Investigating landscapes and their landforms

Assessment description	Category
Students present findings and representations of data and information about landscapes and their landforms in a collection of work using a range of appropriate communication forms.	Multimodal and written/spoken
	Technique
	Collection of work
Context for assessment	**Alignment**
Students: • develop a collection of work in class to demonstrate knowledge, understanding and skills about landscapes and landforms • use a range of sources to complete a series of learning projects in class **including:** – a labelled sketch (from a photograph) of one landscape and specific landforms – a special purpose map showing the distribution at a global scale of one type of landform with a description, including examples – an annotated photograph (or sketch) of a landform model to explain the geomorphological processes evident – a labelled diagram of a geomorphological hazard, a map showing the distribution of where this hazard occurs and an annotated map with a case study summary – an explanation of an artwork of a landscape or landform by an Aboriginal or Torres Strait Islander artist – a graphical representation and analysis of a specific land degradation issue – a factsheet with labelled map about one of Australia's natural World Heritage sites.	*Australian Curriculum v6.0*, Year 8 Geography Australian Curriculum content and achievement standard ACARA — Australian Curriculum, Assessment and Reporting Authority www.australiancurriculum.edu.au Year 8 Geography standard elaborations: www.qcaa.qld.edu.au/downloads/p_10/ac_geog_yr8_se.pdf
	Connections
	This assessment can be used with the QCAA Australian Curriculum resource titled *Year 8 Geography year plan — Geography exemplar* available at: www.qcaa.qld.edu.au/downloads/p_10/ac_geog_yr8_plan.docx

Definitions

Landform: The individual surface features of the earth identified by their shape, e.g. dunes, plateaux, canyons, beaches, plains, rivers and valleys.

Landscape: A landscape is the visible appearance of an area, created by a combination of geological, geomorphological, biological, cultural layers that have evolved over time, and as perceived, portrayed and valued by people. A geomorphic landscape is the landscape without the biological and cultural layers.

Geographical processes: The physical and human forces that work in combination to form and transform the world, e.g. erosion, the water cycle, migration or urbanisation. Geographical processes can operate within and between places.

Spatial distribution: The arrangement of particular phenomena or activities across the surface of the Earth.

Annotation: The process of adding comments and explanations to make meaning. In Geography, annotations are added to visual texts such as diagrams or maps.

Geomorphology: A field of study which attempts to describe and understand the natural features of and

the processes operating on, the Earth's surface. **Landscape degradation:** Degradation occurs through human actions and includes salinity, accelerated soil erosion, the spread of weeds, loss of biodiversity and habitats and water pollution. **Geomorphological hazard:** Hazards that originate from the lithosphere including volcanic eruptions, earthquakes, landslides and avalanches. **Stack:** A geological landform consisting of a steep and often vertical column or column of rock in the sea near a coast, formed by erosion.
In this assessment
Teacher guidelines
Task-specific standards — continua
Task-specific standards — matrix
Assessment resource 1: Identifying landscapes and their landforms
Assessment resource 2: Geomorphic processes in action
Assessment resource 3: Geomorphological hazards
Assessment resource 4: Connecting landforms to Country/Place
Assessment resource 5: Land degradation
Assessment resource 6: Protecting significant landscapes
Assessment resource 7: Glossary of geographical terms
Student booklet

Teacher guidelines

Identify curriculum

Content descriptions to be taught	
Geographical Knowledge and Understanding	**Geographical Inquiry and Skills**
• The different types of landscapes and their distinctive landform features (ACHGK048) • The aesthetic, cultural and spiritual value of landscapes and landforms for people, including Aboriginal and Torres Strait Islander Peoples (ACHGK049) • The geomorphic processes that produce landforms, including a case study of at least one landform (ACHGK050) • The human causes and effects of landscape degradation (ACHGK051) • The ways of protecting significant landscapes (ACHGK052) • The causes, impacts and responses to a geomorphological hazard (ACHGK053)	**Collecting, recording, evaluating and representing** • Collect, select and record relevant geographical data and information, using ethical protocols, from appropriate primary and secondary sources (ACHGS056) • Evaluate sources for their reliability and usefulness and represent data in a range of appropriate forms, for example, climate graphs, compound column graphs, population pyramids, tables, field sketches and annotated diagrams, with and without the use of digital and spatial technologies (ACHGS057) • Represent the spatial distribution of different types of geographical phenomena by constructing appropriate maps at different scales that conform to cartographic conventions, using spatial technologies as appropriate (ACHGS058) **Interpreting, analysing and concluding** • Analyse geographical data and other information using qualitative and quantitative methods, and digital and spatial technologies as appropriate, to identify and propose explanations for spatial distributions, patterns and trends and infer relationships (ACHGS059) • Apply geographical concepts to draw conclusions based on the analysis of the data and information collected (ACHGS060) **Communicating** • Present findings, arguments and ideas in a range of communication forms selected to suit a particular audience and purpose, using geographical terminology and digital technologies as appropriate (ACHGS061) **Reflecting and responding** • Reflect on their learning to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic and social considerations, and predict the expected outcomes of their proposal (ACHGS062)

General capabilities (GCs) and cross-curriculum priorities (CCPs)

This assessment may provide opportunities to engage with the following GCs and CCPs. Refer also to the Resources tab on the P–10 Geography curriculum and assessment page: www.qcaa.qld.edu.au/yr8-geography-resources.html.

- Literacy
- Numeracy
- ICT capability
- Critical and creative thinking
- Personal and social capability
- Ethical understanding
- Intercultural understanding
- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia's engagement with Asia
- Sustainability

Achievement standard

This assessment provides opportunities for students to demonstrate the following highlighted aspects.

By the end of Year 8, students explain geographical processes that influence the characteristics of places and explain how places are perceived and valued differently. They explain interconnections within environments and between people and places and explain how they change places and environments. They propose explanations for spatial distributions and patterns among phenomena and identify associations between distribution patterns. They compare alternative strategies to a geographical challenge and propose a response, taking into account environmental, economic and social factors. Students identify geographically significant questions from observations to frame an inquiry. They locate relevant information from a range of primary and secondary sources to answer inquiry questions. They represent data and the location and distribution of geographical phenomena in a range of appropriate graphic forms, including maps at different scales that conform to cartographic conventions. They analyse geographical data and other information to propose explanations for spatial patterns, trends and relationships and draw reasoned conclusions. Students present findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate communication forms. They propose action in response to a geographical challenge taking account of environmental, economic and social considerations and predict the outcomes of their proposal.

Source: ACARA, The Australian Curriculum v7.2, www.australiancurriculum.edu.au

Sequence learning

Suggested learning experiences

This assessment leads on from the learning experiences outlined in the QCAA's Year 8 Geography year plan. The knowledge, understanding and skills developed in the exemplar year plan will prepare students to engage in this assessment:

- *See Year 8 plan — Year 8 Geography exemplar:* www.qcaa.qld.edu.au/downloads/p_10/ac_geog_yr8_plan.docx

Adjustments for needs of learners

The Australian Curriculum, in keeping with *Melbourne Declaration on Educational Goals for Young Australians* (2008), establishes the expectations of a curriculum appropriate to all Australian students. All students across all education settings and contexts are supported in their diverse learning needs through the three-dimensions of the Australian Curriculum: the learning area content, the general capabilities and the cross-curriculum priorities. The relationship between and the flexibility to emphasis one or more of the dimensions allows teachers to personalise learning programs.

To make adjustments, teachers refer to learning area content aligned to the child's chronological age, personalise learning by emphasising alternate levels of content, general capabilities or cross-curriculum priorities in relation to the chronological age learning area content. The emphasis placed on each area is informed by the child's current level of learning and their strengths, goals and interests. Advice on the process of curriculum adjustment for all students and in particular for those with disability, gifted and talented or for whom English is an additional language or dialect are addressed in *Australian Curriculum — Student Diversity* materials.

For information to support students with diverse learning needs, see:

- Queensland Curriculum and Assessment Authority materials for supporting students with diverse learning needs www.qcaa.qld.edu.au/10188.html
- Australian Curriculum Student Diversity www.australiancurriculum.edu.au/StudentDiversity/Student-diversity-advice
- The *Melbourne Declaration on Educational Goals for Young Australians* www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf
- The *Disability Standards for Education* www.ag.gov.au

Resources

Print and digital

- *Macmillan Global Atlas Fourth Edition* 2014, www.macmillan.com.au/secondary/onix/isbn/9781420232073

Online

- ABC, *Indigenous language map (interactive),* www.abc.net.au/indigenous/map
- Australian Geography Teachers Association, Geogspace, *Field and photosketching*, www.geogspace.edu.au/core-units/f-4/inquiry-and-skills/year-f-4/yf4-is-illus2.html
- Australian Geography Teachers Association, Geogspace, *Using Google Earth to investigate landscapes and landforms*, www.geogspace.edu.au/core-units/years-7-8/inquiry-and-skills/years-7-8/y78-is-illus2.html
- Australian Museum, *Dreamtime story*, www.youtube.com/watch?v=J4rAa6PReQM
- Australian Screen, 'Balgo', 'Maps of the Country', 'Kiwirrkurra' in *Painting Country* 2000, Electric Pictures, Robin Eastwood Productions, SBS Independent & NHK, http://aso.gov.au/titles/documentaries/painting-country (short clips and text explaining law, rights and painting in maps of Country)
- The British Geographer, *Caves, arches, stacks and stumps*, http://thebritishgeographer.weebly.com/coasts-of-erosion-and-coasts-of-deposition.html

- Central Art, *Aboriginal symbols glossary*, www.aboriginalartstore.com.au/aboriginal-art-culture/aboriginal-symbols-glossary
- Cool Geography UK, *Plate margins.*www.coolgeography.co.uk/A-level/AQA/Year%2013/Plate%20Tectonics/Plate%20tectonics/Margins%20and%20landforms.htm
- Film Australia Digital Learning, 'Dreamings through Indigenous art' in *Dreamings — the Art of Aboriginal Australia*, 1988, Australians At Work, Film Australia, 2005, www.australiansatwork.com.au/dreamings/dreamings_ar7-8.php (short clip and text explaining rights to tell stories and symbols and colours in art)
- Geography for Kids, *Break it down: Erosion*, www.geography4kids.com/files/land_erosion.html
- Geography for Kids, *Mechanical weathering*, www.geography4kids.com/files/land_weathering.html
- Hong Kong Geological Survey, *Weathering and Erosion: An Introduction to geomorphology*, http://hkss.cedd.gov.hk/hkss/eng/education/GS/eng/hkg/chapter4.htm
- Kate Owen Gallery, *Aboriginal art symbols — iconography*, www.kateowengallery.com/page/Aboriginal-Art-Symbols.aspx
- Kids.net, *Geomorphology*, http://encyclopedia.kids.net.au/page/ge/Geomorphology
- Our Dreamings, Aboriginal Education Resource, www.ourdreamings.com, (artists stories, paintings and iconography)
- Mr Nussbaum: Learning and fun*, World landforms*, http://mrnussbaum.com/wlandforms
- Oxford Big Ideas: Geography Australian Curriculum Years 7–10, Oxford University Press, *Landforms and landscapes*: www.oup.com.au/secondary/sample_pages/geography
- PBS, *Savage Earth* (animation), www.pbs.org/wnet/savageearth/animations/hellscrust/main.html
- QCAA, *Assessment resource: Cartographic conventions* from *Year 6 Geography sample assessment — Comparing G20 countries*, www.qcaa.qld.edu.au/32687.html.
- QCAA, *Assessment resource: Glossary of geographical terms* (in this assessment)
- UNESCO, *World Heritage — Australia*, http://whc.unesco.org/en/statesparties/AU
- UNESCO, *World Heritage List*, http://whc.unesco.org/en/list
- UNESCO, *World Heritage and sustainable tourism programme*, http://whc.unesco.org/en/tourism
- Worldometer, http://www.worldometers.info/world-population

Objects

- Playdough, clay, plasticine, cardboard or corrugated plastic (such as Corflute) and crayons or paint or other materials for creating a model

Develop assessment

Preparing for the assessment

- Read through the *Student booklet* and the *Task-specific standards* with the students and answer questions about the requirements of the assessment.
- Use the *Task-specific standards* to assist students to identify their learning goals.
- Use the *Assessment resources* to prepare for the assessment.
- Locate a range of photographs and digital images to identify landscapes and their distinctive landform features.
- Provide examples of the forms of communication used to present geographical findings in the assessment.
- Use examples to explain geographical terminology identified in *Assessment resource: Glossary of geographical terms.*
- Review conventions used for communicating geographical information in visual texts, such as infographics, annotated maps, and compound column graphs that use multiple sets of data.
- Use the glossary of the *Year 8 Geography standard elaborations* to explain descriptors of qualities to the students: www.qcaa.qld.edu.au/downloads/p_10/ac_geog_yr8_se.pdf.
- Provide students with the opportunity to complete learning experiences in the *Assessment resources* to prepare for the assessments.

Implementing

Section 1. Landscapes and their landform features

Student role

- Explore the difference between landforms and landscapes through a photo analysis activity that matches images to descriptors of each phenomenon.
- Select a photograph of a landscape to use for a line drawing.
- Complete Section 1 of the *Student booklet* to create a line drawing of a selected landscape.
- Check that landform features are clearly labelled in the foreground, middle ground and background of the line drawing.

Teacher role

- Use *Assessment resource: Identifying landscapes and their landforms* to review specific landform features and examples of each landscape.
- Provide a range of photographs and images to identify the differences between landscapes and their landforms.
- Use the teacher notes in Geogspace to review how to complete a line drawing using a photograph: www.geogspace.edu.au/verve/_resources/2.1.2.3_2_photo_sketching.pdf
- Model the process of developing a line drawing with students as required.
- Check students have clearly labelled their line drawing with a range of landform features.

Section 2. Spatial distribution of landscapes and landforms

Student role

- Analyse the spatial distribution of specific landscape and landform types in special purpose maps across different scales. Identify the features that make them similar — latitude, climate, vegetation, e.g. on a global scale look at the distribution of the world's mountain landscapes and at a regional level look at the

Teacher role

- Provide a range of maps and source material for students to explore the spatial distribution of different landscapes and landforms. Use spatial applications such as Google Earth as appropriate.
- Provide students with:

distribution of landforms such as ridges within Australia. • Complete Section 2 of the *Student booklet* to label a world map with appropriate cartographic conventions, showing spatial distribution of one type of landscape and one type of landform.	– Assessment resource: Glossary of geographical terms (in this assessment) – Assessment resource: Cartographic conventions from Year 6 Geography sample assessment — Comparing G20 countries, www.qcaa.qld.edu.au/32687.html. • Check students have used appropriate cartographic conventions to complete their map. • Provide examples of maps showing global spatial distribution of phenomena using sources such as Worldmapper (www.worldmapper.org) as a guide if required. • Examples of annotated maps developed by students are available in the *Year 9 Geography work sample portfolios* on the Australian Curriculum website: www.acara.edu.au/curriculum/worksamples/Year_9_Geography_Portfolio.pdf.
Section 3. Geomorphic processes that produce landforms	
Student role • Use geographic diagrams and images to create a model of a stack. • Take a photograph or make a line sketch of the model and label the features identified in Section 3 of the *Student booklet*. • Check that the labelled diagram shows the geomorphic processes for the formation of this coastal landform.	**Teacher role** • Use *Assessment resource: Geomorphic processes in action* to review understanding of geomorphic processes represented in cross-sections, diagrams and images. • Review the diagram at *The British Geographer* (http://thebritishgeographer.weebly.com/coasts-of-erosion-and-coasts-of-deposition.html) and the playdough animation *Stack formation* (www.sophia.org/tutorials/year-8-coastal-landforms) to consider the expectations for this section of the assessment • Provide materials for students to complete the assessment in Section 3 of the *Student booklet*.
Section 4. Geomorphological hazards	
Student role • Select one hazard studied in class as a case study. • Create an annotated map showing spatial distribution of the hazard event, a diagram showing how the hazard occurs, and a summary of the effects of this hazard. • Label the map with the appropriate cartographic conventions including title, legend, border, source, and north point. • Check that information is clear, relevant and well positioned on the map in relation to location of the hazard.	**Teacher role** • Use *Assessment resource: Geomorphological hazards* to review with students the selected hazards including labelled diagrams, the locations of selected hazards and the effects of the hazards. • Provide examples of cross-sections and other diagrams to show how selected hazards such as volcanic eruptions, earthquakes and tsunamis occur. • Provide an exemplar of an annotated map to identify features and conventions. An example of a simple annotated map is provided in the *Year 4 Geography sample assessment — Sustaining environments*, www.qcaa.qld.edu.au/32896.html.

Section 5. Cultural significance of landscapes	
Student role • View: – *Painting Country*, http://aso.gov.au/titles/documentaries/painting-country – *Dreamings through Indigenous art*, www.australiansatwork.com.au/dreamings/dreamings_ar7-8.php. • Use the question in Section 5 of the *Student booklet* to take notes during this viewing. • Discuss what is learnt about the importance of Country as represented in Aboriginal or Torres Strait Islander artwork with peers and teachers. • Complete the explanations in Section 5. Check adequate detail and examples are provided.	**Teacher role** • To assist implementation, review the suggested resources for this assessment and advice on the QCAA website including: – *Relationships to Country*, www.qcaa.qld.edu.au/downloads/approach/indigenous_res005_0803.pdf – *Selecting and evaluating resources*, www.qcaa.qld.edu.au/downloads/approach/indigenous_g008_0712.pdf – *Building relationships with local communities*, www.qcaa.qld.edu.au/downloads/approach/indigenous_build_relationship.pdf. – Provide students with resources to review the connection between landforms and Country/Place: – *Assessment resource: Connecting landforms to Country/Place* – a map showing Australian landforms – an Indigenous Languages map, e.g. www.abc.net.au/indigenous/map. • Provide source material from a range of Aboriginal peoples and Torres Strait Islander peoples and their artworks including from local communities. • Inform students that they can present their explanation in written or spoken form.
Section 6. Land degradation	
Student role • Create a simple line graph to show the rate of global population growth over time using appropriate conventions. • Describe the patterns revealed in the graph, making sure that reference is made to changes that occur over time. • Consider which type of graph is best suited to compare multiple sets of data, e.g. a compound column graph. • Create a graph to represent and compare proportion of the world's population size and density. • Describe the patterns revealed in the graph and draw conclusions about the world's population distribution. • Choose a land degradation issue and create a map and data showing location and impact over time. Use this information to propose an explanation, action and outcome of action.	**Teacher role** • Review the conventions of different graphical forms and explanations of the patterns revealed using exemplars, such as *Student work sample portfolios for Year 7, 8 and 9 Geography*, www.australiancurriculum.edu.au/humanities-and-social-sciences/geography/curriculum/f-10?layout=1. • Guide students to make informed choices about the type of graph to use in representing data. • Provide access to a range of sources about land degradation issues related to population pressure. • Use examples of student data responses in the *Year 9 Geography work sample portfolios* on the Australian Curriculum website (www.acara.edu.au/curriculum/worksamples/Year_9_Geography_Portfolio.pdf) to model how to represent ideas in a graphical form. • Students may choose to represent their information in either written or spoken form.

	• Use *Assessment resource: Land degradation* to assist students to consider the impacts on the landscape of continued population growth.
Section 7. Protecting landscapes	
Student role • Select sources about World Heritage sites in Australia. • Create a factsheet about a selected World Heritage site in Australia to include: – a labelled map to show location of the site – a detailed explanation of the importance of this for preservation on a global scale – a detailed explanation of uses of the site and assessment of human impact – propose an action to protect this site into the future and predict the outcome of this proposal.	**Teacher role** • Use Assessment resource: Protecting significant landscapes to review: – locations of World Heritage listings in Australia – the significance of these natural sites for preservation for the global community. • Provide students with a range of source material to complete Section 7 of the *Student booklet*. • Use *Assessment resource: Graphic organisers* in the *Year 5 Geography sample assessment — Investigating natural hazards* (www.qcaa.qld.edu.au/32656.html) to assist students organise ideas and information as required. • Provide exemplars of factsheets that provide information at a glance and clearly communicate findings.

Make judgments

When making judgments about the evidence in student's responses to this assessment, teachers are advised to use the task-specific standards provided. The development of these task-specific standards has been informed by the Queensland Geography standard elaborations. See www.qcaa.qld.edu.au/downloads/p_10/ac_geog_yr8_se.pdf.

The Queensland standard elaborations for Geography

The Queensland Year 8 standard elaborations for Geography are a resource to assist teachers to make consistent and comparable evidence-based A to E (or the Early Years equivalent) judgments. They should be used in conjunction with the Australian Curriculum achievement standard and content descriptions for the relevant year level.

The Queensland Geography standard elaborations provide a basis for judging *how well* students have demonstrated what they know, understand and can do using the Australian Curriculum achievement standard.

The Australian Curriculum achievement standards dimensions of Understanding and Skills are used to organise the Queensland Geography standard elaborations.

The valued features of Geography, drawn from the achievement standard and the content descriptions are organised as:

- Geographical Knowledge and understanding
- Questioning and researching
- Interpreting and analysing
- Communicating.

Task-specific standards

Task-specific standards give teachers:

- a tool for directly matching the evidence of learning in the response to the standards
- a focal point for discussing students' responses
- a tool to help provide feedback to students.

Task-specific standards are not a checklist; rather they are a guide that:

- highlights the valued features that are being targeted in the assessment and the qualities that will inform the overall judgment
- specifies particular *targeted aspects* of the curriculum content and achievement standard
- aligns the valued feature, task-specific descriptor and assessment
- allows teachers to make consistent and comparable on-balance judgments about a child's work by matching the qualities of students' responses with the descriptors
- clarifies the curriculum expectations for learning at each of the five grades (A–E or the Early Years equivalent)
- shows the connections between what students are expected to know and do, and how their responses will be judged and the qualities that will inform the overall judgment
- supports evidence-based discussions to help students gain a better understanding of how they can critique their own responses and achievements, and identify the qualities needed to improve
- encourages and provides the basis for conversations among teachers, students and parents/carers about the quality of students' work and curriculum expectations and related standards.

Task-specific valued features

Task-specific valued features are the discrete aspects of the valued features of Geography targeted in a particular assessment and incorporated into the task-specific standards for that assessment. They are selected from the Queensland Geography standard elaborations valued features drawn from the Australian Curriculum achievement standard and content descriptions.

Task-specific valued features for this assessment

The following table identifies the valued features for this assessment and makes explicit the understandings and skills that students will have the opportunity to demonstrate. This ensures that the alignment between what is taught, what is assessed and what is reported is clear.

Australian Curriculum achievement standard dimensions	Valued features		Task-specific valued features
Understanding and Skills	**Geographical Knowledge and Understanding**	**Knowledge and understanding**	Explains: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently • interconnections within environments and between people and places and of how they change places and environments • spatial distributions and patterns among phenomena and identification of associations between distribution patterns **Sections 1–7**
	Geographical Inquiry and Skills	**Interpreting and analysing**	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw discerning and reasoned conclusions Proposes action in response to protecting landscapes taking into account environmental and/or social considerations Predicts the outcome of the proposal of action **Sections 6 and 7**
		Communicating	Presents findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate forms including a labelled sketch, labelled diagram, annotated maps and a factsheet Represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions **Sections 1–7**

The task-specific standards for this assessment are provided in two models using the same task-specific valued features:

- a matrix
- a continua

Matrix and continua

Task-specific standards can be prepared as a matrix or continua. Both the continua and the matrix:

- use the Queensland standard elaborations to develop task-specific descriptors to convey expected qualities in students' work — A to E (or the Early Years equivalent)
- highlight the same valued features from the Queensland standard elaborations that are being targeted in the assessment and the qualities that will inform the overall judgment
- incorporate the same task-specific valued features, i.e. make explicit the particular understanding/skills that students have the opportunity to demonstrate for each selected valued feature
- provide a tool for directly matching the evidence of learning in the child's response to the standards to make an on-balance judgment about achievement
- assist teachers to make consistent and comparable evidence-based A to E (or the Early Years equivalent) judgments.

Continua

The continua model of task-specific standards uses the dimensions of the Australian Curriculum achievement standard to organise task-specific valued features and standards as a number of reference points represented progressively along an A to E (or Early Years equivalent) continuum. The task-specific valued features at each point are described holistically. The task-specific descriptors of the standard use the relevant degrees of quality described in the Queensland standard elaborations.

Teachers determine a position along each continuum that best matches the evidence in the student's responses to make an on-balance judgment about achievement on the task.

The continua model is a tool for making an overall on-balance judgment about the assessment and for providing feedback on task specific valued features.

Matrix

The matrix model of task-specific standards uses the structure of the Queensland standard elaborations to organise the task-specific valued features and standards A to E (or the Early Years equivalent). The task-specific descriptors of the standard described in the matrix model use the same degrees of quality described in the Queensland standard elaborations.

Teachers make a judgment about the task-specific descriptor in the A to E (or the Early Years equivalent) cell of the matrix that best matches the evidence in the student's responses in order to make an on-balance judgment about how well the pattern of evidence meets the standard.

The matrix is a tool for making both overall on-balance judgments and analytic judgments about the assessment. Achievement in each valued feature of the Queensland standard elaboration targeted in the assessment can be recorded and feedback can be provided on the task-specific valued features.

Use feedback

Feedback to students	Evaluate the information gathered from the assessment to inform teaching and learning strategies. Focus feedback on the student's personal progress and the next steps in the learning journey. Offer feedback that: • models the features and conventions of each communication form identified in the assessment using guiding teaching and collaboratively developed exemplars • directs the student to focus on the requirements of each section of the assessment • provides clarity about the meaning of geographical terms • focuses on the evidence of learning identified in the task-specific standards that matches to student learning goals.
Resources	For guidance on providing feedback, see the professional development packages titled: • *About feedback* www.qcaa.qld.edu.au/downloads/p_10/as_feedback_about.docx • *Seeking and providing feedback* www.qcaa.qld.edu.au/downloads/p_10/as_feedback_provide.docx

Investigating landscapes and their landforms

Name .....

Purpose of assessment: Present findings and representations of data and information about landscapes and their landforms in a collection of work using a range of appropriate communication forms.

Understanding and Skills			
Geographical Knowledge and Understanding	**Geographical Inquiry and Skills**		
Knowledge and understanding	**Interpreting and analysing**	**Communicating**	
Explains: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently • interconnections within environments and between people and places and of how they change places and environments • spatial distributions and patterns among phenomena and identification of associations between distribution patterns **Sections 1–7**	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw discerning and reasoned conclusions Proposes action in response to protecting landscapes, taking into account environmental and/or social considerations Predicts the outcome of the proposal of action **Sections 6 and 7**	Presents findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate forms including a labelled sketch, labelled diagram, annotated maps and a factsheet Represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions **Sections 1–7**	
Comprehensively explains in detail: ▪ geographical processes that influence the characteristics of places and of how places are perceived and valued differently ▪ interconnections within environments and between people and places and of how they change places and environments ▪ spatial distributions and patterns among phenomena and identification of associations between distribution patterns	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw discerning and reasoned conclusions. Proposes considered action in response to protecting landscapes that prioritise environmental and social considerations. Predicts the comprehensive outcome of the proposal of action	Clearly and purposefully presents findings, arguments and ideas using relevant geographical terminology in appropriate contexts and graphic representations in a range of forms including a labelled sketch, labelled diagram, annotated maps and a factsheet. Accurately represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions accurately and consistently	**A**
			B
Explains: ▪ geographical processes that influence the characteristics of places and of how places are perceived and valued differently ▪ interconnections within environments and between people and places and of how they change places and environments ▪ spatial distributions and patterns among phenomena and identification of associations between distribution patterns	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw reasoned conclusions. Proposes action in response to protecting landscapes, taking into account environmental and social considerations. Predicts the outcome of the proposal of action	Presents findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate forms including a labelled sketch, labelled diagram, annotated maps, and a factsheet. Represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions	**C**

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Understanding and Skills		
Geographical Knowledge and Understanding	**Geographical Inquiry and Skills**	
Knowledge and understanding	**Interpreting and analysing**	**Communicating**
Explains: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently • interconnections within environments and between people and places and of how they change places and environments • spatial distributions and patterns among phenomena and identification of associations between distribution patterns **Sections 1–7**	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw reasoned conclusions Proposes action in response to protecting landscapes, taking into account environmental and/or social considerations Predicts the outcome of the proposal of action **Sections 6 and 7**	Presents findings in a multimodal presentation that uses relevant geographical terminology. Represents data and information about water scarcity in graphs and a special purpose map that conform to conventions **Sections 1–7**

◀ Makes statements about: ▪ geographical processes that influence the characteristics of places and different perceptions and values about places ▪ interconnections within environments and between people and places and of how they change places and environments ▪ spatial distributions, patterns and associations	◀ Use of geographical data and other information to identify spatial distribution, trends, and relationships and state unclear conclusions. States action related to protection of landscapes. Makes statements about the outcome of the proposal of action.	◀ Unevenly presents a narrow range of ideas using minimal geographical terminology and incomplete graphic representations. Unevenly represents data and the location and distribution of landscapes and landforms in imprecise graphic forms that use minimal conventions	**D** **E**

141127

Investigating landscapes and their landforms

Name .....

Purpose of assessment: Present findings and representations of data and information about landscapes and their landforms in a collection of work using a range of appropriate communication forms.

			A	B	C	D	E
Understanding and Skills	Geographical Knowledge and Understanding	Knowledge and understanding	Explains: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently	Comprehensively explains in detail: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently	Explains in detail: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently	Explains: • geographical processes that influence the characteristics of places and of how places are perceived and valued differently	Partially describes: • geographical processes that influence the characteristics of places and different perceptions and values about places
			• interconnections within environments and between people and places and of how they change places and environments	• interconnections within environments and between people and places and of how they change places and environments	• interconnections within environments and between people and places and of how they change places and environments	• interconnections within environments and between people and places and of how they change places and environments	Makes statements about: • interconnections within environments and between people and places and of how they change places and environments
			• spatial distributions and patterns among phenomena and identification of associations between distribution patterns **Sections 1–7**	• spatial distributions and patterns among phenomena and identification of associations between distribution patterns	• spatial distributions and patterns among phenomena and identification of associations between distribution patterns	• spatial distributions and patterns among phenomena and identification of simple associations	• spatial distributions, patterns and associations

Continues over page

Investigating landscapes and their landforms

Name .....

			A	B	C	D	E
Understanding and Skills / Geographical Inquiry and Skills	interpreting and analysing	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw discerning and reasoned conclusions	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw discerning and reasoned conclusions	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw effective and reasoned conclusions	Analyses geographical data and other information to explain spatial distribution, trends, and relationships and draw reasoned conclusions	Superficially analyses geographical data and other information to identify spatial distribution, trends, and relationships and draw simple conclusions	Use of geographical data and other information to identify spatial distribution, trends, and relationships and state unclear conclusions
		Proposes action in response to protecting landscapes, taking into account environmental and/or social considerations	Proposes considered action in response to protecting landscapes that prioritise environmental and social considerations	Proposes appropriate action in response to protecting landscapes, taking into account environmental and social considerations	Proposes action in response to protecting landscapes, taking into account environmental and social considerations	Proposes obvious action in response to protecting landscapes, taking into account environmental and/or social considerations	States action related to protection of landscapes
		Predicts the outcome of the proposal of action **Sections 6 and 7**	Predicts the comprehensive outcome of the proposal of action	Predicts the detailed outcome of the proposal of action	Predicts the outcome of the proposal of action	Predicts aspects of the outcome of the proposal of action	Makes statements about the outcome of the proposal of action
	Communicating	Presents findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate forms including a labelled sketch, labelled diagram, annotated maps and a factsheet	Clearly and purposefully presents findings, arguments and ideas using relevant geographical terminology in appropriate contexts and graphic representations in a range of forms including a labelled sketch, labelled diagram, annotated maps and a factsheet	Effectively presents findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate forms including a labelled sketch, labelled diagram, annotated maps and a factsheet	Presents findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate forms including a labelled sketch, labelled diagram, annotated maps and a factsheet	Presents a narrow range of findings, arguments and ideas using geographical terminology and graphic representations in a range of forms including a labelled sketch, labelled diagram, annotated maps and a factsheet	Unevenly presents a narrow range of ideas using minimal geographical terminology and incomplete graphic representations
		Represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions **Sections 1–7**	Accurately represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions accurately and consistently	Effectively represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions	Represents data and the location and distribution of landscapes and landforms in a range of appropriate graphic forms such as a special purpose map and a line graph that conform to conventions	Partially represents data and the location and distribution of landscapes and landforms in simple graphic forms such as such as a special purpose map and a line graph that use some conventions	Unevenly represents data and the location and distribution of landscapes and landforms in imprecise graphic forms that use minimal conventions

Investigating landscapes and their landforms

Identifying landscapes and their distinctive landform features

Research and identify specific landforms that are evident in each landscape image to complete the tables.

The first table has been completed for you as an example.

Landscape — Tropical rainforest landscape	Landforms evident	Examples
 Image source: *Daintree Rainforest, Queensland (483858)*, Robert Linsdell, CC BY 2.0 https://flic.kr/p/fofCKk	• Mountains • Valley • Wetlands	• Amazon Rainforest, South America

Landscape — Coastal landscape	Landforms evident	Examples
 Image source: *Puerto Rico Vista*, Trish Hartmann,CC BY 2.0. https://flic.kr/p/dCaHuT		

Landscape — Desert landscape	Landforms evident	Examples
 Image source: *Paiute Wilderness*, Bob Wick, Bureau of Land Management, California, CC BY 2.0. https://flic.kr/p/fm1d86		

Landscape — Coastal landscape	Landforms evident	Examples
 Image source: *Island, isthmus, surrounded by the blue Pacific Ocean and the equally blue sky, in southern California coast, USA*, Wonderlane, CC BY 2.0. https://flic.kr/p/86TQ9F		

Landscape	Landforms evident	Examples
This table has been left blank for you to include a landscape of your own choosing.		
Image source:		

Investigating landscapes and their landforms

Geomorphic processes in action

What is *geomorphology*?

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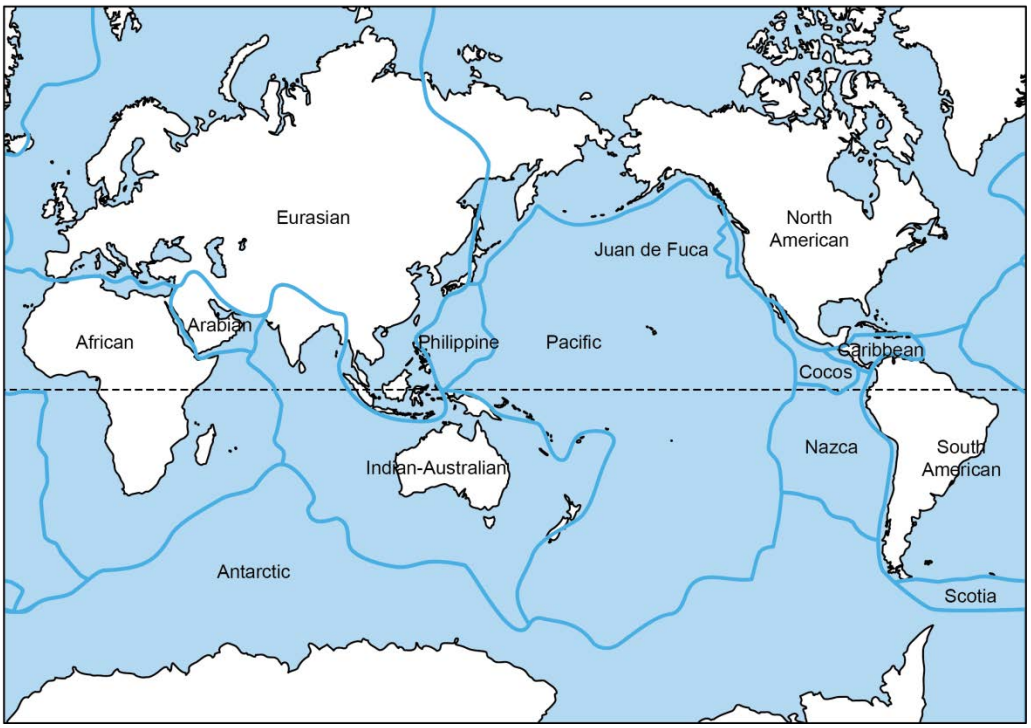
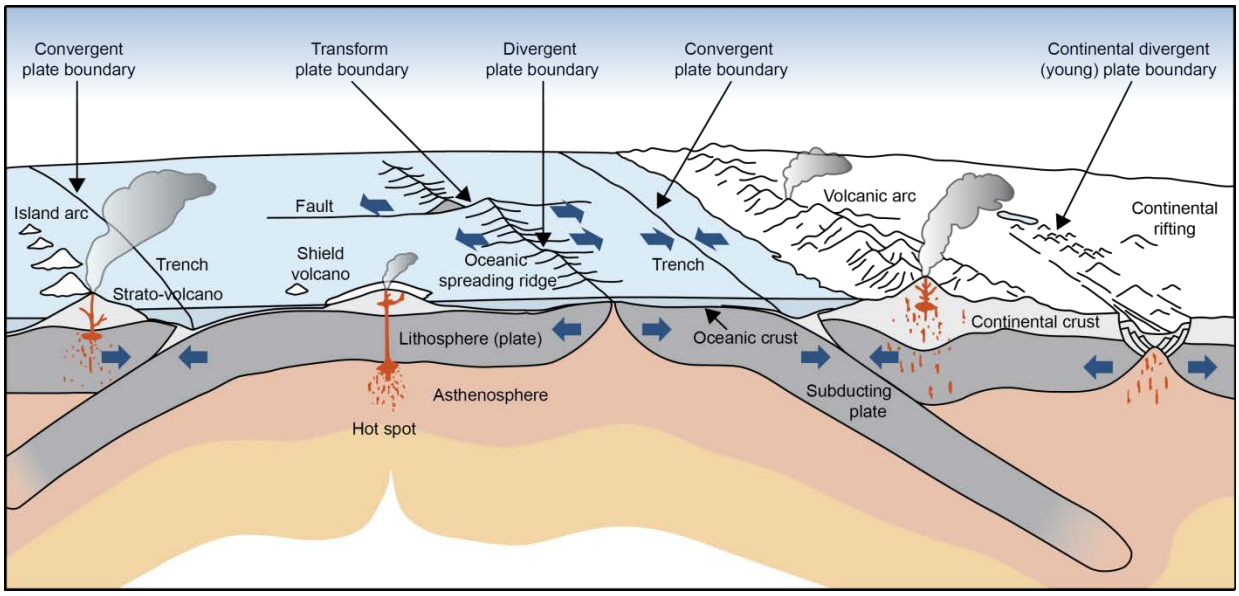
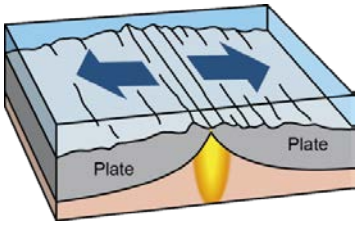
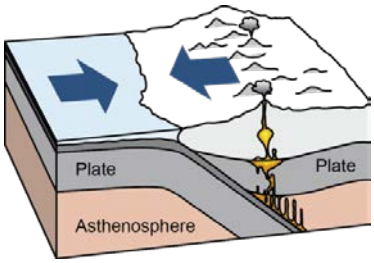
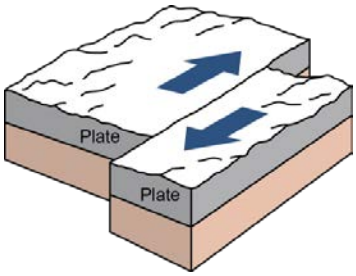
The earth's surface is like a jigsaw consisting of a series of plates called tectonic plates.



These **plates** are continually moving and at the **boundaries** of the plates **landforms** are created.

Analyse the diagram below to match the **type of boundary** with the correct description and the **landform** that is created at each type of boundary. Record this in the table below.



	Type of boundary	Landform
		
		
		

Investigating landscapes and their landforms

Geomorphological hazards

Plate activity creates a range of geomorphological hazards such as volcanic eruptions, earthquakes and tsunamis.

Complete the table to identify:

- how each of these hazards occurs, using a labelled diagram
- one location where this hazard has had a devastating impact on human settlements
- the effects of this hazard.

Type of hazard	Labelled diagram of the geomorphological processes	Location and effects
Volcanic eruption		
Earthquake		
Tsunami		

Investigating landscapes and their landforms

Connecting landforms to Country/place

Use a map of Indigenous language groups (such as the one at www.abc.net.au/indigenous/map) and a map of Australian landforms to match the landforms listed below with the language groups that belong to that country.

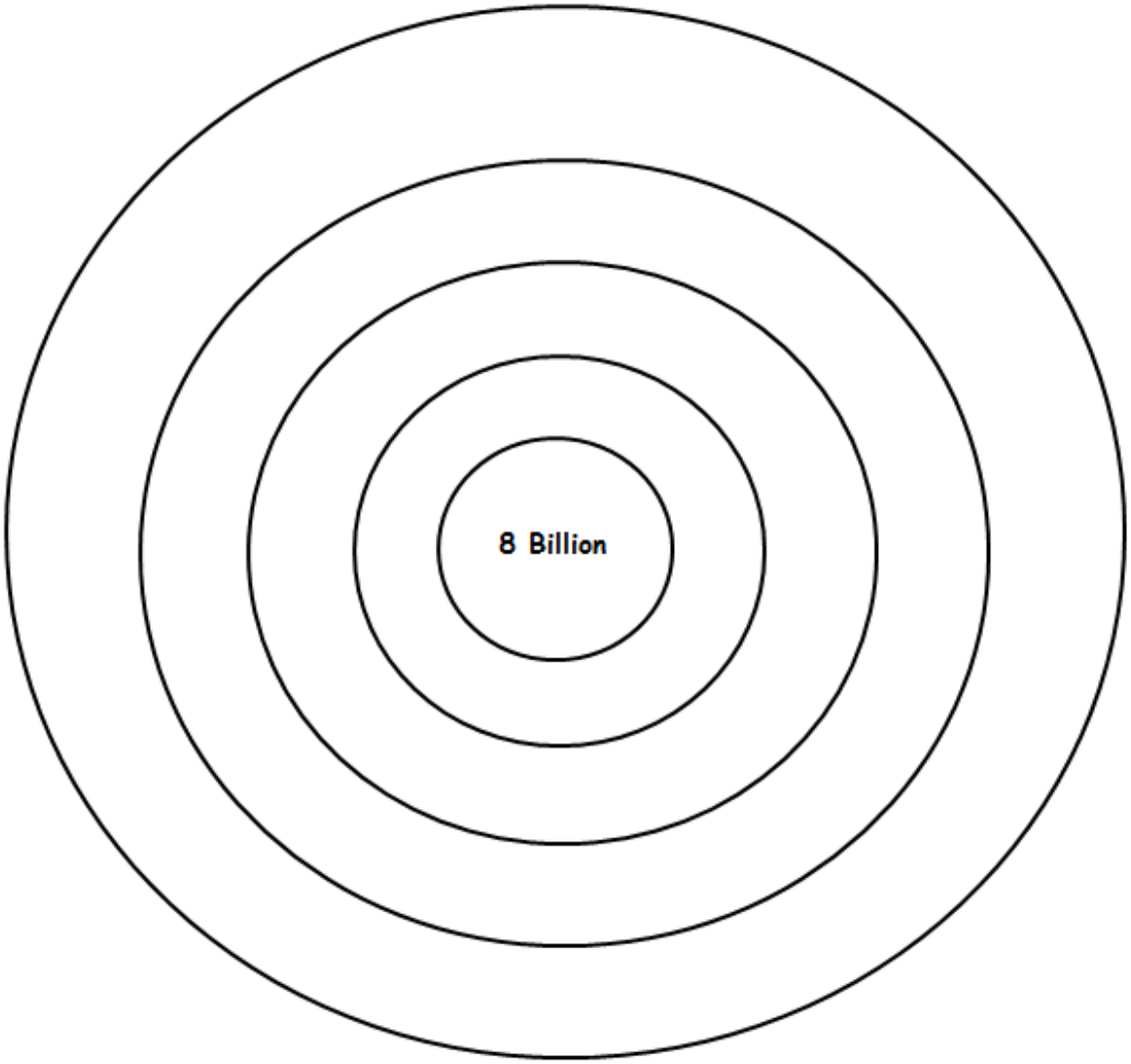
Landform	Location	Language groups
Uluru		
Three Sisters		
Karlu Karlu (Devils Marbles)		
Rainbow Beach — Coloured Sand Cliffs		
Mossman Gorge		
Wilpena Pound		
Koonalda Cave		
The Pinnacles		
Baranguba (Montague Island)		
Mt Buninyong		
Cradle Mountain		
Bald Rock		

Investigating landscapes and their landforms

Land degradation

A *futures wheel* is a visual way of representing the future consequences of a particular change or development.

- Think about the **resources** we need to sustain life for the global population.
- Use the futures wheel below to **predict** what the impact on the earth's environment might be.



Investigating landscapes and their landforms

Protecting significant landscapes

World Heritage listing is designed to provide protection to our cultural and natural sites of significance. Australia is home to a range of both cultural and natural sites that are listed on the World Heritage Register.

1. What is World Heritage listing? How does it act to protect places of significance?

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2. Describe how we can sustainably make use of World Heritage sites in ways that allow human interaction without damage to or destruction of these special places. (Use the *UNESCO Sustainable Tourism Programme* as a guide — http://whc.unesco.org/en/tourism.)

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3. Create a map showing the location of Australia's World Heritage sites — make sure your key differentiates *natural* from *cultural* sites. (Your map could be digital, e.g. Google Earth, or paper.)

Investigating landscapes and their landforms

Glossary of geographical terms

Term	Definition
landscape	A landscape is the visible appearance of an area, created by a combination of geological, geomorphological, biological, and cultural layers that have evolved over time, and as perceived, portrayed and valued by people. A *geomorphic landscape* is the landscape without the biological and cultural layers
landform	The individual surface features of the Earth identified by their shape, e.g. dunes, plateaux, canyons, beaches, plains, rivers and valleys
geographical processes	The physical and human forces that work in combination to form and transform the world, e.g. erosion, the water cycle, migration or urbanisation. Geographical processes can operate within and between places
spatial distribution	The arrangement of particular phenomena or activities across the surface of the Earth
weathering	The physical or chemical breakdown of materials into smaller materials
erosion	The process by which the surface of the earth is worn and transported away by the action of water, glaciers, winds, waves.
geomorphological hazards	Hazards that originate from the lithosphere including volcanic eruptions, tsunamis, earthquakes, landslides and avalanches
land degradation	Degradation occurs through human actions and includes salinity, accelerated soil erosion, the spread of weeds, loss of biodiversity and habitats and water pollution
World Heritage site	A place listed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as of special cultural or natural significance for preservation for the global community
pattern	A regularity in data; reoccurrence
relationship	Cause and effect, how one affects and changes the other
line drawing	In geography, line drawings are illustrations made using a photograph to record features about a landform or landscape. A line drawing is divided into foreground, middle ground and background so that the features of a photograph or image can be accurately labelled and explained
Annotated map	In Geography, annotations are added to maps to add details and explanations about geographical phenomena
stack	A geological landform consisting of a steep and often vertical column or column of rock in the sea near a coast, formed by erosion

Investigating landscapes and their landforms

Image: *Yukon Delta, Alaska*. NASA's Earth Observatory. CC BY 2.0. https://flic.kr/p/azeGX2

Present findings and representations of data and information about landscapes and their landforms in a collection of work using a range of appropriate communication forms.

You will:

- develop a collection of work in class to demonstrate your knowledge, understanding and skills about landforms and landscapes
- use a range of sources to complete a series of learning projects.

Section	Topic	Evidence of learning
1	Landscapes and their landform features	☐ Labelled line drawing (from a photograph) of one landscape and specific landforms
2	Spatial distribution of landscapes and landforms	☐ Special purpose map showing the spatial distribution of one type of landscape and one related landform within that landscape
3	Geomorphic processes that produce landforms	☐ Annotated photograph (or sketch) of a landform model you have created to explain geomorphic processes
4	Geomorphological hazards	☐ Annotated map including the spatial distribution of one hazard ☐ Diagram showing how the hazard occurs ☐ Summary of the hazard's effects
5	Cultural significance of landscapes	☐ Explanation of an artwork of a landscape or landform by an Aboriginal or Torres Strait Islander artist
6	Landscape degradation	☐ Supported explanation and analysis of a selected land degradation issue
7	Protecting landscapes	☐ Factsheet with labelled map about one of Australia's natural World Heritage sites

Section 1. Landscapes and their landform features

Your teacher will provide you with the resource *Identifying landscapes and their distinctive landform features*.

Choose **one image** of a **landscape**:

- create a **line drawing or sketch** of this landscape in the space below
- **label** each of the **different landforms**, and other features, in your drawing.

Section 2. Spatial distribution of landscapes and landforms

Your teacher will provide you with a glossary of geographical terms and cartographic conventions.

1. On the map of the world, shade in the **spatial distribution** of:
   a. one type of landscape, e.g. desert, coastal
   b. one type of landform found in that landscape, e.g. grassland plain, mountain, wetland, headland

2. Label your map with the appropriate **cartographic conventions** including:
   - ☐ title
   - ☐ legend (key)
   - ☐ border
   - ☐ source
   - ☐ north point.


4000 km (equat.)
2000 mi (equat.)
© d-maps.com

Section 3. Geomorphic processes that produce landforms

Over time landforms take shape through processes of **weathering** and **erosion**.

A landform that has been created through the process of erosion is a stack. The stacks are formed in stages over long periods of time.

The Twelve Apostles in Victoria are an example of a stack

Image: *Two of the Twelve Apostles, Martin Coopers photostream, Creative Commons Attribution 2.0.* https://flic.kr/p/kaguxZ

1. Create a **model** to show the process of stack formation, ensuring that you have included all of the following features:
   - ☐ crack
   - ☐ cave
   - ☐ arch
   - ☐ headland
   - ☐ stack
   - ☐ stump.

2. Take a **photograph** or make a **labelled sketch** of your model.

3. **Annotate** your photograph or sketch to explain the process of stack formation.

Section 4. Geomorphological hazards

Select **one** of the following geomorphological hazards studied in class:

- volcanic eruption
- earthquake
- tsunami.

Create an **annotated map** to include:

- the spatial distribution of one hazard event
- a diagram showing how the hazard occurs
- a summary of effects of this hazard.

Use **cartographic conventions** including:

☐ title

☐ legend (key)

☐ border

☐ source

☐ north point.

Check you have:

☐ positioned your annotations appropriately on your map

☐ selected relevant ideas and information

☐ used relevant geographical terminology

☐ clearly labelled your diagram/s

☐ represented information clearly.


4000 km (equat.)
2000 mi (equat.)
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Section 5. Cultural significance of landscapes

View the video clips:

- ***Balgo, Maps of the Country, Kiwirrkurra***
  http://aso.gov.au/titles/documentaries/painting-country
  From *Painting Country,* 2000, Electric Pictures, Robin Eastwood Productions, SBS Independent & NHK.
- ***Dreamings through Indigenous art***
  www.australiansatwork.com.au/dreamings/dreamings_ar7-8.php
  From *Dreamings — the Art of Aboriginal Australia*, 1988, *Australians At Work*, Film Australia, 2005.

While viewing, make notes about:

☐ who owns the Dreaming stories associated with Country

☐ the ways these stories are passed on between generations (use examples from the video clips to support your answer).

☐ how art is used to represent the patterns of the landscape and features of landforms

☐ how interconnections are made between places and people and their culture in paintings

☐ how symbols are used to represent ideas in paintings.

Explain the importance of Country to Aboriginal peoples and Torres Strait Islander peoples that is represented in artwork.

Use your notes and examples from the video clips to help you develop the explanation.

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Select a piece of Aboriginal art that **represents a birds-eye view of a landscape**.

- **Annotate** the photograph of the artwork with relevant descriptors before writing your paragraph. (You may need to re-watch the *Painting Country* video clips again and research what some of the symbols mean).
- **Describe** the artist's representation of the landscape of their Country.
- **Explain** how the symbols are used to tell the story of the landform/landscape.

Annotated photograph

Describe and explain:

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Section 6. Land degradation

Population growth, if not managed, might have a negative impact on the quality of the Earth's resources and cause land degradation.

Create a line graph

Use the data in Table 1 to **create a simple line graph** representing the rate of global population growth between1950 and 2050.

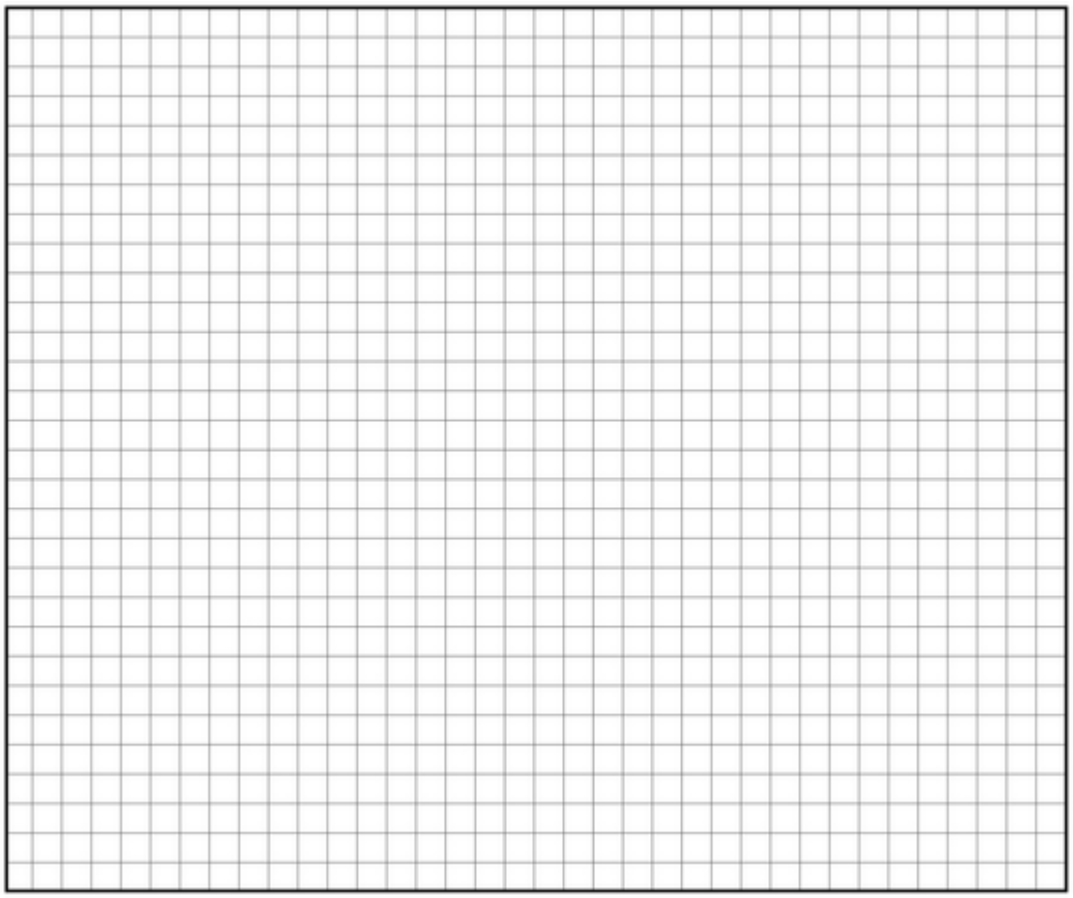
Remember to use the appropriate labels.

Table 1

Year	Population in billions
1927	2
1950	2.55
1960	3
1974	4.5
1987	5
1999	6
2011	7
2024 (predicted)	8
2040 (predicted)	9
2062 (predicted)	10

Data source: Worldometers.info. www.worldometers.info/world-population

Graph 1



Describe the pattern over time of the world's population growth (as shown in your graph) and **give reasons** for this pattern.

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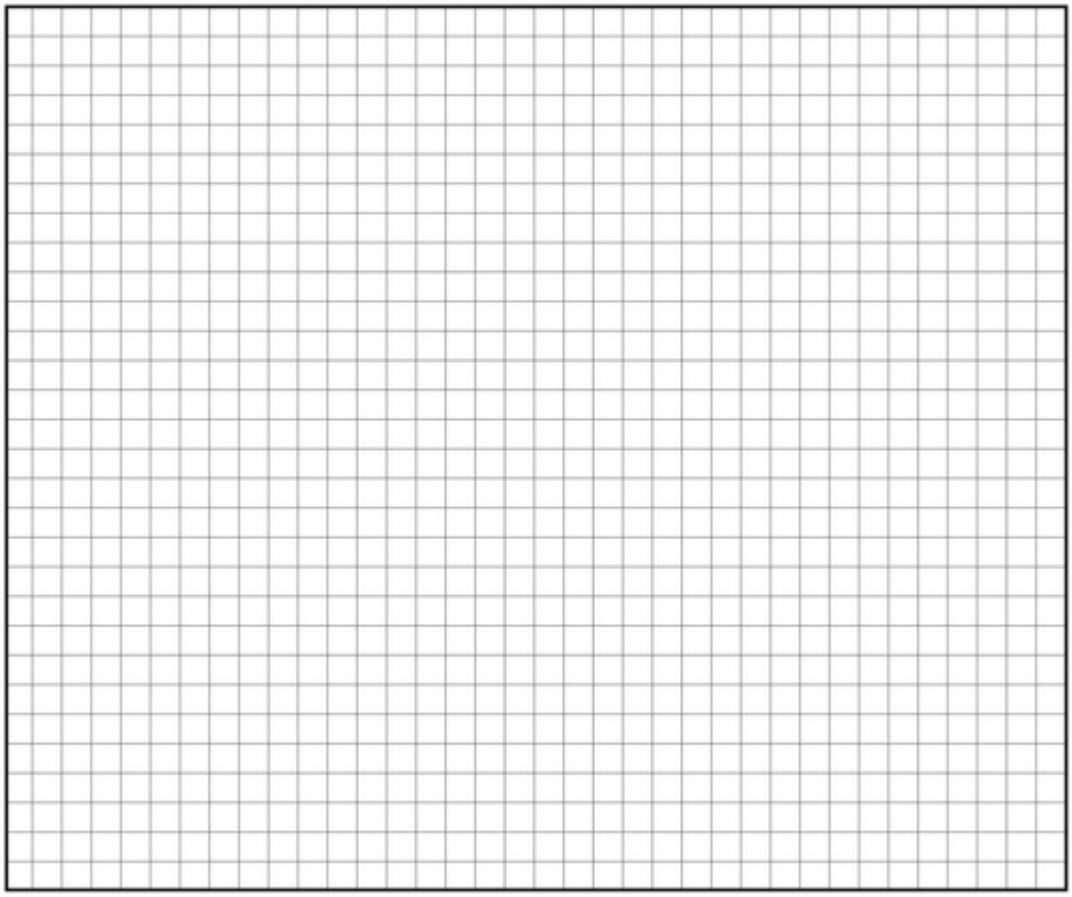
Choose an appropriate graph and labels to represent the data in Table 2. (You must choose the type of graph best suited to the type of data). Make sure you use the appropriate conventions.

Table 2

2013 population	% of World Pop.	Density (p/km²)
Asia	4 298 723 288	31 915 446
Africa	1 110 635 062	30 955 880
Europe	742 452 170	23 048 931
Latin America and Caribbean	616 644 503	20 546 598
Northern America	355 360 791	21 775 893
Oceania	38 303 620	8 563 295
WORLD	7 162 119 434	136 806 988

Data source: Worldometers.info. www.worldometers.info/world-population/#top

Graph 2



Describe the **patterns** of population distribution and density as shown in Graph 2.

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What **conclusion**s can you draw from this data about population pressure on the Earth's resources?

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Choose a land degradation issue (e.g. deforestation, salinity, erosion, desertification, toxic pollution) and create:

☐ **a map** showing where it is occurring

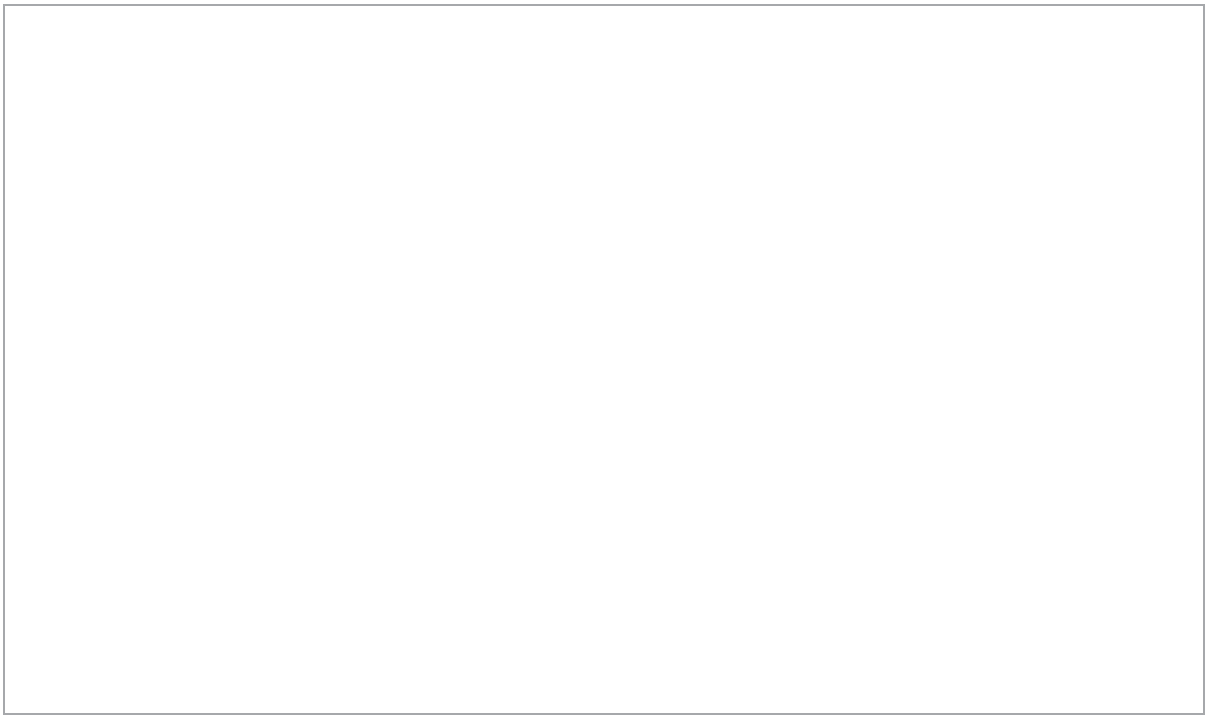
☐ **data** showing its impact on the landscape over time.

Use your map and data to **propose**:

- an **explanation** about the impact of your chosen land degradation issue
- **action** in response to this issue
- **predicted** outcomes of the action.

Map

Data



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Section 7. Protecting landscapes

Create a **factsheet** which includes:

- ☐ the **location** of one of Australia's natural World Heritage sites on a **labelled map**, using spatial technology if appropriate
- ☐ a **detailed explanation** of the importance of this site and why is it listed as a World Heritage site
- ☐ a **detailed explanation** of human use of this site and whether it meets the requirements for sustainable development
- ☐ a **proposed action** to protect this site
- ☐ a **prediction** of the outcome of this proposal.