse cultures in ways that recognise commonalities and differences, create connections and cultivate respect between people.

The draft *Australian Curriculum: Geography* provides opportunities for students to gain a more accurate understanding of other places and of the lives, cultures, values and beliefs of their peoples. Students can have stereotyped views of other places and peoples from an early age and, unless challenged, these stereotypes can be difficult to shift. Through their

study of other places, including those countries that migrants to Australia have come from, students will come to recognise their similarities to other people, and to better understand their differences.

Cross-curriculum priorities

There are three cross-curriculum priorities in the Australian Curriculum:

- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia's engagement with Asia
- Sustainability.

The cross-curriculum priorities are embedded in the curriculum and will have a strong but varying presence, depending on their relevance to each of the learning areas.

Aboriginal and Torres Strait Islander histories and cultures

Aboriginal and Torres Strait Islander communities are strong, rich and diverse. Aboriginal and Torres Strait Islander Identity is central to this priority and is intrinsically linked to living, learning Aboriginal and Torres Strait Islander communities, deep knowledge traditions and a holistic world view.

A conceptual framework based on Aboriginal and Torres Strait Islander Peoples' unique sense of Identity has been developed as a structural tool for the embedding of Aboriginal and Torres Strait Islander histories and cultures within the Australian curriculum. This sense of Identity is approached through the interconnected aspects of Country/Place, People and Culture. Embracing these elements enhances all areas of the curriculum.

The Aboriginal and Torres Strait Islander priority provides opportunities for all learners to deepen their knowledge of Australia by engaging with the world's oldest continuous living cultures. This knowledge and understanding will enrich their ability to participate positively in the ongoing development of Australia.

Australia's unique geography is the product of ancient biophysical environments; the long and continuous history of its Indigenous peoples; the more recent influences of diverse settler and migrant cultures; and the equally diverse ways that Aboriginal and Torres Strait Islander communities have adapted to, or sought to negotiate their position in, a changing world. Geography provides an opportunity to include important aspects of Aboriginal Peoples' and Torres Strait Islander Peoples' knowledge and ways of knowing into the Australian curriculum. By finding out how different Aboriginal and Torres Strait Islander communities manage their biophysical environment, students can learn from the experience of their thousands of years of occupation of this land. By learning about Aboriginal Peoples' and Torres Strait Islander Peoples' perceptions of and attachments to Country/Place, students can gain a deeper understanding of the significance of place and belonging in human life, and learn that there are different ways of thinking about and interacting with the biophysical environment and its resources. By reading or listening to Aboriginal and Torres Strait Islander explanations of the origins of particular landforms, students can gain a deeper appreciation of ways of experiencing landscapes.

The draft *Australian Curriculum: Geography* incorporates the nature of Aboriginal Peoples' and Torres Strait Islander Peoples' settlement and use of the land before European colonial presence, and the abrupt changes in their locations and lives that resulted from occupation. It examines the continuing influence of Aboriginal Peoples' and Torres Strait Islander Peoples' on Australian places, and their role in environmental management and regional economies. The study of Aboriginal Peoples' and Torres Strait Islander Peoples' also contribute to an understanding of spatial inequalities in human welfare, sustainable development, remoteness and human rights. In addition, the geography curriculum provides some opportunities for Aboriginal and Torres Strait Islander students to study topics of particular relevance to them.

Asia and Australia's engagement with Asia

The Asia and Australia's engagement with Asia priority provides a regional context for learning in all areas of the curriculum. China, India and other Asian nations are growing rapidly and the power and influence they have in all areas of global endeavour is extensive. An understanding of Asia underpins the capacity of Australian students to be active and informed citizens, working together to build harmonious local, regional and global communities, and to build Australia's social, intellectual and creative capital**.**

This priority is concerned with Asia literacy for all Australian students. Asia literacy develops knowledge, skills and understanding about the histories, geographies, cultures, arts, literatures and languages of the diverse countries of our region. It fosters social inclusion in the Australian community. It enables students to communicate and engage with the peoples of Asia, so that they can effectively live, work and learn in the region. Australia now has extensive engagement with Asia in areas such as trade, investment, immigration, tourism, education and humanitarian assistance and this engagement is vital to the prosperity of all Australians.

The study of Asia is an essential part of the draft *Australian Curriculum: Geography*. Students investigate and explore Asian places, and learn about the ways in which Australia and Asia are interconnected. A geographical perspective enables them to study Asia as an important region of the world, as individual countries, as regions within countries, and at the local level. In particular, geography enables students to learn about the diversity between and within the countries of Asia, and helps to counter stereotypes and to foster intercultural understanding. By examining the characteristics of Asian places at these different scales, a study of geography leads to a growing understanding of the varied environments, peoples, economies and cultures of Australia's neighbours. Also, by investigating Asian perceptions of the world, students learn to see that world in other ways.

Sustainability

Sustainability is about the ongoing capacity of earth to maintain all life.

Sustainable patterns of living meet the needs of the present, without compromising the ability of future generations to meet their own needs. Actions to improve sustainability are both individual and collective endeavors, shared across local and global communities. They necessitate a renewed and balanced approach to the way humans interact with each other and the environment.

Education for sustainability develops the knowledge, skills and values necessary for people to act in ways that contribute to more sustainable patterns of living. It is futures-oriented, focusing on protecting environments through action that recognises the relevance and interdependence of environmental, social, cultural and economic considerations.

In the draft *Australian Curriculum: Geography*, sustainability is not only a cross-curriculum priority but also one of the seven organising concepts. Student learning will incorporate the source, sink and service function of the environment that support human life and human activities, and consider what sustainability means for each of these functions. A spiritual function and relationship to the environment also has an influence upon land use. Students will integrate their study of biophysical processes with investigations of the attitudinal, demographic, social, economic and political influences on human use of the environment, in a holistic approach to understanding. Students will examine how sustainability issues and strategies vary from place to place, evaluate these strategies for their effects on the environment, economic and society and consider what they can do to promote sustainability.

Implications for teaching, assessment and reporting

The draft *Australian Curriculum: Geography* emphasises inquiry-based learning and teaching, and opportunities for student-led questioning and investigation should be provided at all stages of schooling. The curriculum should also provide opportunities for fieldwork at all stages, as this is an essential component of geographical learning. Fieldwork is any study undertaken outside the classroom, and could be within the school grounds, around the neighbouring streets, or in more distant locations. These teaching and learning methods should be supported by forms of assessment that enable students to demonstrate their ability to think geographically and apply geographical skills.

Students' interest in geographical learning should be stimulated by a wide variety of activities, such as field trips, interpretation of remotely sensed images, reading literary accounts of places, statistical analysis, role plays and class debates. Learning should also emphasise the ability to understand, explain, appreciate and use knowledge, rather than simply reproduce it. The learning of skills should be made meaningful by using them to answer questions or communicate information, and this will help to connect the two strands of the curriculum.

The draft *Australian Curriculum: Geography* avoids prescribing specific case studies that all students must undertake. In early primary school the places studied should include the local area and places which students are aware through visits, the origins of their families, their classmates from other places, the media, and books they are reading. In upper primary and in secondary school teachers should choose case studies from a variety of countries, including Asia. Some of these countries could be those with the strongest connections to the region where the school is located. When using case studies from other countries, teachers should ensure that students gain a balanced knowledge of those countries. For example, they should know that the Amazon Rainforest in Brazil is more than a simple example of deforestation.

Geography: Foundation to Year 6

Foundation Year

Big idea: *Where we live*

Year Description:

The Foundation curriculum builds student's understanding of places. Students explore the place in which they live and places that they know. They observe natural features and built features of these places and consider places that are special to them. Space is introduced when students observe how places and objects are arranged, and experiment with different ways of arranging familiar spaces, like the classroom. The study of weather in science is extended through discussion of how the daily weather influences the location of activities. Students are encouraged to ask questions about the world that they can answer through collective inquiry involving observation and play. They will be introduced to the stages of inquiry by reflecting on how their thinking has changed.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
People live in different places that have natural features and built features	• discussing features of a place and identifying some features of the local place that are either natural or built • recognising that places are shared by people who live in them • recognising that the people who live in a place may come from other parts of the world, such as Asia • exploring the features of familiar places or places that they have questions about, and finding these places on simple maps
People have special places and care for places	• describing places that the student recognises as 'special', for example, their bedroom or the local park • identifying people responsible for the care of their place and other places they talk about, for example, finding out who cares for the habitat of a favourite animal

Space	
Places and objects are located and arranged in space and these can be identified on a map	• identifying some of the places and features that they pass on their way from home to school • creating a map to represent their journey from home to school • investigating the layout of spaces such as classrooms, playgrounds and bedrooms, and exploring ways to arrange them for different purposes, either virtually or through play
Environment	
Changes in the weather influence people's activities	• discussing how seasons and changes in the weather affect what people do and the locations they choose to complete the activities in, for example, where they live, places they go, food they eat, sports they play and clothes they wear

Geographical Inquiry and Skills (Foundation)

Content description	Elaborations
Observing and questioning	
Pose questions about place, space and environment	• having individual and collective opportunities to ask questions about their world and responding to stimulus that builds curiosity • responding to questions posed about place, space and environments • talking about what they already know or think about the topic of inquiry and what they want to learn, and identifying questions that will enable students to build from prior learning and understanding
Planning, collecting and evaluating	
Observe familiar places and explore other information sources	• participating in fieldwork that requires observing and identifying features of the local place, such as plants, animals or the layout of a place • using a range of secondary sources to play and increase their background knowledge of place, space and environment, for example, through puzzles, digital and multimedia applications • making observations on the layout of a classroom or play area, or the arrangement of furniture at home for different purposes
Collect information about the school or a favourite place in the local area	• collecting and recording information about how different parts of the school are used, for example, areas that are used for physical activities, for storage or for reading
Processing, analysing, interpreting and concluding	
Share and sort observations and information	• using pictures, images or sounds to represent features of the local place and to classify them as natural features or built features • creating a class chart of favourite places in the school or local area

Understand that space is arranged in different ways	• representing different spatial arrangements using toys, models, tracing around objects or drawing picture symbols on picture maps • comparing different spatial arrangements in relation to their purpose for example how the classroom looks when set up for different activities • using directional language to describe spatial arrangements such as how to get from the classroom door to the book corner
Communicating	
Share observations and ideas	• presenting observations or ideas using a variety of oral, graphic, written or digital communication methods
Reflecting and responding	
Recognise the stages of the inquiry process	• discussing what they have learnt through their inquiry, such as through keeping a class journal at each stage of the inquiry, creating an audio diary as a class or building a photo-story
Reflect on their learning and ask further questions	• demonstrating what they have learned and what else they would like to know, for example, by showing a class display or sharing work samples

Foundation Year Achievement Standard

Achievement Standard
By the end of the Foundation Year, students describe the key characteristics of some familiar places. They explain how particular places are special to them and how they can be cared for. They locate and represent places and features on simple maps. They can talk about how weather has an effect on life in a place. Students can represent and describe the layout of familiar places. Students pose and answer questions about their world by observing familiar places. They sort their observations and represent them using a given format. Students talk about how their thinking has changed.

Year 1

Big Idea: Not everywhere is the same

Year Description:

The Year 1 curriculum expands the understanding of familiar places explored in Foundation. Students are guided to see familiar places as part of bigger places and they begin identifying how places change. Spatial understanding is expanded from exploring the arrangement of space in Foundation to recognising ways that places are used. Students learn more about the environmental features of places, and begin to consider ways of caring for the environment. The inquiry process is guided and students are introduced to geographical tools that help them develop their skills and answer their questions.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
Places are named areas of the earth's surface	• naming known places in Australia and locating them on a map • talking about places that they know or are aware of, such as a place they have visited or heard about • identifying the Asian region on a map and recognising that Australia is part of the region
Smaller places are part of larger places and places are defined at different scales	• studying addresses to identify the larger area to which their home belongs
Aboriginal Peoples and Torres Strait Islander Peoples are the first people of their respective Country/Place	• identifying local Aboriginal Country or Countries on a map • identifying and locating the five Torres Strait cultural groups on a map
Places have characteristics that can change over time	• observing changes in the local place and identifying whether they happen quickly or slowly, for example, new building construction in the local area, the growth of vegetables in a school garden or the effects of seasonal changes to the school grounds

Space	
Space has different types of characteristics and uses	• exploring the different ways in which spaces are used, for example, residential, retail or recreational purposes • listing the different ways in which spaces in the school are used, such as, for recess, lunch or sport
Environment	
Environmental features of places can be observed, described and classified in different ways	• exploring the local area or school grounds and classifying its features • discussing the differences between features of environments such as natural features, built features or managed features and classifying environment features in other ways, such as seasonal or permanent, warm or cool, sunny or shady • recognising environmental features on maps such as rivers, mountains, cities, oceans, countries
People affect the environments in which they live	• recognising the need to care for places and explaining the ways this can be done, for example, by volunteer groups establishing a community garden • listing some of the positive and negative effects that people have on the environment

Geographical Inquiry and Skills (Years 1 and 2)

Content description	Elaborations
Observing and questioning	
Pose and respond to questions for an inquiry, based on a variety of question stems and stimulus	• forming questions about a stimulus based on question stems such as what, when, where, how, why, what impact, could it happen again, how should it be, what can we do, how do you think others feel, what if, how many? • recording their current knowledge and opinion about the topic and discussing what they want to learn
Planning, collecting and evaluating	
Participate in a guided inquiry and using a range of information sources	• using fieldwork within and beyond the local area to observe features, for example, the number and size of shops and services, types of plants and animals and uses of land • using a range of geographical tools to develop their skills and build background knowledge, locate and learn about a place or research an issue • recording information about familiar places on simple plans and maps using pictorial symbols or colour, for example, to indicate on a map the places they have been in the local area or creating a plan for a new park
Collect information about the local area	• using fieldwork to identify the number of people who use different school entrances or to measure and record rainfall and temperature • gathering information about life in other places, for example, online data about weather or population • undertaking a class survey to identify different points of view about place, space or environment, for example, the best location for a new piece of playground equipment

Processing, analysing, interpreting and concluding	
Sort information and identify patterns	• collating data and drawing graphs, for example, column, bar or picture graphs, surveying people to see how far they will travel for different activities • using pictures and maps or writing points to compare and contrast life in different places • plotting features of places or environments on outline maps and interpreting maps to identify patterns or relationships, for example, there are more shops near bigger populations, hottest places are near the equator
Draw conclusions based on their investigations and share these conclusions	• posing generalisations, based on their investigation, for example, young children use the play equipment more than the oval, distant places are connected by highways • considering reasons for what they have found, for example, why people, plants or animals live in a particular area, why we have a particular number of shops in a local area • suggest consequences based on what they have found, for example, if we empty the bins more often, there will be less litter
Communicating	
Present findings, using appropriate communication methods, geographical tools and skills and geographical vocabulary	• presenting observations or ideas using a variety of oral, graphic, written or digital communication methods • using geographical vocabulary, including positional language, or the specific name for a type of map

Reflecting and responding	
Review their inquiry process in order to identify ways of improving the process for next time	• reviewing each stage of the inquiry process through an account or a talk or a journal and discussing what they did, what they enjoyed or learned from the process
Review their learning and determine what they could do next	• reflecting on how their understanding and knowledge has changed through the inquiry, and sharing this with other students • planning individual or collective action based on what has been learned, for example, to make a display in the classroom, make posters about litter for the school, make a personal choice to recycle, plan more research on the topic

Year 1 Achievement Standard

Achievement Standard
By the end of Year 1, students explain how some places are different in their use, and change over time. They describe the different environmental features of places and explain how people can have an effect upon places and the environments within them. Students pose and respond to questions in a guided inquiry using information sources provided. They use data and images to draw conclusions about places. They present their findings using a variety of geographical texts (oral, visual, written).

Year 2

Big Idea: Links to our world

Year Description:

The Year 2 curriculum builds on student learning about places in earlier years by exploring people's connections with other places. Students then expand their geographical knowledge by finding out about these other places and using an increasing variety of information sources. Their spatial understanding is extended from reviewing the use of spaces to examining how distance influences the places they go to. Year 2 learning about environment builds on the Foundation study of weather and students learn about the weather in different places. Students apply their previous learning about environment as they recognise the environment as the source for things they use and consider how significant places are protected. The inquiry process continues to be guided and students are introduced to geographical tools and skills that help them answer their questions.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
People are connected to other places	• identifying some of the ways that people are connected to other places that are close or distant, for example Australian people having a connection with the Asian region through family, friends or sport
Space	
Distance has an influence on where we go, how often and for what purpose	• exploring the relationship between the distance of places and when they are visited, for example, walking to the local park every day but travelling to a bigger park only occasionally
Environment	
The environment is the source of every material thing we use or consume	• identifying the sources of some of the material things they use or consume, such as wood to make paper • understanding the principles of reduce, reuse, recycle and replace and how they relate to caring for the environment

The significance of an environment or place contributes to how it is managed or used	• exploring heritage sites, such as World Heritage sites, and investigating how they are protected or how they can be used • exploring features of different environments that are of local relevance and investigating how they might be managed or cared for, for example, rivers or national parks
Weather can be described and measured by temperature, sunshine, rainfall and wind	• creating a weather chart over the period of a week or month, checking daily weather forecasts from newspapers or other information sources and discussing the different weather patterns that occur around Australia

Geographical Inquiry and Skills (Years 1 and 2)

Content description	Elaborations
Observing and questioning	
Pose and respond to questions for an inquiry, based on a variety of question stems and stimulus	• forming questions about a stimulus based on question stems such as what, when, where, how, why, what impact, could it happen again, how should it be, what can we do, how do you think others feel, what if, how many? • recording their current knowledge and opinion about the topic and discussing what they want to learn
Planning, collecting and evaluating	
Participate in a guided inquiry and using a range of information sources	• using fieldwork within and beyond the local area to observe features, for example, the number and size of shops and services, types of plants and animals and uses of land • using a range of geographical tools to develop their skills and build background knowledge, locate and learn about a place or research an issue • recording information about familiar places on simple plans and maps using pictorial symbols or colour, for example, to indicate on a map the places they have been in the local area or creating a plan for a new park
Collect information about the local area	• using fieldwork to identify the number of people who use different school entrances or to measure and record rainfall and temperature • gathering information about life in other places, for example, online data about weather or population • undertaking a class survey to identify different points of view about place, space or environment, for example, the best location for a new piece of playground equipment
Processing, analysing, interpreting and concluding	
Sort information and identify patterns	• collating data and drawing graphs, for example, column, bar or picture graphs, surveying people to see how far they will travel for different activities • using pictures and maps or writing points to compare and contrast life in different places • plotting features of places or environments on outline maps and interpreting maps to identify patterns or relationships, for example, there are more shops near bigger populations, hottest places are near the equator

Draw conclusions based on their investigations and share these conclusions	• posing generalisations, based on their investigation, for example, young children use the play equipment more than the oval, distant places are connected by highways • considering reasons for what they have found, for example, why people, plants or animals live in a particular climate, why we have a particular number of shops in a local area • suggest consequences based on what they have found, for example, if we empty the bins more often, there will be less litter
Communicating	
Present findings, using appropriate communication methods, geographical tools and skills and geographical vocabulary	• presenting observations or ideas using a variety of oral, graphic, written or digital communication methods • using geographical vocabulary, including positional language, or the specific name for a type of map
Reflecting and responding	
Review their inquiry process in order to identify ways of improving the process for next time	• reviewing each stage of the inquiry process through an account or a talk or a journal and discussing what they did, what they enjoyed or learned from the process
Review their learning and determine what they could do next	• reflecting on how their understanding and knowledge has changed through the inquiry, and sharing this with other students • planning individual or collective action based on what has been learned, for example, to make a display in the classroom, make posters about litter for the school, make a personal choice to recycle, plan more research on the topic

Year 2 Achievement Standard

Achievement Standard
By the end of Year 2, students explain that they are connected to other places and that distance influences people's use of a place. They recognise that the environment is the source of everything they use, suggest consequences of consumption and examine how the significance of an environment contributes to its use. Students pose and respond to several questions using fieldwork and information sources provided. They collect and sort their information to identify patterns and draw conclusions. When communicating their findings, students use geographical tools and geographical vocabulary. They talk about how their learning has changed.

Year 3

Big Idea: How we live

Year Description:

The Year 3 curriculum for geography builds on previous learning about places as students are guided to describe and compare places in a geographic way. Students build on their learning about links between people and places as they examine the personal and cultural connections people have to places. In space, students apply abstract thinking to their earlier learning about layout and distances as they build understanding of how maps represent places. Students are also introduced to the ways natural resources are distributed across Australia and the world. This builds on Year 2 learning about the environment as the source of all they use and links to environment, where the concept of sustainability is formally introduced. Students then consider their own resource use and how they can reduce their impact. The inquiry strand builds on Years 1 and 2 as students are asked to identify whether questions are geographical and they consider the primary sources and secondary sources they can use to find answers.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
Places can be described by a variety of geographical features including location, population and landscape	• describing places by features, such as name, location, area and population size, boundaries, landscape, built features, natural resources, uses, people, and human activities • recognising that Aboriginal Peoples and Torres Strait Islander Peoples are the first people of their respective Country/Place and gave these places names
Their own place or places are both similar and different to other places	• comparing characteristics of other places to their own place and places in Asia, for example, the built features such as cities and housing, or natural features such as rivers and landscapes • comparing population, land-use and landscape features of different places within Australia, for example, coastal and inland, rural and urban places

People are connected to places in different ways and have feelings about them	• analysing which places, or parts of places, are visited, liked or avoided by different people • recognising people's aesthetic, emotional and spiritual connections with places and environments, including Aboriginal Peoples' and Torres Strait Islander Peoples' deep relationships with their place through their concepts of Country/Place
Space	
Maps are geographical tools to locate and represent places and their relationship to other places	• exploring a variety of maps at different scales and projections • interpreting maps and describing the absolute and relative locations of places, for example, Australia is near Asia, Darwin is a city in northern Australia but it is closer to Indonesia than it is to Melbourne • describing the location of places and features, for example, the equator, the tropics, hemispheres, the Arctic Circle, the South Pole, continents and countries
Natural resources are found in particular locations or environments	• exploring environments or locations where a familiar natural resource is located, for example, major forests or mining regions
Environment	
The use of natural resources and disposal of waste affects the environment	• understanding that sustainability means using resources at less than or equal to the rates of renewal • exploring ways natural resources are utilised, for example, metal from mining, paper from trees, glass from sand • investigating the environmental effects of consumption, for example the waste that is generated by school, homes, daily travel and holidays and where this waste ends up • experimenting with ways to reduce their effects on the environment, for example, sorting school rubbish into what could be recycled or composted
People are able to influence the capacity of the environment to sustain life into the future	• investigating some of the ways in which a local heritage site or national park are managed

Geographical Inquiry and Skills (Years 3 and 4)

Content description	Elaborations
Observing and questioning	
Pose questions about place, space or environment and make some predictions about their answer	• recording existing knowledge and opinions about the topic, and discussing what they want to learn • considering how things are now, how they change over time and what they might be like in the future
Determine which questions prompt geographical inquiry	• sorting a range of questions for an inquiry into geographical and non-geographical questions • considering and asking about the geographical aspects of a topic of inquiry, then posing further questions
Planning, collecting and evaluating	
Suggest some inquiry sources and use a range of oral, graphic, written and digital information sources, including spatial technologies where appropriate	• building background knowledge to locate and learn about a place or to research an issue, using geographical tools and skills
Select appropriate geographical methodologies to collect data, including following protocols for consultation with local Aboriginal communities and/or Torres Strait Islander communities	• identify methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs
Use appropriate materials, geographical tools or equipment to collect data or observations, using formal measurements and digital and spatial technologies as appropriate	• completing actual and virtual fieldwork to generate data, such as designing and using surveys, using video footage to observe another place, gathering information about other Australian places by communicating with students who live there • designing ways to collect information or test theories, for example, build a device to measure rainfall overnight, plot places on an outline map to show places that the class has visited

Processing, analysing, interpreting and concluding	
Sort information and data and look for relationships or patterns, using maps and spatial technologies as appropriate	• creating maps or adding to outline maps, to show specific features and use geographical conventions including cardinal compass points, symbols and colour codes • creating spreadsheets, graphs, diagrams or maps from data and annotating what the data means
Draw conclusions based on their investigations and share these conclusions	• comparing and contrasting information about Australian environments • examining the cause and effect relationships that explain how a place or an environment has changed over time or might change in the future, under different conditions, for example, what will it look like if we continue using a particular resource?
Communicating	
Present and compare findings, choosing an appropriate communication method for a particular audience, using geographical tools and skills and geographical vocabulary	• discussing the audience for their inquiry and presenting observations or ideas using a specific variety of oral, graphic, written or digital communication methods using geographical vocabulary including terms such as 'location', 'relative', 'cause and effect', 'observation', 'data', 'conclusions', 'sustainability', or positional language, or the specific name for a type of map
Reflecting and responding	
Reflect on the quality of the inquiry	• guiding questions about each inquiry stage and whether it was effective, for example, What worked?, Did we ask the right questions?, Did we need more information? • suggesting improvements to the process for next time or to find more information
Reflect on what has been learned and what they could do as a result	• planning action that is needed to respond to their inquiry and how it could be done, for example identifying further information that could be collected, asking questions for a related inquiry, designing a personal action plan, suggesting community projects • identifying the cause and effect of their suggested action or inaction on an issue

Achievement Standard
By the end of Year 3, students describe and compare the geographical features of places and recognise that people have different connections to places. They recognise that maps are used as geographical tools to represent places and relationships between places. They explain the location, uses and management of some natural resources in relation to sustainability. Students select appropriate questions for a geographical inquiry. They suggest information sources and collect data in response to questions. They draw conclusions from their investigation. When communicating their conclusions, they use geographical tools and geographical vocabulary.

Year 4

Big Idea: How we live

Year Description:

The Year 4 curriculum for geography builds on Year 3 exploration of connection to places by providing opportunities for students to consider the culture of places. Students link their learning to history by exploring the geography and spatial arrangement of Australia before European colonial presence. This also introduces them to exploring the geographic features of Australia and how they are distributed. To build on their earlier learning about distant places, investigation of places and environments moves to the global scale. Environment is further developed through studies of landforms and the influence of air masses on local weather. Students are asked to identify whether questions are geographical and consider the primary sources and secondary sources they can use to find answers. Students also explore cause and effect relationships by suggesting consequences for actions.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
Different places have different cultures and ways of living	• investigating different religions in Australia and Asia and the influence of religion upon peoples lifestyles • comparing the different jobs that people do in Australia and in other parts of the world, for example, mining or tourism
Places can have particular meaning and significance for people	• investigating places within a local area that students identify as significant, for example, places of worship, landscapes or historical sites • recognising Aboriginal Peoples' and Torres Strait Islander Peoples' deep relationships with their places through their concepts of Country/Place and how this is increasingly acknowledged, for example, by using place names and acknowledging Country

Space	
The location and main characteristics of the States and Territories in Australia, including populations, significant cities and natural features	• locating States and Territories, capital and major cities, regional centres and significant places or features on a map • considering why the cities and regional centres developed and grew in particular locations (such as proximity to a river or other natural resource) and the consequences of their location • recognising that the spatial distribution of Aboriginal Peoples and Torres Strait Islander Peoples before European colonial presence was predominantly coastal and riverine and followed the location of food resource
The location of the major countries in the Asian region	• identify major countries in the Asian region on a map, for example, China, Indonesia, Japan, Korea, India
Environment	
Natural processes such as erosion, deposition or tectonic plate movement shape landforms	• exploring how particular landforms came to be, for example, a valley, mountain range or coastal dune system
Pressure systems and frontal processes help to explain the daily weather	• locating the source and direction of high and low pressure systems and cold and warm fronts • recognising that weather patterns are linked to pressure systems for example, low pressure systems being associated with cyclones and storms
Cultural groups perceive, use and describe the environment differently	• finding out how the local Aboriginal Peoples and Torres Strait Islander Peoples describe and view the environments of their Country/Place by considering their calendar, stories, artworks and maps • exploring a variety of factual, artistic and literary descriptions of environments in Australia and other countries over time, using oral, graphic, written or digital information sources

Geographical Inquiry and Skills (Years 3 and 4)

Content description	Elaborations
Observing and questioning	
Pose questions about place, space or environment and make some predictions about their answer	• recording existing knowledge and opinions about the topic, and discussing what they want to learn • considering how things are now, how they change over time and what they might be like in the future
Determine which questions prompt geographical inquiry	• sorting a range of questions for an inquiry into geographical and non-geographical questions • considering and asking about the geographical aspects of a topic of inquiry, then posing further questions
Planning, collecting and evaluating	
Suggest some inquiry sources and use a range of oral, graphic, written and digital information sources, including spatial technologies where appropriate	• building background knowledge to locate and learn about a place, or to research an issue using geographical tools and skills
Select appropriate geographical methodologies to collect data, including following protocols for consultation with local Aboriginal communities and/or Torres Strait Islander communities	• identify methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs
Use appropriate materials, geographical tools or equipment to collect data or observations, using formal measurements and digital and spatial technologies as appropriate	• completing actual and virtual fieldwork to generate data, such as designing and using surveys, using video footage to observe another place, gathering information about other Australian places by communicating with students who live there • designing ways to collect information or test theories, for example, build a device to measure rainfall overnight, plot places on an outline map to show places that the class has visited

Processing, analysing, interpreting and concluding	
Sort information and data and look for relationships or patterns, using maps and spatial technologies as appropriate	• creating maps or adding to outline maps, to show specific features and use geographical conventions including cardinal compass points, symbols and colour codes • creating spreadsheets, graphs, diagrams or maps from data and annotating what the data means
Draw conclusions based on their investigations and share these conclusions	• comparing and contrasting information about Australian environments • examining the cause and effect relationships that explain how a place or an environment has changed over time or might change in the future, under different conditions, for example, what will it look like if we continue using a particular resource?
Communicating	
Present and compare findings, choosing an appropriate communication method for a particular audience, using geographical tools and skills and geographical vocabulary	• discussing the audience for their inquiry and presenting observations or ideas using a specific variety of oral, graphic, written or digital communication methods using geographical vocabulary including terms such as 'location', 'relative', 'cause and effect', 'observation', 'data', 'conclusions', 'sustainability', or positional language, or the specific name for a type of map
Reflecting and responding	
Reflect on the quality of the inquiry	• guiding questions about each inquiry stage and whether it was effective, for example, What worked?, Did we ask the right questions?, Did we need more information? • suggesting improvements to the process for next time or to find more information
Reflect on what has been learned and what they could do as a result	• planning action that is needed to respond to their inquiry and how it could be done, for example identifying further information that could be collected, asking questions for a related inquiry, designing a personal action plan, suggesting community projects • identifying the cause and effect of their suggested action or inaction on an issue

Achievement Standard
By the end of Year 4, students explain how the environment shapes the ways in which people live. They investigate and describe cultures or different ways of life around the world. They analyse personal and cultural perceptions of places and how these are described. Students describe the diversity of Australian environments and consider how natural processes have shaped the environment over time. Students pose geographical questions and speculate about their answers. They identify geographical sources to gather information or data and consider the usefulness of these sources. They evaluate data to suggest relationships or patterns. Students draw conclusions from their inquiry and suggest responses. When communicating their conclusions, they use appropriate geographical tools and geographical vocabulary, using geographical conventions to show and describe what they have learned from an inquiry.

Year 5

Big Idea: Climate and activities

Year Description:

The Year 5 curriculum for geography has a focus on building students' ability to explain their world in a geographic way. It requires increased critical and analytical thinking. Students consider contemporary places and the functions they serve. This builds on their spatial knowledge of Australia in Year 4, by analysing the spatial distribution of human populations and activities, such as retailing and tourism at national and regional levels. The environmental theme is extended from earlier studies of weather into the idea of climate. Students discuss contemporary sustainability issues. The Inquiry and Skills strand builds on students' analytical, decision-making and evaluation skills. They draw conclusions on issues and consider different viewpoints when thinking about what could or should happen in the future. Students reflect on the effectiveness of their inquiry, how their thinking is different to that of others and how it has changed as a result of their learning.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
Places are locations for a range of activities and functions	• recognising that places are locations for economic activity, centres of decision making and administration, centres for transmission and exchange of knowledge and ideas, meeting places for social interaction
Communities manage places and make decisions about the provision of services for their people	• exploring a range of services that communities provide for people, such as leisure facilities, education and environmental services • investigating some of the reasons why (locational reasoning), services and facilities are located in particular places

Space	
The spatial distribution of human activities has explainable patterns	• investigating where places developed in Australia and how and why some have grown and others have declined • examining the reasons for the spatial distribution of economic activities like retailing at the local or regional scale, and tourism at the national scale • recognising that some Aboriginal Peoples and Torres Strait Islander Peoples' today live in places that are different to their historic Country/Place, but still have a relationship with that Country/Place
Environment	
There are a variety of climates and each climate results in a distinctive type of natural vegetation and use by people	• exploring the relationship between climate and vegetation such as dense vegetation in tropical zones and sparse vegetation in arid zones • locating and comparing selected Australian climates and other world climates • comparing the local environment, its uses and population, to other parts of Australia and the Asian region, for example, alpine, desert, coastal, river, savannah
Human activities can change environments and places over time	• investigating how development changes environments by exploring a contemporary sustainability issue, such as urban planning • investigating the effects of European colonial presence, including examples such as vegetation clearance, drainage, irrigation, farming,
Sustainability is about maintaining the capacity of the environment to support our life	• considering how and by whom decisions are made about how places are used and sustained, for example the role of government, business, environmental groups and individuals in using a natural environment • exploring how Aboriginal Peoples and Torres Strait Islander Peoples have cared for the Australian environment over a long period of time

Geographical Inquiry and Skills (Years 5 and 6)

Content description	Elaborations
Observing and questioning	
Pose geographical questions that range in complexity and guide deep inquiry, then speculate on their answers	• recording existing knowledge and opinions about the topic, and discussing what they want to learn • forming and evaluating questions from given question stems, then speculating on what their findings might be and explaining their ideas or forming a hypothesis • discussing the geographical aspects of an inquiry topic before posing questions
Planning, collecting and evaluating	
Identify a variety of information sources that will be used for inquiry, considering their validity	• creating a plan for the inquiry and considering how they will complete the inquiry effectively, for example, establishing a clear purpose or goal for the inquiry, giving individual responsibilities in a group, deciding when drafts will be reviewed • building background knowledge and learning about a place or researching an issue using geographical tools and skills • examining information sources for their authorship, time of production, background context, perspective and bias
Identify and create appropriate materials, geographical tools or equipment to collect data or observations, using formal measurements and digital and spatial technologies as appropriate	• selecting methods to collect data then designing tools such as surveys, interviews or spreadsheets to gather data • collecting or finding and managing data over time, for example, comparing census data across years, reviewing population data to show growth, working out a distance from a scale on a map, collecting media coverage of an issue • considering weaknesses with data collection methods and reliability of data
Select appropriate geographical methodologies to collect data, including following protocols for consultation with local Aboriginal communities and/or Torres Strait Islander communities	• identifying methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs

Processing, analysing, interpreting and concluding	
Manage data and information collected and look for patterns or relationships	• converting data into a useful form, such as a spreadsheet, display, graph, or distribution map, then making decisions informed by trends in data or information • creating or adding to maps (such as grid maps), including a scale, and demonstrating specific features or relationships • using tables or charts to compare information from different information sources
Combine data and information to draw and share conclusions, considering their impacts	• explaining a situation in terms of cause and effect and suggesting and evaluating possible future scenarios, giving reasons for their preferred options • considering their findings or conclusions and identifying the probable reactions and responses of those who hold other viewpoints
Communicating	
Present findings, choosing an appropriate communication method for more than one audience, using appropriate geographical tools and skills and geographical vocabulary	• presenting their findings using a specific variety of oral, graphic, written or digital communication methods that engage the target audiences, for example, a poster for the wall and a role play for a younger class, a plan for a house that uses sustainable energy with supporting information in text • using positional language, directions, and the name of a type of map, and using terms such as ‘scale’ ‘location’, ‘relative’, ‘cause and effect’, ‘evidence’, ’consequence’ ‘observation’, ‘data’, ‘conclusions’, ‘sustainability’, ‘latitude and longitude’
Reflecting and responding	
Reflect on the quality of inquiry	• using critical questions to reflect on each stage of the inquiry and reflecting on the inquiries of others to learn about the process for example, What worked?, How could it be improved? • suggesting and planning improvements to the process or product of their inquiry for next time
Reflect on what has been learned, feelings about conclusions and what should happen as a result	• determining whether action is needed and suggesting action plans at personal, local, regional, national and global scales • reflecting on their learning and opinions and comparing this with the views of others, then considering how this has changed during the inquiry

Year 5 Achievement Standard

Achievement Standard
By the end of Year 5, students analyse the different uses and functions of land in different places and at different scales. They reflect on sustainability to describe the features of a variety of places and explain how communities provide services and manage places. They describe patterns in human activities and explain how they have changed over time. They describe the relationships between climate and environments and human activity. Students evaluate the sustainability of a range of human activities and generate and justify a plan for action. Students select geographical questions that range in complexity to guide an inquiry. They identify and use a variety of geographical information sources to gather information or data and judge the validity of these sources. When investigating, they identify and use appropriate materials, geographical tools and skills and equipment and manage the data they collect to identify patterns and relationships. They combine their data and information to draw conclusions. When communicating their conclusions to a range of audiences, they select and use appropriate geographical tools and geographical vocabulary.

Year 6

Big Idea: Going Global

Year Description:

In the Year 6 curriculum for geography, students are immersed in considering place, space and environment through a global lens. Students begin to explore the connections between places and the impacts of these connections. Study of space also becomes global increasing students' knowledge of places throughout the world and introduces them to some of the fundamental inequalities and differences across the world. The Inquiry and Skills strand builds students' analytical, decision-making and evaluation skills. They draw conclusions on issues and consider different viewpoints when thinking about what could or should happen in the future. Students reflect on the effectiveness of their inquiry and how their thinking is different to that of others and has changed as a result of their learning.

Geographical Knowledge and Understanding

Content description	Elaborations
Place	
The characteristics of a place are the result of cause and effect relationships within the place, and with other places; locally, regionally and globally	• recognising that people and events in one country can have an effect upon people or the environment in other countries, for example, the effects of an earthquake in the Asian region on Australia
Places are connected to other places, locally, regionally and globally, through the movement of goods, people and ideas as well as human or environmental events	• exploring some of the connections between Australia and countries in Asia and the world such as migration, trade, aid, travel, defence, impact of major events or natural disasters, community and political relationships or education • exploring how the interconnections between places impact on each place, for example, investigating the development of multiculturalism in Australia or examining how tourism provides employment for people in a place

Space	
Global population, wealth and health is unevenly distributed	• using data to identify patterns in the distribution of the population, wealth and health between and within countries or communities
Environment	
Bushfires and other hazards are a recurring feature of seasonal changes to environments	• mapping the location, frequency and severity of bushfires in Australia • investigating the causes and effects of bushfires • identifying people's responsibilities for the prevention of and recovery after a bushfire

Geographical Inquiry and Skills (Years 5 and 6)

Content description	Elaborations
Observing and questioning	
Pose geographical questions that range in complexity and guide deep inquiry, then speculate on their answers	• recording existing knowledge and opinions about the topic, and discussing what they want to learn • forming and evaluating questions from given question stems, then speculating on what their findings might be and explaining their ideas or forming a hypothesis • discussing the geographical aspects of an inquiry topic before posing questions
Planning, collecting and evaluating	
Identify a variety of information sources that will be used for inquiry, considering their validity	• creating a plan for the inquiry and considering how they will complete the inquiry effectively, for example, establishing a clear purpose or goal for the inquiry, giving individual responsibilities in a group, deciding when drafts will be reviewed • building background knowledge and learning about a place or researching an issue using geographical tools and skills • examining information sources for their authorship, time of production, background context, perspective and bias
Identify and create appropriate materials, geographical tools or equipment to collect data or observations, using formal measurements and digital and spatial technologies as appropriate	• selecting methods to collect data then designing tools such as surveys, interviews or spreadsheets to gather data • collecting or finding and managing data over time, for example, comparing census data across years, reviewing population data to show growth, working out a distance from a scale on a map, collecting media coverage of an issue • considering weaknesses with data collection methods and reliability of data
Select appropriate geographical methodologies to collect data, including following protocols for consultation with local Aboriginal communities and/or Torres Strait Islander communities	• identifying methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs

Processing, analysing, interpreting and concluding	
Manage data and information collected and look for patterns or relationships	• converting data into a useful form, such as a spreadsheet, display, graph, or distribution map, then making decisions informed by trends in data or information • creating or adding to maps (such as grid maps), including a scale, and demonstrating specific features or relationships • using tables or charts to compare information from different information sources
Combine data and information to draw and share conclusions, considering their impacts	• explaining a situation in terms of cause and effect and suggesting and evaluating possible future scenarios, giving reasons for their preferred options • considering their findings or conclusions and identifying the probable reactions and responses of those who hold other viewpoints
Communicating	
Present findings, choosing an appropriate communication method for more than one audience, using appropriate geographical tools and skills and geographical vocabulary	• presenting their findings using a specific variety of oral, graphic, written or digital communication methods that engage the target audiences, for example, a poster for the wall and a role play for a younger class, a plan for a house that uses sustainable energy with supporting information in text • using positional language, directions, and the name of a type of map, and using terms such as ‘scale’ ‘location’, ‘relative’, ‘cause and effect’, ‘evidence’, ’consequence’ ‘observation’, ‘data’, ‘conclusions’, ‘sustainability’, ‘latitude and longitude’
Reflecting and responding	
Reflect on the quality of inquiry	• using critical questions to reflect on each stage of the inquiry and reflecting on the inquiries of others to learn about the process for example, What worked?, How could it be improved? • suggesting and planning improvements to the process or product of their inquiry for next time
Reflect on what has been learned, feelings about conclusions and what should happen as a result	• determining whether action is needed and suggesting action plans at personal, local, regional, national and global scales • reflecting on their learning and opinions and comparing this with the views of others, then considering how this has changed during the inquiry

Year 6 Achievement Standard

Achievement Standard
By the end of Year 6, students analyse how places are connected at a global scale and explain the impacts or effects of these connections. Students explain human and environmental connections to extreme weather events and describe responses to them. They describe perspectives on an issue and suggest responsive and sustainable actions. They can support their view with analysis of its consequences for varied people or environments. Students select geographical questions, ranging in complexity, to guide a deep inquiry. They identify, interpret and judge the validity of a variety of geographical sources to collect information and data relevant to their inquiry. When investigating, they identify and use appropriate materials, geographical tools and equipment and manage the data and information they collect to analyse patterns and relationships. They combine their data and information to support their conclusions. When communicating their conclusions to a range of audiences, they use a variety of presentation methods and select and use appropriate geographical tools and geographical vocabulary, including geographical conventions. Students evaluate their research methodologies to help explain what they have learned and to support their views and findings.

Geography: Years 7 to 10

Year 7 Unit 1

Environmental Resources

Unit Description:

This unit focuses on environmental resources, using water as a case study. It examines water as an essential, renewable resource and its role in natural hazards. There is also a study of a non-renewable resource. The unit provides a context for examining different types of resources, the varying issues arising from their nature, distribution and use, perceptions by people, and approaches to managing resource issues. Unless specified, the case studies chosen can be from Australia and other countries across the region.

Geographical Knowledge and Understanding

Content description	Elaborations
Environmental resources (including renewable resources, non-renewable resources and continuous resources) have different characteristics that affect their use and significance	• describing the variety of environmental resources, and their classification into renewable, non-renewable and continuous • examining the spatial distribution of selected environmental resources • explaining the uses of environmental resources and their economic and social significance
Water is a resource that links places together as it moves through the water cycle	• describing how water takes different forms (solid, liquid, gas, fresh water, salt water) throughout the earth, and varies in accessibility • investigating rainfall (produced by orographic processes, convective processes or frontal processes) as the source of water and its subsequent movement through the water cycle • exploring the availability of surface and groundwater as a resource for people ('blue water') and recognising the importance of soil moisture as the source of water for plant growth ('green water')

The distribution, availability and uses of fresh water vary throughout the region and the world	• mapping the spatial distribution of fresh water to determine its availability in different places and explaining the patterns and reasons why water resources in Australia are generally more limited and more variable than in other continents, including Asia • recognising that most of the world's water cannot be used by people and that global stocks of available fresh water are limited
Water is a difficult resource to manage because it moves through the environment, is an essential but shared resource, has competing uses and is highly variable over space and time	• investigating and comparing the direct, indirect and competing uses of water, for example, domestic, agricultural and industrial uses • recognising that many places have economies and communities based on irrigation
Aboriginal Peoples and Torres Strait Islander Peoples have contributed to the knowledge about water resource management within Australia	• investigating in the local Country/Place how Aboriginal Peoples and Torres Strait Islander Peoples have and continue to engage with local waterways and water systems to sustain well-being for resource provision
There are several strategies for increasing water supply and reducing water use, such as dams, desalination, charging higher prices, aquifer recharge and storage, recycling, changing the uses of water, and trade in virtual water	• investigating case studies of water resource management in Australia and overseas, understanding the concept of trade in virtual water as a way of spatially redistributing water around the world
Environmental hazards such as droughts, or storms, or floods have different causes, frequencies and distributions	• investigating the temporal and spatial patterns of either droughts or floods or storms in Australia or another country in Asia
There are differences and similarities in the ways that communities manage or adapt to the chosen environmental hazard	• comparing and contrasting how communities in Australia or another country in Asia have managed or adapted to a drought or flood or storm

A non-renewable resource such as coal, or oil, or gas, has particular characteristics and significant uses, distribution patterns and management strategies	• exploring the uses of the selected resource, for example, in the household, in industry or in agriculture • investigating the spatial distribution of production and consumption of the selected resource at local, national, regional and global scales • understanding how a non-renewable resource can be made more sustainable by transferring natural capital into financial capital

Year 7 Unit 2

Why people live where they do

Unit Description:

This unit focuses on investigating the reasons why people decide to live where they do, at a variety of scales and in the context of the environmental, economic, social and other factors that might influence decision making. The ability to choose where to live is not always available to people and it should be recognised that the unequal distributions and concentrations of populations has consequences. There is a specified focus on Australia, Asia and South America at particular points in the unit.

Geographical Knowledge and Understanding

Content description	Elaborations
Population distribution and people's choices of where to live within Australia has changed over time	• understanding how the resources of Country/Place, among other factors, affect the customary distribution of Aboriginal Peoples and Torres Strait Islander Peoples • investigating the types of changes in the distribution of population in Australia over the last 100 years, using a variety of sources • identifying internal and international migration as the main cause of shifts in the distribution of population within Australia
There are differences and similarities in the way of life of people living in urban, rural and remote places in Australia	• investigating how population density tends to decline with increasing distance from urban centres • explaining 'remoteness' and comparing the demographic characteristics of urban, rural and remote places • describing the advantages and disadvantages of living in different kinds of places, for example, regional towns, rural areas and remote places

There are similarities and differences between the locational choices of Australians and those of people in other countries	• explaining the reasons why many of the world's people do not have much of a choice about where to live • comparing the causes and consequences of population movements in Australia and another geographically large country
The nature and development of urbanisation and the reasons for population change in Australia, Asia OR South America has been influenced by economic activities	• exploring the reasons for the emergence of cities in the Ancient World and recognising urbanisation as the major shift in the distribution of the population within nations • investigating reasons for population growth and decline in urban areas and identifying the positive and negative outcomes of urbanisation, for example, by considering the influence and effects of push and pull factors and demand for housing, sanitation, transport or service provisions
Factors such as economic opportunities, lifestyle preferences, personal income and safety largely determine people's choice of where to live but different factors apply at different scales	• recognising that Aboriginal Peoples' and Torres Strait Islander Peoples' population mobility reflects family and kinship relationships, the significance of Country/Place and Culture, and employment, as well as histories of dispossession and relocation • explaining that existing concentrations of economic activity and people have advantages that tend to attract people and perpetuate their growth • describing how advancements in technology allow for greater flexibility in choice of where to live, but that there are still advantages in living physically close together
Knowledge about factors affecting decisions of where to live can be used to make an informed decision of where people think they would like to live in the future	• undertaking a simulation of locational choice based on differing criteria or scenarios to identify the advantages and disadvantages of their choice • assessing the environmental consequences of their choice, such as travel and access to services, environmental and financial impacts

Geographical Inquiry and Skills (Year 7 and Year 8)

Content Descriptions	Elaborations
Observing and questioning	
Determine a focus for the inquiry within an area of interest, for example, make a prediction or develop a key question	• considering an area of study or current event to generate ideas for an inquiry, such as describing their response and developing an inquiry question from that • distinguishing between geographical and other kinds of questions, for example, 'so what' questions about effects, 'what ought' questions about what should happen, 'what might happen' questions about the future, and 'what if' questions about alternatives in a geographical context
Develop and evaluate questions through perspectives of place, space and environment and other relevant concepts	• developing questions that explore the place, space and environment perspectives relevant to an area of study or current event • evaluating the questions for their capacity to explore place, space and environmental perspectives
Planning, collecting and evaluating	
Determine a purpose and operational scale and then design the sequence of the geographical inquiry	• considering what answers or explanations are needed, and at what scale, for example, at the local or global scales
Design the inquiry and develop a plan to determine which data will be needed, and to locate this data from fieldwork, library and online research using spatial technologies, maps, statistics, photographs and other images	• determining how data will be collected, including whether fieldwork will be undertaken, which techniques will be used and the appropriateness of data collection processes, for example, designing survey and questionnaire instruments and deciding sample size and feasibility • using a range of geographical tools and skills to gather data, for example, weather instruments, synoptic maps and charts or satellite images to represent the weather or causes of precipitation in a particular area

Select appropriate geographical methodologies to collect, organise and store data, including following protocols for consultation with local Aboriginal communities and/or Torres Strait Islander communities	• identify methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs • determine how best to organise and structure data, for example, designing data capture sheets for later retrieval
Assess the effectiveness of methodology and suitability of collected data	• asking questions of the data relating to the source, the author, the purpose, the motives, the intended audience, and accessibility
Processing, analysing, interpreting and concluding	
Select appropriate geographical methodologies to retrieve and interrogate data	• using diagrams, statistics and mapping skills to represent data • sorting data for later retrieval and interpretation, for example, constructing climate graphs and tables to use to interpret mean, median and variability of rainfall for individual stations to forecast climate patterns
Analyse different sources of data to identify relationships, trends, patterns, anomalies and generalisations	• comparing and contrasting primary data and secondary data to identify patterns, trends and geographical relationships • using mental maps to organise information about people, places, and environments in a spatial context
Synthesise data and develop conclusions in response to the inquiry, for example, a prediction or a key finding	• selecting and using appropriate graphical techniques to present data in maps, statistics, photographs and other images, for example, drawing sketch maps of their neighbourhood following geographical conventions or constructing population profiles • interpreting soil moisture budgets to inform their own garden project or a fieldwork report to advise farmers in their local area
Propose alternatives, strategies or solutions to the inquiry and make decisions on a course of action	• demonstrating how the inquiry considers the interests of other people including, in the Australian context, those of Aboriginal Peoples and/or Torres Strait Islander Peoples • making recommendations, for example, of ways to improve the use of water in student's local context

Communicating	
Develop geographical texts using appropriate geographical vocabulary, concepts and geographical conventions to communicate effectively in one or more of the following forms: written, oral, visual and graphic	• writing an argument, supported by information from a range of sources • developing a role play of a civic meeting, with presentations supported by maps, diagrams, tables and statistics
Select appropriate methods, including the use of ICT to display data in graphs, tables, maps or statistics	• incorporating appropriate geographical methodologies and observing geographical conventions, including maps, tables, statistics, photographs and other visual representations • determining how to use data to support findings, including the use of ICTs to present data in maps, statistics, photographs and other images
Reflecting and responding	
Reflect on the inquiry process, including a review of all methods of collection, retrieval, analysis and presentation of data, examine conclusions, and if necessary revisit earlier phases with further questions or change techniques	• reflecting on what is still unclear about what has been investigated, and deciding how to address this • relating findings of an investigation to existing knowledge, to construct new understandings and refine questions
Select key findings from an inquiry to inform decisions on how to best respond to the question, issue or problem and where appropriate, plan for action	• determining key findings based on evidence about question, issue or problem and justifying this in terms of data or evidence • using key findings to inform the objectives of action plan, before making decisions about actions • empathising with the opinions and viewpoints of others, to inform if and how action should be taken • evaluating the influence of personal values and attitudes on decisions about actions

Achievement Standard
By the end of Year 7, students describe the significance, interconnection and characteristics of places and identify relationships between these. They use concepts related to location, distribution and pattern to describe their observations and findings. Students compare perceptions of biophysical environments and the structure and functioning of biophysical environments at different scales. They explain aspects of sustainability in relation to geographical contexts. Students select the focus of a geographical inquiry and develop questions to inform this inquiry. They determine a purpose for their inquiry and identify relevant sources. Students compare information sources and collection methods for their capacity to provide useful information to respond to the inquiry. They process and examine data in order to identify patterns, trends and relationships. They form conclusions in response to their inquiry, including making recommendations. They use geographical vocabulary and develop geographical texts, such as reports and oral presentations, Using their findings, they plan for action.

Year 8 Unit 1

Landscapes

Unit Description:

This unit focuses on the nature of landscapes and the forces, processes and factors which shape them physically, as well as people's perceptions and use of them. The unit examines, at a variety of scales, how landscapes fundamentally affect the ways in which people live and also how landscapes are modified and managed.

Geographical Knowledge and Understanding

Content description	Elaborations
There are a variety of landscapes throughout the world, which are produced by geomorphic, biotic and cultural processes over time	• defining a landscape and exploring different types of landscapes, for example, coastal, alpine, riverine, arid, urban, rural, industrial and mining landscapes • explaining that landforms are produced by a combination of tectonic (folding, faulting, volcanism), gradational (weathering, erosion and transportation) and depositional processes • referring to stories of Aboriginal Peoples and Torres Strait Islander Peoples and other Indigenous societies that explain how landforms were created
Landscapes have aesthetic, emotional, spiritual and economic value	• investigating how different people appreciate and interpret the same landscape differently, for example, recognising that wilderness is a contested concept • appreciating that some societies do not separate landscape and culture
The management and care of landscapes can occur at local, national or international scales	• exploring the multiple uses of a particular landscape and describing how the human use of landscapes can have an effect on the sustainability of the qualities for which they are valued • investigating a program that preserves the quality of a landscape, for example, Landcare and CoastCare, national and State parks, World Heritage sites • recognising that Aboriginal Peoples and Torres Strait Islander Peoples cared for and changed Australian landscapes through their land management practices

There are a range of approaches to custodial responsibilities and land management practices which are used by Aboriginal and Torres Strait Islander communities.	• describing the role of Aboriginal Peoples and Torres Strait Islander Peoples in landscape management • discussing Aboriginal and Torres Strait Islander models of sustainability that contribute to broader conservation practices
The causes, location, frequency and effects of one or more landscape hazards and the ways that communities manage or adapt to the chosen hazard	• investigating landscape hazards such as volcanic eruptions, earthquakes, tsunamis, coastal erosion, beach rips, landslides and avalanches • investigating examples of landscape hazards in Asia, for example, floods and earthquakes • recognising that people can manage the effects of landscape hazards through mitigation and adaptation

Year 8 Unit 2

Personal and community geographies

Unit Description:

This unit focuses on the geographical concepts of place and space, beginning with the student's experience of daily life and developing into an investigation of community and neighbourhood and how these can be defined and understood. There is a focus on the perceptions and objective characteristics of places and spaces, which offers scope for fieldwork. The unit concludes by investigating how perceptions can be challenged and characteristics of places can be changed through planning and direct action.

Geographical Knowledge and Understanding

Content description	Elaborations
Young people's perception of place, and their use of space, is an integral part of their personal geography	• mapping and comparing their perceptions and uses of places, their movement through space and reflecting on the meaning of their observations, such as, the places they spend most time in and the usual routes taken to travel between places • examining how information and communication technologies affect their use of place, space and their pattern of movement, for example, by reducing their need to visit shops for purchases or meeting up with people • describing how people are spatially constrained in their mobility and the places they use but in different ways for different people • mapping and recording their movements over a week and investigating how they could be made more efficient and more sustainable • analysing why places and spaces have varying degrees of significance and value to individuals and considering how the places and spaces they use could be better designed and managed

Different types of communities can be identified, such as, school, neighbourhood, locality, cultural, religious, interest-based and virtual communities	• identifying the similarities and differences between different types of community, including the distinction between communities defined by shared space and communities defined by shared affiliations or interest • using survey techniques to identify the strength of neighbourhood and community attachment in their own place • investigating the significance and consequences of the growth of virtual or online communities • explaining that community and neighbourhood can take different forms in other countries and comparing these contrasts
Places differ in the characteristics of their populations	• analysing the age, ancestry, religious beliefs, income, educational and occupational characteristics of the population of the local place • explaining the changes that have occurred in the size of the population of the local place over the last 30 years and the reasons for these changes
Geographical data can be used to measure the liveability, amenity, heritage value and aesthetic quality of places	• creating a list of indicators to evaluate the liveability, amenity, heritage value or aesthetic quality of their local area, town or city • comparing perceptions of safety and crime with official statistics or media reports of local areas • comparing perceptions of residential quality of life with median house prices or rental value for local areas
Cities that rank very highly on liveability have distinctive characteristics	• comparing and contrasting international measures of the liveability of cities and the rankings they produce • describing the liveability of one or more cities that are ranked highly in these measures • applying the measures of liveability to the success of planning and management in their own town or city, or cities they know
Planning can improve the liveability and quality of places	• investigating ways of improving liveability of their place • assessing the role of governments in planning to improve liveability • exploring the different points of view involved in a local planning issue

Geographical Inquiry and Skills (Year 7 and Year 8)

Content Descriptions	Elaborations
Observing and questioning	
Determine a focus for the inquiry within an area of interest, for example, make a prediction or develop a key question	• considering an area of study or current event to generate ideas for an inquiry, such as describing their response and developing an inquiry question from that • distinguishing between geographical and other kinds of questions, for example, 'so what' questions about effects, 'what ought' questions about what should happen, 'what might happen' questions about the future, and 'what if' questions about alternatives in a geographical context
Develop and evaluate questions through perspectives of place, space and environment and other relevant concepts	• developing questions that explore the place, space and environment perspectives relevant to an area of study or current event • evaluating the questions for their capacity to explore place, space and environmental perspectives
Planning, collecting and evaluating	
Determine a purpose and operational scale and then design the sequence of the geographical inquiry	• considering what answers or explanations are needed, and at what scale, for example, at the local or global scales
Design the inquiry and develop a plan to determine which data will be needed, and to locate this data from fieldwork, library and online research using spatial technologies, maps, statistics, photographs and other images	• determining how data will be collected, including whether fieldwork will be undertaken, which techniques will be used and the appropriateness of data collection processes, for example, designing survey and questionnaire instruments and deciding sample size and feasibility • using a range of geographical tools and skills to gather data, for example, weather instruments, synoptic maps and charts or satellite images to represent the weather or causes of precipitation in a particular area

Select appropriate geographical methodologies to collect, organise and store data, including following protocols for consultation with local Aboriginal communities and/or Torres Strait Islander communities	• identify methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs • determine how best to organise and structure data, for example, designing data capture sheets for later retrieval
Assess the effectiveness of methodology and suitability of collected data	• asking questions of the data relating to the source, the author, the purpose, the motives, the intended audience, and accessibility
Processing, analysing, interpreting and concluding	
Select appropriate geographical methodologies to retrieve and interrogate data	• using diagrams, statistics and mapping skills to represent data • sorting data for later retrieval and interpretation, for example, constructing climate graphs and tables to use to interpret mean, median and variability of rainfall for individual stations to forecast climate patterns
Analyse different sources of data to identify relationships, trends, patterns, anomalies and generalisations	• comparing and contrasting primary data and secondary data to identify patterns, trends and geographical relationships • using mental maps to organise information about people, places, and environments in a spatial context
Synthesise data and develop conclusions in response to the inquiry, for example, a prediction or a key finding	• selecting and using appropriate graphical techniques to present data in maps, statistics, photographs and other images, for example, drawing sketch maps of their neighbourhood following geographical conventions or constructing population profiles • interpreting soil moisture budgets to inform their own garden project or a fieldwork report to advise farmers in their local area
Propose alternatives, strategies or solutions to the inquiry and make decisions on a course of action	• demonstrating how the inquiry considers the interests of other people including, in the Australian context, those of Aboriginal Peoples and/or Torres Strait Islander Peoples • making recommendations, for example, of ways to improve the use of water in student's local context

Communicating	
Develop geographical texts using appropriate geographical vocabulary, concepts and geographical conventions to communicate effectively in one or more of the following forms: written, oral, visual and graphic	• writing an argument, supported by information from a range of sources • developing a role play of a civic meeting, with presentations supported by maps, diagrams, tables and statistics
Select appropriate methods, including the use of ICT to display data in graphs, tables, maps or statistics	• incorporating appropriate geographical methodologies and observing geographical conventions, including maps, tables, statistics, photographs and other visual representations • determining how to use data to support findings, including the use of ICTs to present data in maps, statistics, photographs and other images
Reflecting and responding	
Reflect on the inquiry process, including a review of all methods of collection, retrieval, analysis and presentation of data, examine conclusions, and if necessary revisit earlier phases with further questions or change techniques	• reflecting on what is still unclear about what has been investigated, and deciding how to address this • relating findings of an investigation to existing knowledge, to construct new understandings and refine questions
Select key findings from an inquiry to inform decisions on how to best respond to the question, issue or problem and where appropriate, plan for action	• determining key findings based on evidence about question, issue or problem and justifying this in terms of data or evidence • using key findings to inform the objectives of action plan, before making decisions about actions • empathising with the opinions and viewpoints of others, to inform if and how action should be taken • evaluating the influence of personal values and attitudes on decisions about actions

Year 8 Achievement Standard

Achievement Standard
By the end of Year 8, students explain the significance, interconnection and characteristics of places and the relationships between them. They use and apply a range of concepts related to location, distribution and pattern to describe their observations and findings and to explain the relationships between concepts. Students compare perceptions of biophysical environments and the structure and functioning of biophysical environments at different scales. They explain aspects of sustainability in order to show how sustainability is related to geographical contexts. Students select the focus of a geographical inquiry and develop and refine questions to inform this inquiry. They determine a purpose and scale for the inquiry, design the sequence of the inquiry and identify relevant sources. Students evaluate information sources and collection methods for their capacity to provide useful information to respond to the inquiry. They process and examine data to identify patterns, trends, relationships and anomalies. They form conclusions in response to their inquiry, including evaluating alternatives and making recommendations. They use geographical vocabulary, concepts and geographical conventions and develop geographical texts, including reports and oral presentations. They select key findings from their inquiry and plan for action.

Year 9 Unit 1

Biomes and food security

Unit Description:

This unit examines the personal and global patterns of food production and consumption, the impact of food production on the natural environment and the potential impacts which related environmental issues have on food security. Students will investigate the capacity of the world's environments to sustainably feed the projected future population, in the face of competing land uses such as biofuel production and urbanisation.

Geographical Knowledge and Understanding

Content description	Elaborations
Biomes produce the foods we consume and many other commodities, such as plant materials and a range of ecosystem services	• identifying and describing the biomes in Australia and throughout the world in terms of location, characteristics and the foods they produce • investigating an everyday use of plant materials for non-food purposes (for example, cotton for clothing) and where these materials come from
Global patterns of food production and consumption are unevenly distributed and influenced by climate, culture, human modification of environments, soil fertility, landforms, technology, labour and demand	• describing how the world climatic regions differ in the biomass they can produce • mapping the global distribution of food production • investigating the global differences and trends of food production and consumption • explaining why soil is an essential and fragile resource that is not easily renewable, and describing how in comparison with other continents, Australian soils are generally low in nutrients, thin and easily eroded

Food production can affect biophysical environments in ways that affect future food security	• identifying the factors that contribute to sustainable food production in local and global contexts • assessing the effects that food production has on biophysical environments including factors such as environmental degradation, deforestation, reduced biodiversity • explaining how trade may lead to an increased availability of food world-wide • understanding the effect that increased consumption of meat and processed foods has on the environment
Competing land uses can influence the amount of productive land available to support future food production through degradation and desertification,	• describing how competing land uses such as urban development, biofuel production and mining affect the extent and productivity of agricultural land • explaining that the use of particular plant species to produce biofuels must satisfy the criteria of environmental impact statements and economic costs and benefits.
The capacity of the world's environments to sustainably feed the projected future population is contestable	• explaining how agricultural technology has the capacity to increase grain production to the levels required to feed projected national and world populations • considering whether poverty, wastage, government policies and trade barriers affect the ability to feed the world's population • analysing the success of sustainable agriculture and one of its forms in maintaining a sustainable practice • investigating the sustainability of Aboriginal Peoples and Torres Strait Islander Peoples food production methods before and since European colonial presence

Year 9 Unit 2

Navigating global connections

Unit Description:

This unit focuses on the connectedness of Australia with its region and the world. This is explored initially through the eyes of the student and the connections and contacts they have with the wider world in their everyday lives. The unit then looks at the nature of Australia's connections (with particular emphasis on social and economic connections) and the positive and negative impacts of these connections. The ability of a student to act locally, but with a regional and global view of the consequences is investigated. The unit also builds towards forecasting futures for Australia with a variety of outcomes in mind.

Geographical Knowledge and Understanding

Content description	Elaborations
People are connected to places in the world through their purchase of consumer goods	• investigating the geography of the design and production of a consumer product used by students, for example, computers, computer games, mobile phones, fashion goods, sports gear and audio equipment • describing how transportation and information and communication technologies and global corporations make it possible to have global design, production and marketing systems for many consumer goods • explaining why these products are not made in Australia • exploring the ways in which a consumer product connects students to people in other places • evaluating the truth of 'fair trade' in fair trade products such as coffee or chocolate
Some places in the world support high levels of innovation, creativity and entrepreneurship and others specialise in manufacturing	• analysing a city that specialises in product design and a city that specialises in manufacturing and the reasons for their success • explaining the growth, built environment, population and human well-being of the selected cities

People are connected to places across the world through their cultural interests and activities	• investigating how an understanding and knowledge of Country/Place, Culture and Identity contributes to Aboriginal Peoples' and Torres Strait Islander Peoples' lifeways • investigating the role of technologies in the changing manner and pace of cultural diffusion, or, in the potential 'homogenising' of culture
Australian places are connected to other places within Australia and throughout the world through internal and international migration, tourism, trade, education and other links	• understanding how the student's place is linked with other places, in Australia and outside Australia, by flows of people, capital, goods and services • investigating the role of any other significant connections between the student's place and other places
Global connections have uneven effects on Australian places,	• explaining why global connections advantage some places within a country and disadvantage others • investigating the diverse effects of mining on Australian regions
The economic characteristics of places can be analysed through the industry or employment of their populations	• comparing the employment structure of the local government area and Statistical Division or Sub Division and comparing this structure with those of other places in Australia • explaining the reasons why the place in which people are employed is usually different to their place of residence • recognising the growing number of people employed in fly-in fly-out contracts
Different industrial sectors have different rates of growth and patterns, and these can be used to forecast future employment in individual places	• investigating of the contribution of the consumer services and producer services sectors to the different rates of growth of Australian cities • considering the implications for Australia and the region of the projected trends in the populations of the major countries of Asia, for example Japan, Korea or China • describing the economic effects of likely future trends in Australia's links with other countries • investigating the different national rates of growth of each sector and forecasting the employment outcomes for the student's own place and other places in Australia

Geographical Inquiry and Skills (Year 9 and 10)

Content Descriptions	Elaborations
Observing and questioning	
Determine a focus for the inquiry, for example, propose a hypothesis or develop a series of questions that are inclusive of the concepts, including place, space and environment	• considering current events to generate ideas for an inquiry • identifying a questions framework, using questioning conventions, for example, spatial association questions, ICT based questions and values questions, in order to inform a geographical inquiry
Evaluate questions in terms of their ability to examine place, space environment and other concepts	• selecting or generating inquiry questions using a question framework that, for example, explores stakeholder views, alternative responses and decision making • justifying a selection of inquiry questions in terms of their feasibility, representation of geographical perspectives and balance
Planning, collecting and evaluating	
Determine a purpose and operational scale of the geographical inquiry and independently design the inquiry	• planning how to combine quantitative and qualitative methods of collecting and analysing data
Independently design the inquiry to identify and locate data using fieldwork, library and online research, spatial technologies, maps, statistics, photographs and other images	• collecting primary data and secondary data, including fieldwork techniques such as interviews, surveys, observation, taking photographs, annotating maps and land use surveys • determining which information sources will provide relevant, reliable and representative data, and addressing issues, for example, using another collection method such as a survey or soil testing
Select appropriate geographical methodologies to collect, organise and store data, including following protocols for consultation with the local Aboriginal communities and/or Torres Strait Islander communities	• identify methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs • determine how best to organise and structure data, for example, designing data capture sheets for later retrieval

Evaluate data and collection methods for reliability and representation and make necessary adjustments	• listening to arguments and opinions from a wide spectrum of people, in order to represent a range of viewpoints on a geographical issue • identifying ethical ways to access information that is representative and inclusive of place, space and environment • reflecting on the appropriateness of data collection processes
Processing, analysing, interpreting and concluding	
Select appropriate geographical methodologies to organise and record relevant data for synthesis, storage and retrieval, using ICT and other methods, following geographical conventions	• collating and recording Census data, using ICT and spatial technologies in formats such as annotated maps, graphs and table • representing data in a range of formats, for example, recording data from fieldwork using spatial technologies, using computer mapping software to create statistical and other maps for later use, constructing graphs and tables
Analyse data to identify and explain order, diversity, trends, patterns, anomalies and generalisations	• analysing data to identify cause and effect relationships, order, diversity, trends, patterns and anomalies to develop generalisations • interpreting analysis from primary data and secondary data, including various types of maps; (weather, political, topographic maps, thematic, relief maps, diagrammatic and choropleth), to identify trends, patterns and geographical relationships
Synthesise data and draw conclusions that link to the focus of the inquiry	• synthesising data and testing conclusions in response to the inquiry, for example, prove or disprove the hypothesis, form conclusions by accounting for opposing evidence
Evaluate alternatives by applying criteria and make a recommendation on a course of action	• demonstrating how the inquiry considers a selection of other people's interests including, in the Australian context, those of Aboriginal Peoples and Torres Strait Islander Peoples

Communicating	
Develop a range of geographical texts such as written, oral, visual and graphic, based on data from primary sources and secondary sources, using appropriate graphical techniques including spatial technologies, maps, statistics, photographs	• developing a logically structured argument, supported by data from primary sources and secondary sources and incorporating a range of visual forms such as maps, a flow chart and population profiles
Determine how to incorporate data to support findings, including the use of ICTs to present maps, statistics, photographs and other images	• writing a field report incorporating geographic conventions to present data and information in maps, diagrams, tables and statistics within geographical texts, for example, synoptic maps and charts, cross-sections and graphs depicting survey data
Use appropriate geographical vocabulary, concepts and geographical conventions to communicate effectively	• giving an oral presentation supported by data in maps, statistics, photographs and other images, and spatial technologies data, incorporating appropriate graphical techniques and geographical conventions
Reflecting and responding	
Appraise the effectiveness of the inquiry process and its findings, including a review of all methods of collection, retrieval, analysis and presentation of data	• identifying the probable reactions and responses of those who hold other viewpoints • understanding how observations and interpretations of the world are influenced by who we are and what we already think
Plan how an inquiry could be improved	• revisiting the purpose of the inquiry in order to appraise what has been achieved, and address what was not attended to • relating key findings to existing knowledge to develop revised explanations
Use decision-making methods to decide on the most appropriate plan for action, as an individual or part of a group	• evaluating alternative possibilities before deciding on any action, for example, how sustainability can influence actions

Achievement Standard
By the end of Year 9, students compare the significance, interconnections and characteristics of places and spaces at a range of scales and assess these relationships. They apply a range of concepts when examining their observations and communicate their findings by drawing on the relationships between concepts. Students analyse perceptions of biophysical environments and the structure and functioning of biophysical environments at a variety of scales. They account for interconnections between people and environments and explain aspects of sustainability as being related to geographical contexts. Students determine the focus, purpose, and scale for a geographical inquiry. They frame and refine questions encompassing the perspectives of place and space and environment. They locate relevant sources, including from fieldwork. Students evaluate information sources and collection methods for reliability and representation. They process and synthesise information and data to identify order, pattern, trends, anomalies and generalisations. They form conclusions in response to their inquiry, including appraising alternatives by applying criteria and recommending a course of action. They use geographical vocabulary, concepts and geographical conventions to develop a range of geographical texts that incorporate data. Using their findings, they plan for action and devise useful individual or group strategies.

Year 10 Unit 1

Environmental challenges and geography

Unit Description:

The unit gives students the opportunity to use their geographical thinking, skills and technological tools to examine some environmental challenges that will affect their future lives, and to find out how geography contributes to the understanding and management of these challenges. Students will select two of the following environmental challenges for detailed study:

- Climate change
- Coastal erosion and sea level rise
- Marine resources and the oceans
- River basins
- Urban biophysical environments
- Mountains
- Land degradation

Geographical Knowledge and Understanding

Content description	Elaborations
Environmental challenges of the future have environmental, economic and social consequences	• evaluating the extent to which particular environmental challenges threaten the sustainability of the source function, sink function, service function and spiritual functions of the environments that support human life and welfare • evaluating their economic and social consequences, at present and in the future
Biophysical processes result in environmental challenges	• investigating the biophysical causes of the selected environmental challenges, by studying the effects of human actions on the relevant environmental processes

There are underlying demographic, economic, technological, social and political causes of the selected environmental challenges	• exploring the demographic, social, economic, technological and political causes of the selected environmental challenges, and how they interact with environmental processes
Spatial technologies can be employed to visualise, map and analyse the distribution, causes and possible solutions to the environmental challenge	• investigating spatial technologies used by geographers working on environmental challenges • analysing the causes of the challenge and to develop possible, probable and preferred futures
The causes of the selected environmental challenges can assist in identifying effective strategies to manage the challenges	• explaining that environmental strategies have to satisfy the criteria of environmental benefit, economic viability, and social justice • understanding why global sustainability challenges require local actions and that different strategies may be needed in different places • evaluating whether progress towards more sustainable environments may require changes in economic incentives, technology, regulation, and/or human attitudes and values
Reflective geographical thinking and skills contribute to the effective management of the selected environmental challenges	• recognising the value of spatial technologies as a geographical tool used in geographical inquiry and in a wide range of practical applications • recognising that the uniqueness of each place means that environmental challenges, their causes and the strategies to manage them will vary from place to place • investigating and discussing how professional geographers use geographical thinking and geographical tools and skills in their work

Year 10 Unit 2

Global well-being

Unit Description:

This unit focuses on the nature of well-being around the world and how can it be measured. Indicators which can be used to measure, assess and compare global well-being can include gross domestic product (GDP), infant mortality, daily calorie intake and literacy rates. Spatial characteristics of well-being and the factors that influence it, and the inequalities that exist at a variety of scales, are used to investigate programs that address issues of well-being.

Geographical Knowledge and Understanding

Content description	Elaborations
Human well-being can be defined and measured in various ways that are relevant in geography	• exploring different concepts of human well-being and development, including those relating to Aboriginal Peoples and Torres Strait Islander Peoples • examining different measures of human well-being and explaining how these indicators do not always provide a consistent view of well-being when applied to places • analysing the appropriateness of terms like developed/developing and North/South to generalise global differences
There are major spatial variations to human well-being at the global scale, as demonstrated through the indicators of well-being	• investigating global inequalities in human well-being, as measured by indicators such as income, nutrition, access to water, shelter, health, education, female equality, child labour and safety • analysing the spatial association of different well-being indicators at varying scales • comparing overall human well-being in a developing and developed country
There are interrelationships between human well-being and conflict	• classifying and mapping the different types of conflict around the world and explaining the pattern • considering the role and status of environmental resources in conflicts • analysing the effects of conflicts on places

There are significant spatial variations in human well-being within nations, at both regional and local scales	• comparing and explaining spatial inequalities in well-being in Australia and China or another country in Asia • investigating the well-being of Aboriginal Peoples and Torres Strait Islander Peoples across Australia • explaining that there are multiple uses of local resources (such as minerals, water, marine resources, landscapes and biodiversity), and that these uses can have a contestable effect on the local community, including the Aboriginal Peoples and Torres Strait Islander Peoples who belong to that Country/Place • assessing the social and political consequences of national spatial inequalities
ONE government and ONE non-government program which attempts to improve human well-being *within Australia*, and why such programs may be spatially targeted at specific places	• investigating how nations attempt to reduce spatial differences in well-being through national welfare and revenue transfers • evaluating spatially targeted national economic and social development programs for success in improving human well-being • understanding that policies to manage similar problems may need to be adapted to suit local conditions in different places
ONE government and ONE non-government program which attempts to improve human well-being in *another country*, and why such programs may be spatially targeted at specific regions within the country	• investigating international economic and social development programs • evaluating spatially targeted international economic and social development programs for success in improving human well-being • recognising that disadvantage may be most effectively addressed by integrating programs at a regional level • considering how they might be involved in a non-government program
Geographical knowledge can be used to evaluate possible, probable and preferable sustainable futures for places	• forecasting what their place or region will be like in the future, considering employment, well-being, lifestyles, housing, place liveability and community characteristics • investigating how sustainability principles might be applied to evaluate alternative futures

Geographical Inquiry and Skills (Year 9 and 10)

Content Descriptions	Elaborations
Observing and questioning	
Determine a focus for the inquiry, for example, propose a hypothesis or develop a series of questions that are inclusive of the concepts, including place, space and environment	• considering current events to generate ideas for an inquiry • identifying a questions framework, using questioning conventions, for example, spatial association questions, ICT based questions and values questions, in order to inform a geographical inquiry
Evaluate questions in terms of their ability to examine place, space environment and other concepts	• selecting or generating inquiry questions using a question framework that, for example, explores stakeholder views, alternative responses and decision making • justifying a selection of inquiry questions in terms of their feasibility, representation of geographical perspectives and balance
Planning, collecting and evaluating	
Determine a purpose and operational scale of the geographical inquiry and independently design the inquiry	• planning how to combine quantitative and qualitative methods of collecting and analysing data
Independently design the inquiry to identify and locate data using fieldwork, library and online research, spatial technologies, maps, statistics, photographs and other images	• collecting primary data and secondary data, including fieldwork techniques such as interviews, surveys, observation, taking photographs, annotating maps and land use surveys • determining which information sources will provide relevant, reliable and representative data, and addressing issues, for example, using another collection method such as a survey or soil testing
Select appropriate geographical methodologies to collect, organise and store data, including following protocols for consultation with the local Aboriginal communities and/or Torres Strait Islander communities	• identify methods for collecting, recording and describing data obtained through observation, fieldwork, surveys and map interpretation, for example, identifying and labelling features from maps, satellite images and photographs • determine how best to organise and structure data, for example, designing data capture sheets for later retrieval

Evaluate data and collection methods for reliability and representation and make necessary adjustments	• listening to arguments and opinions from a wide spectrum of people, in order to represent a range of viewpoints on a geographical issue • identifying ethical ways to access information that is representative and inclusive of place, space and environment • reflecting on the appropriateness of data collection processes
Processing, analysing, interpreting and concluding	
Select appropriate geographical methodologies to organise and record relevant data for synthesis, storage and retrieval, using ICT and other methods, following geographical conventions	• collating and recording Census data, using ICT and spatial technologies in formats such as annotated maps, graphs and table • representing data in a range of formats, for example, recording data from fieldwork using spatial technologies, using computer mapping software to create statistical and other maps for later use, constructing graphs and tables
Analyse data to identify and explain order, diversity, trends, patterns, anomalies and generalisations	• analysing data to identify cause and effect relationships, order, diversity, trends, patterns and anomalies to develop generalisations • interpreting analysis from primary data and secondary data, including various types of maps; (weather, political, topographic maps, thematic, relief maps, diagrammatic and choropleth), to identify trends, patterns and geographical relationships
Synthesise data and draw conclusions that link to the focus of the inquiry	• synthesising data and testing conclusions in response to the inquiry, for example, prove or disprove the hypothesis, form conclusions by accounting for opposing evidence
Evaluate alternatives by applying criteria and make a recommendation on a course of action	• demonstrating how the inquiry considers a selection of other people's interests including, in the Australian context, those of Aboriginal Peoples and Torres Strait Islander Peoples

Communicating	
Develop a range of geographical texts such as written, oral, visual and graphic, based on data from primary sources and secondary sources, using appropriate graphical techniques including spatial technologies, maps, statistics, photographs	• developing a logically structured argument, supported by data from primary sources and secondary sources and incorporating a range of visual forms such as maps, a flow chart and population profiles
Determine how to incorporate data to support findings, including the use of ICTs to present maps, statistics, photographs and other images	• writing a field report incorporating geographic conventions to present data and information in maps, diagrams, tables and statistics within geographical texts, for example, synoptic maps and charts, cross-sections and graphs depicting survey data
Use appropriate geographical vocabulary, concepts and geographical conventions to communicate effectively	• giving an oral presentation supported by data in maps, statistics, photographs and other images, and spatial technologies data, incorporating appropriate graphical techniques and geographical conventions
Reflecting and responding	
Appraise the effectiveness of the inquiry process and its findings, including a review of all methods of collection, retrieval, analysis and presentation of data	• identifying the probable reactions and responses of those who hold other viewpoints • understanding how observations and interpretations of the world are influenced by who we are and what we already think
Plan how an inquiry could be improved	• revisiting the purpose of the inquiry in order to appraise what has been achieved, and address what was not attended to • relating key findings to existing knowledge to develop revised explanations
Use decision-making methods to decide on the most appropriate plan for action, as an individual or part of a group	• evaluating alternative possibilities before deciding on any action, for example, how sustainability can influence actions

Achievement Standard
By the end of Year 10, students compare the significance, interconnections and characteristics of places and spaces and environments at a range of scales and analyse these relationships. They select and apply a range of concepts, examining their observations and communicating their findings by drawing on the significant distinctions and relationships between concepts. Students analyse perceptions of biophysical environments to differentiate between the structure and functioning of biophysical environments at a variety of scales. They account for and evaluate interconnections between people and environments and justify aspects of sustainability as being significantly related to geographical contexts Students independently determine the focus, purpose, and a range of scales for an inquiry. They frame and evaluate questions encompassing the perspectives of place, space and environment and other concepts. They identify and locate a range of information sources, including from fieldwork. Students evaluate sources and collection methods for reliability and representation and make necessary adjustments. They process and synthesise information and data to identify and explain order, diversity, pattern, trends, anomalies and generalisations. They form conclusions in response to their inquiry, including evaluating alternatives using criteria and recommending a course of action. They use geographical vocabulary, concepts and geographical conventions appropriately and develop a range of geographical texts that incorporate data from primary sources and secondary sources. Using key findings from their inquiry, they plan action and devise useful individual or group strategies.

Geography: Senior Secondary

Rationale

The study of geography provides a systematic, integrative way of exploring, analysing and explaining place and space. The subject fosters an understanding of the uniqueness of places; that place matters in explanation and policy. It also encourages knowledge about the interconnections between places; that is, nothing exists in isolation, and the subject consequently considers the significance of location, distance and proximity. Geography students develop the ability to investigate the arrangement of biophysical and human phenomena across space and to understand the interconnections between people, places and environments. They come to appreciate the role of the biophysical environment in human life and to understand the effects human activities can have on that environment. Geography provides key tools for students to develop the ability to suggest appropriate and sustainable approaches to the future, by thinking holistically and spatially in seeking answers to questions. In the study of geography, using different scales to explore relationships is fundamental.

Geography provides a structured framework to investigate and analyse the major challenges facing Australia and the global community in the twenty-first century. These major challenges include rapid change in biophysical environments, planning for sustainability in settlements, dealing with risks posed by environments, and the consequences of evolving interconnections at many scales in the modern world.

By studying geography, students will develop a full understanding and application of the geographical concepts of place, space, environment, sustainability, interconnection, scale and change. These major concepts are applied and explored in depth through unit topics, to provide a deeper understanding of the complex processes shaping our world. Experiences and learning in the F to 10 draft *Australian Curriculum: Geography* provides a background and clear foundation in geographical inquiry and skills, upon which students of senior secondary geography can draw. Taken together, the ability of students to use concepts in the context of geographical inquiry, and the application of skills, constitute 'thinking geographically'.

Students apply geographical inquiry through a more advanced study of geographical methods and skills than in the F to 10 curriculum, exploring deeper ways of understanding and explaining. The engagement of students in decision making, evaluation and the discussion of ethics and values are also central to this subject. Geography students learn how to collect information from primary sources and secondary sources such as field observation, mapping, monitoring, remote sensing, interviews, studies, statistical surveys and reports. Geography promotes communication using non-verbal and non-textual means by building the skills of graphicacy or spatial and visual representation and interpretation through the use of cartographic, diagrammatic, graphical, photographic and audio-visual forms, in addition to communicating their conclusions by traditional written and oral means.

The senior secondary draft *Australian Curriculum: Geography* provides a unique context to help students develop competence in the general capabilities. Inquiry based learning and fieldwork, both essential ways of teaching geography, have been shown to be effective in

improving interpersonal skills and students' awareness of their own strengths and weaknesses. Particular emphasis is placed on the use of spatial technologies in analysis, representation and modelling, which integrates the use of digital maps and remotely sensed and satellite images.

Aims

The senior secondary *Australian Curriculum: Geography* aims to develop students':

- understanding and appreciation of the nature and consequences of globally important issues at a range of scales
- capacity to propose and justify geographically sound and sustainable approaches to futures
- ability to think geographically, based on an understanding of the concepts of place, space, environment, interconnection, sustainability, scale and change.
- capacity to be competent and critical users of geographical inquiry methods and skills
- potential as informed and active citizens who are ready to contribute to the development of a sustainable and just world.

Organisation of the subject

The senior secondary *Australian Curriculum: Geography* is organised in four units. Each pair of units (Units 1 and 2, and, Units 3 and 4) includes one that emphasises physical geography and one that emphasises human geography. The units reflect themes of immediate relevance and importance for students in the twenty-first century and have scope for application at a wide range of scales, from the local to the global, as well as the ability to investigate case studies from Australia and beyond. All of the units build upon themes introduced in the F to 10 draft *Australian Curriculum: Geography*, as well as developing students' conceptual understanding and the application of geographical inquiry and skills from earlier years. Units 1 and 2 provide a sound foundation for the study of the subject at a senior level while Units 3 and 4 require greater rigour in applying the understandings and skills of geography.

The four units are:

Unit 1: The changing biophysical cover of the earth

This unit focuses on the changing biophysical cover of the earth's surface. Changes in land cover involve the replacement of one type of land cover with another or the alteration of the existing cover without changing its type. They are produced by processes such as deforestation, the expansion and intensification of agriculture, rangeland modification, land and soil degradation, desertification, urbanisation, land drainage, irrigation, land reclamation, ice sheet retreat and mining. Students will also examine the ways people seek to reverse the negative effects of land cover change through land management, revegetation, wetland restoration and other rural and urban environmental programs.

Unit 2: Sustaining places

This unit focuses on the economic, social and environmental sustainability of places. The places people settle have unique characteristics, and each is influenced by its own combination of environmental, economic, political and social factors. Such factors lead to changes, including growth, stagnation or decline, measured in terms of spatial size, population, commerce or other measures. Such factors are also associated with challenges which affect places in different ways.

Unit 3: Environmental Risk Management

This unit focuses on identifying risks and managing those risks to eliminate or minimise harm to the environment whilst benefitting from economic activities. Relationships between environments and people can involve risks in both directions. The exploitation of natural resources by mining, agriculture, forestry, fishing and tourism industries can place environments and their processes at risk, while natural hazards and climate change can adversely affect humans and their activities. Such risks can affect the sustainability of places, environments and communities at a range of scales.

Unit 4: A world in the making

This unit focuses on the widening, deepening and speeding up of global interconnections, enabling students to investigate a range of places and to consider how changes in connections affect specific localities and groups of people. This emerging world is examined with the awareness that people are progressively integrated into a global society through telecommunication technologies, flows of commodities and people, the decisions they make as consumers, ideas disseminated through media, and decisions made in locations both near and far.

Unit 1: The changing biophysical cover of the earth

Unit Description

This unit focuses on the changing biophysical cover of the earth's surface. Changes in this land cover are produced by processes such as deforestation, the expansion and intensification of agriculture, rangeland modification, land and soil degradation, urbanisation, land drainage, irrigation, land reclamation, ice sheet retreat and mining. Students will also examine the ways people seek to reverse the negative effects of land cover change through rural and urban environmental programs.

The unit provides a way of integrating aspects of physical and environmental geography around the study of the processes changing the face of the earth. In the past, these processes altered climates and hydrology, and damaged ecosystem services, biodiversity and soils, at a local or regional scale, but they are now sufficiently extensive to influence global climate change and global biogeochemical cycles. The unit will give students a comprehensive and integrated understanding of these processes, and their local and global environmental consequences. The study of land cover change will also develop students' understanding of geographical inquiry methods tools and skills, because it requires a spatially explicit treatment of human–environment relationships, using geospatial technologies and systems analysis.

Students will undertake an overview of the processes producing land cover change, the resulting spatial distribution of this change, and the consequences of land cover change. They will study ONE of the following processes in depth, both globally and through case studies from Australia and other countries:

- Deforestation
- The expansion and intensification of agriculture
- Rangeland modification
- Urbanisation

Students will study Australian and overseas programs that aim to restore or rehabilitate land cover. They will study ONE of the following programs in depth, through case studies from Australia and other countries:

- Reforestation and revegetation programs
- Programs to redesign agricultural and agroforestry land management practices
- Urban vegetation and biodiversity programs
- Wetland restoration programs.

Learning outcomes

By the end of this unit, students:

- use spatial technologies to map and analyse the local, national and global spatial distribution of the main types of land cover change over time
- explain the spatial distribution and causes of ONE of the specified processes of land cover change at local, national and global scales

- understand the main fieldwork and geospatial skills used to investigate land cover change and its consequences
- understand and evaluate projections of future changes in global land cover
- evaluate the effects of land cover change on local and regional environments
- understand the interrelationships between land cover change and climate change
- understand a range of programs developed to reduce the negative effects of land cover change
- critically evaluate the environmental, economic and social benefits of ONE of the specified programs.

Content Descriptions

Land cover change

- The spatial pattern of change in global forest, cropland, pasture and urban land cover over the last 2000 years, and of the processes responsible for this change, with illustrative case studies from different regions and countries and at different scales.
- Methods of classifying land cover from remotely sensed images and aerial photographs.
- The application of geospatial technologies to identify contemporary changes.
- Fieldwork methods to investigate local land cover change.
- Methods of projecting future changes in land cover through spatial modelling, incorporating both environmental and socioeconomic variables.
- An in-depth study of ONE of the specified processes responsible for the changing land cover of the earth.
- The underlying causes of the process, such as population growth, economic growth, trade and globalisation.
- The differences in the process between countries, and the roles of government policies, institutions, poverty, land ownership, type of economy, ideology and culture in explaining these differences.

The effects of land cover change

- The effects of land cover changes on local and regional environments. These effects include soil erosion and degradation, nutrient inputs, changes to the water cycle, degraded water quality, loss of biodiversity and habitat, loss of ecosystems services, changes in regional climates caused by changes in surface radiation and water balances, urban heat islands, increased ability to feed people, and allowing economic development to occur.
- The interrelationships between land cover change and climate change. These include the effects of land cover change on climate through changes to surface reflectivity (albedo) and carbon dioxide and methane emissions, and the effects of global warming on vegetation and ice sheets.

Programs for land cover restoration and rehabilitation

- Programs to reverse the negative effects of land cover change.
- An in-depth study of ONE of the specified programs, and evaluation of its environmental, economic and social benefits.
- Fieldwork methods to investigate a land cover restoration or rehabilitation program.

Unit 2: Sustaining Places

Unit Description

This unit focuses on the economic, social and environmental sustainability of places. All places are subject to changes produced by economic, demographic, social, political and environmental processes, but the outcomes of these processes in each place depends on local responses and adaptations. Sustainable places are those best able to adapt to change.

This unit deals with the challenges faced by places, including population growth and decline, unemployment and labour shortages, economic restructuring, loss of jobs, deficiencies in transportation infrastructure, inadequate health and education services, and liveability. In metropolitan and regional cities the challenges may also include urban sprawl, car dependency, environmental degradation, abandoned land, and deficiencies in urban planning and management. In regional and rural places the challenges may include lack of employment for young people, poor transportation connections to major centres, closure of a major industry, the effects of climate change on agriculture, and isolation and remoteness. Students will examine how governments, planners, communities and individuals attempt to manage these challenges and ensure the sustainability of places. They will also investigate the ways that geographical knowledge and skills can be applied to these challenges.

Students will select ONE of two contexts to study these challenges:

- Metropolitan and regional centres
- Regional centres and rural places

In both contexts case studies and comparisons should be drawn from Australia, at least one developed country, and at least one developing country.

Learning outcomes

By the end of this unit, students:

- understand the economic, demographic, social, political and environmental processes producing changes in places, and their varying outcomes in different places
- use geospatial technologies and statistical methods to analyse trends in these processes
- use fieldwork methods such as land use surveys, traffic counts and interviews to investigate a challenge
- evaluate a selected challenge and ways of managing it
- evaluate the use of geographical knowledge and skills in analysing the challenge and developing responses to it.

Content Descriptions

Metropolitan and regional centres

- Urbanisation and its economic and social consequences.
- The concentration of national urban populations into a few very large cities, with comparisons between Australia and other countries.
- The demands of cities and environmental relationships between cities and their hinterlands.
- An overview of demographic, economic and social trends in cities, and the identification of different types of city.
- The changing spatial structure of cities.
- An overview of challenges in developed and developing country cities, such as housing, economic restructuring, employment, transportation, congestion, environmental degradation, sanitation, spatial inequalities and land abandonment.
- An in-depth study of ONE of the following challenges:
  - housing
  - transportation
  - employment
  - water supply and energy use.

  The in-depth study should evaluate both the use of geographical knowledge and skills to analyse the challenge and develop responses to it, and the planning and other strategies that could be adopted to manage the challenge. Each challenge should be examined for its environmental, social and economic dimensions. Case studies should include examples of cities that have successfully met the challenge.

OR

Regional centres and rural places

- The concepts of regional and rural, and why they are contested.
- The significance of regional centres and rural places in Australia and other countries.
- Classify regional places, and explain their different rates of population growth.
- An overview of demographic, economic and social trends in regional centres and rural space, and the identification of different types of places.
- An overview of challenges for regional centres and rural places in developed and developing countries, including population loss, employment, economic restructuring, housing, service provision, concentrations of socially vulnerable populations, transportation, resource degradation, land use conflicts, declining political influence and isolation and remoteness.
- The changing spatial structure of rural society resulting from population decline and increased mobility.

- An overview of national, state, local government and community development strategies for regional centres and rural places, comparing Australia with countries with strong regional development policies.
- An in-depth study of ONE of the following challenges:
  - economic development and employment
  - service provision and housing
  - infrastructure
  - land use conflicts.

The in-depth study should evaluate both the use of geographical knowledge and skills to analyse the challenge and develop responses, and the development, planning and other strategies that could be adopted to manage the challenge. Each challenge should be examined for its environmental, social and economic dimensions. Case studies should include examples of places that have successfully met the challenge.

Unit 3: Environmental Risk Management

Unit Description

This unit focuses on identifying risks and managing those risks to eliminate or minimise hard to the environment whilst benefitting from the economic activity. On the one hand, the use of natural resources such as timber, mineral deposits, fish, freshwater and soils may place environments at risk; on the other, environmental hazards are potential sources of harm to human life, health, income and possessions and may affect people's built structures or aspects of the biophysical environment. Environmental risks threaten the sustainability of place, space and environments at a variety of scales.

Building on their existing geographical knowledge and understandings, students examine environments placed at risk through the use of natural resources and a number of types of environmental hazards: atmospheric hazards such as tornadoes, frosts and droughts; hydrological hazards such as flooding, wave set up and glacial surges; geomorphic hazards such as earthquakes, volcanoes and landslides; and ecological hazards such as epidemics, overgrazing, plant invasions and bushfires.

Students practice a refined application of geographical inquiry and skills, including fieldwork methodologies. Geospatial technologies are used to model, assess and forecast risk.

This unit requires an in-depth study of one environmental risk from each of the following categories, identifying the biophysical factors that underpin the chosen environmental risk and explaining the risk management strategies:

1. An environment placed at risk as a result of the use of a natural resource	2. An environmental hazard

Risk management, in this context, involves a number of policies and procedures, and practices focused on monitoring, identifying, analysing, evaluating and acting to reduce risk.

Unit Outcomes

By the end of this unit, students:

- apply geographical inquiry methods and skills, including fieldwork, spatial technologies and data sets, to investigate environmental and human-induced risk
- understand that there is an interdependent relationship between the earth's environments and human activities
- understand that place, space and environments are influenced by both environmental and human-induced risk
- understand that the degree to which people adopt sustainable strategies influences the nature of their impact on their environments
- identify risk management policies, procedures and practices and make comparisons between Australian strategies and those employed overseas

- communicate the results of geographic inquiry, focused on depth studies of one environment placed at risk as a result of the use of a natural resource and one environmental hazard.

Content Descriptions

Understanding risk

- Define the concept of risk as applied to the use of natural resources and environmental hazards.
- Define the concept of sustainability as applied to an assessment of the risks resulting from human induced environmental change.
- Identify the temporal distribution, randomness and periodicity of environmental hazard risks.
- Examine, in depth, one environment placed at risk as a result of the use of a natural resource and one environmental hazard:
    - Identify the risks
    - Assess the risks, in terms of a set of criteria, an examination of the elements of the risk, identifying who or what is vulnerable and estimating the degree of risk
    - Treat the risk, through preparations for a hazardous event, prevention of an event or disaster, response to the event, disaster or environment placed at risk, and recovery from the event, disaster or impact of resource use

Identifying risk

- Describe one environmental hazard, at either a local or global scale, from each of the following categories: atmospheric, hydrological, geomorphic and ecological.
- Measure the magnitude and speed of onset of environmental hazards and identify the critical thresholds implicit in these measurements.
- Investigate the frequency, duration and temporal spacing of environmental hazards using statistical techniques to identify patterns, clusters and trends.
- Map the areal extent, spatial dispersion and spatial distribution of one environmental risk, using geospatial technologies, and apply an understanding of biophysical processes to explain these spatial patterns.
- Apply geospatial technologies to forecast the future spatial patterns of one environmental risk.
- Investigate the effectiveness of geospatial technologies in risk mapping exercises.

Explaining risk

- Articulate reasons that help to explain why some environments are placed at risk and why disasters occur.

- Describe the biophysical processes involved in one human-induced environmental change, and the significance of the concepts of a system, environmental vulnerability, resilience and non-linear change.
- Evaluate the underlying demographic, economic, social, political and attitudinal causes of one human-induced environmental change.
- Investigate the significance of people's perceptions of and attitudes towards environmental risks, and the consequences of these perceptions and attitudes.

Comparing and managing risk

- Describe risk management policies, procedures and practices for:
  - one environment placed at risk as a result of the use of a natural resource
  - one environmental hazard.
- Compare the environmental, economic and social impacts of environmental risks in Australia with those in other countries, and explain why some places, and some people, are more vulnerable than others.
- Compare and evaluate the strategies adopted to limit the damage from a future hazard event, and community, national and international responses during and after a hazard event in Australia, with similar strategies in other countries.
- Compare and evaluate the strategies developed in response to threats to the sustainability of an environmental resource in Australia with similar strategies in other countries.

Unit 4: A World in the Making

Unit Description

This unit focuses on the widening, deepening and speeding up of global interconnections, enabling students to investigate a range of places and to consider how changes in connections affect specific localities and groups of people. This emerging world is examined through an awareness that people are progressively integrated into a global society through telecommunication technologies, flows of commodities and people, the decisions they make as consumers, ideas that are disseminated through media, and decisions that are made in locations both near and far.

This unit examines the complexities characteristic of this interconnected world. Paradoxically, as time and space is compressed, place appears to become ever more important. People and places compete for attention in this increasingly interconnected world. Particular places, for example nation states, remain powerful in the context of the circulation of global economic activities and certain places emerge as powerful centres of industry and innovation, such as 'Third Italy', 'Silicon Valley' in California, southern China and the City of London. At the same time many people are bypassed by these developments. There are vast spaces of disadvantage which are less well integrated into the apparently seamless global interconnections.

Learning Outcomes

By the end of this unit, students:

- understand the nature and consequences of global interconnections on particular people and places
- understand how changes in connections affect specific localities and groups of people
- think geographically, based on an understanding of the complexities of an interconnected world, examined through the concepts of place, space, interconnection, scale and change
- propose and justify approaches to achieving a better world for all, based on an understanding of an integrated global society, the resilience of people and the power of place
- apply a range of geographical inquiry methods and skills to investigate a world in the making, a world revealed as much more complex than simplistic models of the process of globalisation would suggest

Content Descriptions

People

- Describe how people are living in an interconnected world, through examples such as world events being communicated via satellite technology, overseas products and ideas being incorporated into daily life, political events affecting ways of life at a local, national and global scale, or where increasing numbers of people work outside their country of birth for long periods of time. Students will:
    - identify, locate and extract spatial data from a range of information sources that illustrate these interconnections
    - identify print and digital sources that illustrate how people are living in an interconnected world
- Explain why Aboriginal Peoples and Torres Strait Islander Peoples share concerns and celebrate differences with other First Nation People — for example, how Aboriginal Peoples' and Torres Strait Islander Peoples; share similar concerns with Saami People over resource extraction industries, tourism and media perceptions; or how Aboriginal Peoples share bush tucker resources with First Nation Peoples' in sub-Saharan Africa.
- Describe how migrants build connections across different national and international boundaries and often maintain close ties to more than one place, for example through employment, family and business connections. Students will:
    - identify, locate and extract spatial data from a range of information sources to illustrate migration streams between Australia and the Asia-Pacific, the United States of America and other American nations, North Africa and Southern Europe.
- Critically analyse how competition between people and places affects the notion of the 'global commons' (such as the deep seabed or Antarctica being available to everyone yet owned by no-one in particular) or the common heritage of human kind. Students will:
    - critically analyse the notion of the 'global commons' in terms of their relative location, areal extent and the competing demands of nation states.

The material world

- Recognise that the flow of component parts and assembled goods as well as business people move across space cheaply and efficiently, for example, in containerships and commercial aircraft. Students will:
    - identify, locate and extract spatial data from a range of information sources that illustrates these flows.
- Assess the extent to which the world is perceived to be shrinking as a result of the use of satellites and high-speed telephony via fibre optic cables, for example, that 'weightless' goods and products such as information or currencies can be transported almost instantaneously across the world and that people and places compete fiercely for these goods and products even if they have restricted access to these technologies.
- Discuss how global cities (for example London, New York and Tokyo) have become centres of command and control for the global economy and why these centres are becoming more important as the twenty-first century progresses. Students will:

  - identify, locate and extract spatial data from information sources to illustrate the networks of connections that integrate global cities into a global system of markets for capital, labour and commodities; these connections exist, for example, among transnational corporations, financial institutions, business services, international institutions, non-government organisations, and intergovernmental organisations, and can be mapped in terms of the flows of people, goods, services and knowledge
  - analyse spatial data to demonstrate how certain global cities have come to dominate these flows and become centres of command and control for the global economy
- Account for the 'global shift', or a change in the location of the world's manufacturing activity, for example, to the BRICS nation-states of Brazil, Russia, India, China and South Africa.
- Examine the effect of globalisation of the levels of production and consumption of food, including how societies are obtaining food from a vast network as new countries and new food commodities are drawn into international markets, and that many people are left hungry, while others source their food supplies locally in reaction to perceptions about mass-produced food products and the 'food miles' these commodities travel.

Explaining the networked world

- Examine the connections between the 'local' and the 'global' and the ways that people adapt to and resist these forces of global interdependence. This could include a study of how these connections leave some people as largely citizens of the globe while others are inhabitants of place, showing that differences between these two groups are reconciled in different ways, for example, acquiescence, adaptation, resistance and reaction.
- Demonstrate how geopolitical ideas allow certain transnational organisations to achieve a presence at local, national, regional and international scales, so that they can demand an end conflicts or maintain peace, for example, the United Nations, Amnesty International, the Baha'i Faith or the Campaign for Nuclear Disarmament.
- Discuss the extent to which the world in the making is being reconstructed through powerful humanitarian ideals as, for example, through the Millennium Development Goals.
- Evaluate the extent to which the perception of places and events are influenced through the images and information that are distributed by television, newspaper, music and film.

Glossary

- *Where glossary terms are unsourced, they have been developed from the expertise of the writing team.*

Aboriginal language and cultural maps	*'This definition is to be developed in consultation with Aboriginal and Torres Strait Islander stakeholders'*.
Biodiversity	- the variety of all life forms; the plants, animals and micro-organisms and the genes they contain as well as the variety of ecosystems they form (Harte, 20).
Biofuel	- fuel produced from renewable resources, especially plant biomass, vegetable oils and treated municipal and industrial wastes. Much biofuel is currently produced through commercial agricultural production of sugar cane and grain but firewood can be thought of as a biofuel, as wood is a biomass product, which can be burnt to released energy in the form of heat (referenced from www.thefreedictionary.com/biofuels)
Biomass	- the total weight of organisms in a particular area (Harte, 21).
biophysical environments/biophysical environment	- an alternative term used for the natural environment. The biophysical environment is made up of the atmosphere, lithosphere, hydrosphere and biosphere. Biophysical environments include, for example, forests, deserts and oceans. Biophysical features can include mountains, clouds, sand dunes, rivers and plants (referenced from Harte, 21).
biophysical processes	- the atmospheric, biological, chemical and physical processes that take place in the lithosphere, hydrosphere, atmosphere and biosphere. They can be further broken down, for example, soil-forming processes, mass wasting, cloud-forming processes, fluvial processes, marine processes, glacial processes and biogeochemical cycling.
blue water	- water resources that exist in storages such as lakes and rivers (referenced from Linton, 641).
boundaries	- limiting or bounding lines that can be demarcated or marked out on the ground for example, national or state frontiers and boundaries. They can also be gradual zones of transition such as, deserts and mountains

	(referenced from Money, 175-182)
built environment	- the environment created or altered by people, for example, cities, roads, industrial areas, buildings (Baker et al, 51) The term 'built environment' will be used to specifically refer to the constructed environment of buildings, roads, railways, airports, harbours, drains, parks and wetlands characteristic of the urbanised places in which the majority of Australian students live, and which are a major site for geographical field work. These are all subsets of the biophysical environment (Shape of the Australian Curriculum: Geography, 14)
cause and effect	- what is happening in a particular place connected with why is it happening at that location, for example, the flow-on effects of pollutants on the food chain
Climate	- the average condition of the atmosphere over the long term. For example, a place is described as having a desert climate because it has been dry, or arid, for decades, hundreds or thousands of years (referenced from Harte, 31)
climate graphs	- provide summaries of climate information about a place, such as temperature and precipitation (referenced from Harte, 31)
climate maps	- give general information about the climate and precipitation of a region, using a colour code to show different zones [2] (http://www.myteacherpages.com/webpages/TTravis/social_studies_class.cfm?subpage=648434)
Coastcare	-a community of volunteers who care for the coastline. Coastcare volunteers identify local environmental problems and work together to achieve practical solutions (referenced from Coastcare).
communication methods	-communication methods help students share their learning. They usually involve geographical tools and will be similar to the information sources that are explored. At times, a collection of forms will be combined. Some examples of communication methods for geography include: **Oral-** role play, presentation, poster talk, guided tour, song, poem, podcast, stories

[2]Dorchester County Public Schools (2011) (website), *Types of Maps*, Cambridge, USA, http://www.myteacherpages.com/webpages/TTravis/social_studies_class.cfm?subpage=648434 (accessed September 2011)

	Graphic- photographs, remotely sensed images, photo-stories, mixed media displays, artworks, posters, models, collages, graphs, tables, tallies, diagrams, object displays, plans or maps **Written-** factual texts, reports, articles, poetry, picture books, stories, surveys, annotated visual pieces, learning journeys, response to inquiry questions, learning journals **Digital-** role-plays, slideshows, videos, films, advertisements, websites, documentaries, maps
communities/community	- groups of people with shared histories, beliefs and aspirations. Many communities can be identified on the basis of shared space, religion, ethnicity or socioeconomic status. (Harte, 36).
continuous resource	-a renewable resource, such as solar energy, the availability of which is not affected by human activity in terms of its availability (referenced from Hutchinson, 2).
convective processes	- the upward movement of material, such as air, as a result of heating from below. On the earth the land tends to heat up relatively quickly. As it does, the air is heated and so becomes less dense than the air above it. The lower air rises in what is called a convection current and may produce rainfall (Harte, 42).
Country/Place	*'This definition is to be developed in consultation with Aboriginal and Torres Strait Islander stakeholders'*
cultural diffusion	- the spread of profit-making cultures that may support the values and customs of some cultural groups or dismantle or extinguish the cultures of others (Anderson, 77).
Data	- geographic data can be obtained from primary and secondary sources and can be both quantitative and qualitative data. They are pieces of information that have been collected (referenced from Kriewaldt & Digby, 134)
Deforestation	- the clearing of vegetation on a large scale, for example, to create more space for housing development and agriculture (referenced from Harte, 45-46).
Degradation	- the deteriorating quality of the land due to soil salinity, and accelerated soil erosion (Harte, 46).
demographics/demographic	- the study of population data including the identification of patterns and trends (referenced from Harte, 47).
desertification	- the intensification or spread of arid conditions which can occur in already arid or desert areas where average rainfall has declined over time. (referenced from Harte,48).

economic viability	- relates to the provision of renewable resources, the provision of employment opportunities and the possibility of sustainable futures (referenced from Cochlin & Dibden)
environment/environments	-the term 'environment', where unqualified, means the living and non-living elements of the earth's surface and atmosphere. It includes human changes to the earth's surface, such as croplands, planted forests, buildings and roads. The term 'environment' will be used in the primary school curriculum; while in secondary school the more precise term 'biophysical environment' will be preferred. It is understood that there are no longer any purely natural environments, and that many environments have been greatly altered by human activities. (Shape of the Australian Curriculum: Geography, 14)
environmental benefit	- related to such factors as dryland salinity, biodiversity, carbon sequestration, renewable energy, and flood mitigation. There may also be some intangible environmental benefits (referenced from Cochlin & Dibden)
extreme weather events	- short-term episodes of very hot or cold temperatures, exceptionally strong winds and storms, periods of heavy rainfall and lack of rainfall. These events can result in floods, short-term droughts, coastal damage, destruction of the built environment and catastrophic bushfires.
Features	- prominent or conspicuous elements. Geographers frequently divide these into human and natural features.
fieldwork	- is an essential core component of geographical learning. Field work is any study undertaken outside the classroom, and could be within the school grounds, around the neighbouring streets, or in more distant locations. (Shape of the Australian Curriculum: Geography, 15)
frontal processes	- the forced rising of air as a result of different air densities. Frontal rainfall can result from the passage of a cold front over an area. As a parcel of cold, dense air moves towards an area with warmer, less dense air, the less dense air is forced to rise. As the air rises it cools, eventually forms clouds, and may rain. This is called frontal rain. Rainfall tends to continue for an extended period of time such as a week compared with the more brief episodes associated with convectional rainfall (Harte, 67).
geographical conventions	- topographic maps display a number of conventions: the map title is shown on the top centre of the map and may be the name of an important town or of an area; the north point diagram is usually located on the bottom margin and shows for a given year, the direction of true, magnetic and grid north; the representative fraction, expressing scale, is located at the top of the map and also at the bottom above the linear scale (State

	Emergency Service, Tasmania, 11). When constructing maps students should bear in mind the acronym BOLTSS: Border, Orientation, Legend, Title, Scale and Source (Kriewaldt & Digby, 2).
geographical texts	- can be oral, graphic, written or digital.
geographical tools	- are used to gather geographic information, for example, pictures, maps, globes, specimens, models, graphs, statistical tables, texts and fieldwork' (referenced from Scarfe, 8).
global distribution	- where things of any particular category are found throughout the world, for example, coniferous forests, red tropical soils, human population.
'green water'	- the main water resource involved in rain-fed crop production and the growth of natural vegetation. Engineers have been preoccupied with managing water in rivers, lakes and dams rather than with 'green water' resources. 'Green water' resources are particularly important in the arid environments of Australia (Linton, 641).
homogenising of culture	- where cultures in every-place are similarly defined by corporate values rather than local customs (Anderson, 77). This type of 'cultural globalisation' is often thought of as a synonym from 'Americanisation' where the pink of the US strawberry milkshake has replaced the pink coloured former colonies of the British Empire (Toynbee, 191).
human features/built features	- elements or components created by people. (Harte, 83).
human well-being	-the overall standard of living and health of a population as determined by factors including various indicators of development such as gross domestic product (GDP), infant mortality rates, literacy rates. A good or satisfactory condition of existence (referenced from Macquarie Online dictionary)
information sources	- can be oral, graphic, written or digital and involve primary and secondary data. Fieldwork is a major source for students to construct their own information. Some examples of sources for geographical inquiry include: **Oral-** interview, guest speaker, songs, podcasts, stories, experts, radio broadcasts **Graphic-** photographs (air photos, remotely sensed images, ground and oblique photographs), advertisements, maps diagrams, statistics, graphs, models, artefacts or objects (for example, clothing, stamps, money)

	Written- factual texts, literature, poetry, picture books, print media, stories, surveys, documentaries **Digital-** news footage, video clips, social media, advertisements, online games, iPad apps, websites, spatial technologies.
interconnection/interconnections	-an interconnection between places is the way that environments, organisations, businesses and people in different places are connected to each other. These connections are through environmental processes, the movement of people, flows of trade and investment, the purchase of goods and services, cultural influences, the exchange of ideas and information, political power and international agreements.
Landcare	- is a non-profit company that was formed by the Australian Government in 1989 as a result of deteriorating environmental quality, such as soil erosion, salinity habitat loss, Landcare attempts to draw attention to the plight of the natural environment, promote ecologically sustainable development practices and to encourage community groups and others to become active participants in ecologically sound practices (Harte, 99).
Landscape	- is a term that has a number of interpretations in geography. Each has a slightly different emphasis, but they are not mutually exclusive: • a regional environment, for example the landscape of Wilpena Pound • as countryside • as land use, for example, the wheat/sheep belt • as topography or landform, for example, Kata Tjuta • as an ecosystem in which ecological relationships are realised in different types of landscape, each the product of the interaction of the biosphere, hydrosphere, atmosphere and lithosphere • as scenery, and this is the most common everyday usage • as heritage or historical artefact, for example, the Rocks or Ned Kelly Country • as a composite of individual components, for example, a sclerophyllous forest landscape, urban landscape • as an art form, for example, Dutch *landschap*, the representation in painting of inland natural scenery • as a resource, for example, landscapes attractive to tourists (Goodall, 262).
Lifeways	*'This definition is to be developed in consultation with Aboriginal and Torres Strait Islander stakeholders'*

Location	- the site where something is. Geographers refer to absolute location (latitude and longitude) and relative location (where the site is in relation to other things, for example, a hilltop or another place).
locational reasoning	- the reasons that determine the location of an activity (factors of location), including climate, water availability, labour, capital, and enterprise and the characteristics of the place itself
map/maps	- a representation on a flat surface of a part or the whole of the earth's surface (Macquarie Dictionary). Maps represent landscapes or a particular theme (ICSM, 2011) They include different scales, use keys and compass points. They show how places are related to each other by distance, direction and size. [3]
mental maps	- represent what people know about the locations and characteristics of places at a variety of scales. (referenced from Geography Education Standards Project, 64).
natural features	- elements or components of the biophysical environment, for example, rivers, mountains, forests, rocks
Neighbourhood	- an urban district occupied and dominated by an identifiable subculture to which most people conform (Harte, 116).
Network	- a general term, which describes the multiple number of pathways, joined together, for example, transport network, food web (Harte, 116).
non-renewable resource	- those resources which are finite and the exploitation of which will lead to their exhaustion (Hutchinson, 2).
North/South and developed/developing	- the 1980 *Brandt Report, North-South: A Programme for Survival* divided the world into two groups, the developing countries as those that occupy the southern hemisphere and developed countries as those that occupy the northern hemisphere. The report recognised that both halves coexisted within a common global economy but it drew a line between the comparatively huge populations in the South and their relative poverty and health compared to the North.

[3] Dorchester County Public Schools (2011) (website), *Types of Maps*, Cambridge, USA, http://www.myteacherpages.com/webpages/TTravis/social_studies_class.cfm?subpage=648434 (accessed September 2011)

operational scale	- operational scale refers to the logical scale at which a geographical process takes place (Sheppard & McMaster, 5)
orographic processes	- air that is forced to rise as a result of meeting a barrier. For example, as air moves from the sea toward the land it rises up to a higher altitude. As the air rises it cools and may eventually rain. Rain falls on the windward side of the barrier (that is, the side from which the wind comes). On the other side of the barrier (on the lee or leeward slope) conditions are much drier (Harte, 119-120).
picture maps	- used to show location of natural or built features using picture symbols. These may not be drawn to scale and are commonly used by young students or in tourist maps.
place/places	-places are specific areas of the earth's surface; portions of space that have been given meanings which have been shaped by people.
population profiles	- are standard styles of graphs that represent the age and sex composition of a population. Sometimes these special bar graphs are called population pyramids, but this can be confusing as they can be a variety of shapes (Kriewaldt & Digby, 88). ICT programs such as Excel can be used to generate population profiles.
primary data/primary sources	- information that is first-hand and has not been processed and changed, for example, collected through fieldwork such as surveys and field measurements (Harte, 133).
proximity	-the measure to find places within a specified distance of particular locations (Kriewaldt & Digby, 135).
push and pull factors	-centripetal forces, or pull factors, attract people or economic activity into an area as opposed to centrifugal forces that repel them
qualitative data	- less easily quantified data, such as people's quotes or opinions; sometimes known as 'soft' data (Kriewaldt & Digby, 135).
quantitative data	- fixed data recorded in quantities at a point in time and usually presented in the form of statistics, graphs or maps; sometimes called 'hard' data (Kriewaldt & Digby, 135).
questioning conventions	- geographer's questions based on a *spatial perspective* might ask the following questions: Where is … located? Why is it there? With what is it associated? What are the consequences of its location and

	associations? What spatial alternatives should be considered in decision making? Who decides, for whom? The geographer's questions based on a *humanistic perspective* might ask the following questions: What is the place or thing we are concerned with? What are my own perceptions of this place? What are the perceptions of other people? What is the language used to describe this place/ what does this place mean to people as evidenced by their reactions to it? What are the causes and consequences of the perceptions of place? (Fien et al 66) Geographer's questions based on an *environmental management perspective* might ask the following questions: What do we need to find out about this environment? How suitable are current management practices in caring for this environment? What do you feel about this environment? What sorts of appropriate action could you take as a responsible citizen? Geographer's questions based on a *cartographic perspective* might ask the following questions: What is meant by the following map symbols? In which direction would you travel to reach …? How long would this journey take travelling at 60kph? How can we make some sense of the spatial patterns shown on the map? How is this map linked to the current topic that we are studying? What is the intent of the cartographer in producing the map? Whose interests does it serve? Geographer's questions based on a *global education perspective* might ask the following questions: How is my world interlinked by economic, social, political, cultural and environmental factors? How can I develop a sense of shared identity with others? What can I find out about social justice and human rights in Australia and the Asia-Pacific? How can we achieve peace, security, cooperation and sustainability in a particular place? Geographer's questions based on a *political perspective* might ask the following questions: Who has power in a particular place? Who decides about developments in a community? Who benefits and who misses out? How can these decisions manifest in the built environment?
relative locations	- the location of a point compared to some other point, for example, 6 km from …. Southwest of … (Harte, 139). Relative location can be compared with absolute location or the specific location of a point such as its latitude and longitude, grid reference or area reference (Harte, 7).

relief maps	- show the physical features of an area, for example, mountains and rivers. A colour code is used to show relief (elevation). This usually ranges from green (low elevation) to brown or orange (high elevation). Water is represented in blue (ICSM, 2011).
renewable resources	- are things that grow and can be replaced over time. Anything based on plants and animals (for example, trees) is a renewable resource (Hutchinson, 3)
secondary data/ secondary sources	- information that has already been processed or changed in some way, for example, information from television, textbooks and newspapers (Harte, 145). ICTs can be used to collect secondary data, for example, texts, digital videos, animations, satellite images, photographs, statistics and sounds (Martin, 44).
service function	- the 'service function' describes an environment's ability to provide beneficial outcomes, for example, clean water, renewable soil, better amenities, healthy living conditions, and fewer environmental hazards. It is important to acknowledge that the life support and ecosystem services functions of the environment should be protected.
sink function	- the 'sink function' describes an environment's ability to absorb and render harmless waste and pollution: when waste output exceeds the limit of the sink function, long-term damage occurs.
social justice	- relating to the relative access to social benefits and responsibilities. Social justice is concerned with ensuring that all people have equal access to community resources such as health services, housing, water and food, as well as community expectations such as employment. (referenced from Harte, 151).
soil moisture/soil moisture budgets	- show the availability of moisture stored in the soil for use by plants. The budget is determined by rainfall and evaporation statistics together with the amount of water forming surface runoff and percolation to the groundwater store. When the soil holds all the water it can it has reached its field capacity and any excess becomes runoff or soaks into the groundwater. The availability of soil water determines the growing season for shallow rooted plants (Manuel, 22).
source function	- the potential of an environment to provide services and materials is referred to as an 'environment's source function'

spatial distribution/spatial arrangement/spatial patterns	- the distribution or spread of features such as cities across a geographic area. The spatial distribution of features can be described as clustered or dense where features are close together, or dispersed or sparse where features are spread apart (Harte, 153). It is these distributions that form spatial patterns or spatial arrangements.
spatially targeted programs	- the idea of singling out a specific place for development, whereby a new enterprise is established in a chosen location and leads to a chain of events occurring (for example, a new enterprise leads to an influx of people, an increased pool of highly skilled labour, the development of other enterprises, growth in consumer demand, more tax revenue and further development). One of the dilemmas of instituting a spatially targeted program is choosing who to target within a community. Another is deciding which place to target; another is which pockets within a place should be targeted. Finally, a choice needs to be made as to whether a program should filter through central government structures or should by-pass them and select groups of individuals, in chosen places, on the basis of some preordained sets of criteria.
spatial technologies	- are any software or hardware that interacts with real world locations. The use of spatial technologies forms the basis of many geographers' work practice. Global Positioning Systems (GPS), Google Earth, Geographic Information Systems (GIS) and the use of satellite images are the most commonly used spatial technologies to visualise, manipulate, analyse, display and record spatial data. The use of spatial technologies is integral to the inquiry and skills process. The spatial technology application links geographic locations to information about them so you can: • find information about places across the globe or locally • analyse relationships between locations • make decisions on the location of facilities • map the demographics of target markets • integrate maps with information from a variety of sources (referenced from http://learningplace.com.au/deliver/content.asp?pid=37645).
spiritual function	- the potential of an environment to provide opportunities for spiritual reflection, contemplation, sense of identity. It can also refer to belonging to Country/Place. The recreational, psychological, aesthetic and spiritual value of environments for people should be acknowledged.
sustainable agriculture	- involves producing food, managing land and raising livestock in a manner that is not only sustainable and

	effective for the environment, but, just as importantly, is sustainable and effective for the entire community (Caritas).
sustainability principles	- the principles are: • renewable resources should only be exploited at or below their rates of renewal or at a cautiously lower rate if their rate of renewal is uncertain • biodegradable wastes should not be added to the environment faster than they can be broken down and recycled • non-biodegradable wastes should only be added to the environment at levels below those that threaten human health and well-being • non-renewable resources should not be exploited faster than the rate at which they can be substituted by other resources or maintained through technological progress or recycling • the life support functions of the environment should be protected • the spiritual functions of the environment should be protected • sustainability in one place cannot be achieved at the expense of environmental conditions in other places • global sustainability depends on an equitable sharing of global environmental functions
topographic maps	- are summaries of the landscape and show important physical and human features in an area. They show elevation using contour lines (a line that joins points of equal elevation above sea level), an emphasis on showing human settlement (roads, cities, buildings) but may include some thematic information such as vegetation or the boundaries of national parks. They also have location reference systems, including latitude and longitude, but may also have grid lines. They often have additional information such as an arrow pointing to magnetic north as well as true north (referenced from ICSM, 2011).
urbanisation	- (i) the increasing concentration of urban activities in an area; (ii) the increasing percentage, or proportion of people, living in urban areas of a country. The term 'level of urbanisation' is often used. For example, the level of urbanisation might be expressed as 82 per cent. This means that of all the people in an

	area, such as a country, 82 per cent live in urban areas and only 18 per cent live in rural areas (Harte, 167).
urban sprawl	- the outward growth of the city, where residential/commercial/industrial land use activity replaces previously rural land (Harte, 167).
virtual water	- water that has been used to grow the crops that make the food we eat, the beverages we drink and the clothes we wear. For example, a can of cola contains 0.35 litres of water, yet it requires an average of 200 litres to grow and process the sugar contained in that can. Similarly it takes 2900 litres to 'grow' a cotton shirt and 8000 litres to produce a pair of leather shoes, that is, the amount of water required to grow feed, support a cow, and process its skin into leather. Australia is the second largest exporter of virtual water, after USA, through its agricultural exports. Similarly, Brazil, Mexico, Japan and China are major importers of virtual water (Chapagain & Orr, 15).
water cycle	- also referred to as the hydrological cycle. It is the cycling or transfer of water between various storages such as oceans, lakes and the atmosphere. This occurs through a variety of processes including evaporation, condensation, precipitation and runoff within the biophysical environment (referenced from Harte, 86).
world heritage	- cultural and natural sites of significance that are recognised worldwide (not just by a country) and are of concern for all people. A World Heritage List has been established by UNESCO. Over 400 sites worldwide have been designated as World Heritage sites (referenced from Harte, 175).

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