

# 12 Geography concepts and skills

## Student learning matrix

- 12.4 SkillBuilder: Describing spatial relationships in thematic maps
- 12.5 SkillBuilder: Describing divergence graphs
- 12.6 SkillBuilder: Describing patterns and correlations on a topographic map
- 12.7 SkillBuilder: Interpreting satellite images to show change over time
- 12.8 SkillBuilder: Constructing and describing a transect on a topographic map
- 12.9 SkillBuilder: Constructing multiple line and cumulative line graphs
- 12.10 SkillBuilder: Constructing a land use map
- 12.11 SkillBuilder: Creating a survey
- 12.12 SkillBuilder: Constructing ternary graphs
- 12.13 SkillBuilder: Constructing and describing proportional circles on maps
- 12.14 SkillBuilder: Constructing and describing isoline maps
- 12.15 SkillBuilder: Constructing and describing a flow map
- 12.16 SkillBuilder: Constructing a table of data for a GIS
- 12.17 SkillBuilder: GIS — deconstructing a map
- 12.18 SkillBuilder: Interpreting a geographical cartoon
- 12.19 SkillBuilder: Using advanced survey techniques — interviews



# Student learning matrix

Name: ..... Class: ..... Due date: .....

Monitor your learning throughout this topic by completing this page.

Shade the circle to indicate that you have completed an activity and how well you think you have understood it using the traffic light system.

(**Green:** I understand; **Yellow:** I can do it with help; **Red:** I do not understand).

My progress					
TOPIC 12 Geography concepts and skills	eWorksheets				
<b>12.4</b> SkillBuilder - Describing spatial relationships in thematic maps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.5</b> SkillBuilder - Describing divergence graphs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.6</b> SkillBuilder - Describing patterns and correlations on a topographic map	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.7</b> SkillBuilder - Interpreting satellite images to show change over time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.8</b> SkillBuilder - Constructing and describing a transect on a topographic map	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.9</b> SkillBuilder - Constructing multiple line and cumulative line graphs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.10</b> SkillBuilder - Constructing a land use map	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.11</b> SkillBuilder - Creating a survey	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.12</b> SkillBuilder - Constructing ternary graphs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.13</b> SkillBuilder - Constructing and describing proportional circles on maps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.14</b> SkillBuilder - Constructing and describing isoline maps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.15</b> SkillBuilder - Constructing and describing a flow map	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.16</b> SkillBuilder - Constructing a table of data for GIS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>12.17</b> SkillBuilder - GIS - deconstructing a map	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

<b>12.18</b> SkillBuilder - Interpreting a geographical cartoon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>12.19</b> SkillBuilder - Using advanced survey techniques- interviews	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>12.20</b> SkillBuilder - Writing a fieldwork report as an annotated visual display (AVD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reflection	Date completed:		<input type="radio"/>	<input type="radio"/>

**Areas for improvement:** .....

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**Signatures:**

Parent/guardian: ..... Teacher: .....

**GEOGRAPHY**

# SkillBuilder: Describing spatial relationships in thematic maps

Student: ..... Class: ..... Due date: .....

1. Study the thematic maps showing Australia's climate and biomes, shown in FIGURES 2 and 3. In a paragraph, describe the spatial relationship between biomes and climate in Australia. Use the checklist to ensure you cover all aspects of the task.

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2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

- a. Is there a strong relationship between Australia's arid climates and desert biomes? Explain your answer.

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- b. Is there a spatial relationship between Australia's tropical rainforests and climate?

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- c. Is the spatial relationship between climate and the savanna (grassland) biome strong or weak? Explain your answer.

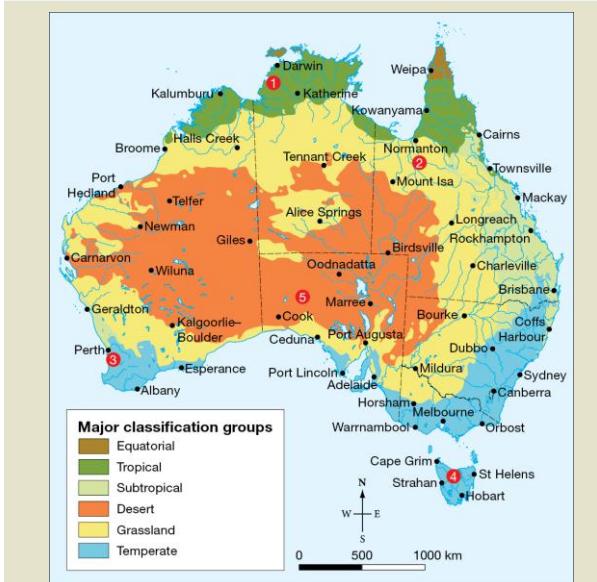
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- d. Name the main biome found in Tasmania. Why might there be only one biome on the map?

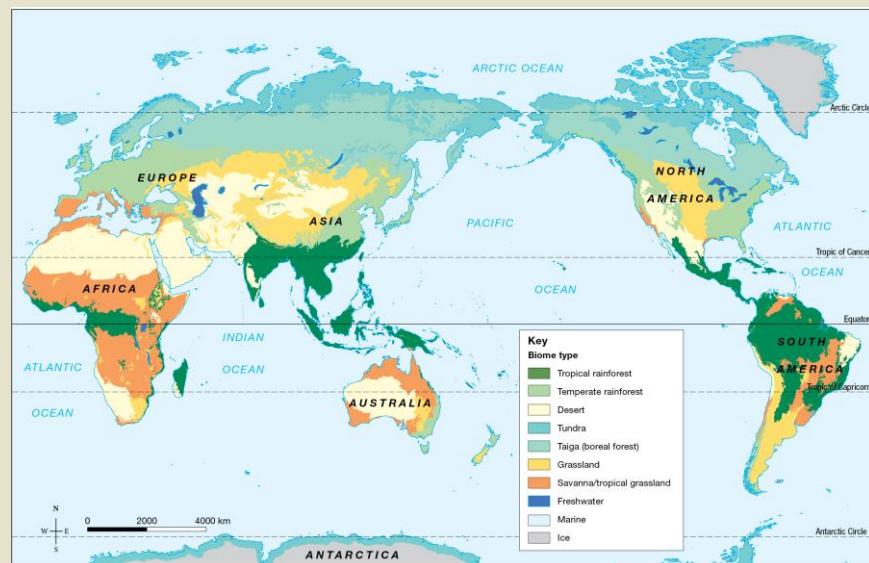
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- e. Find one biome that does not occur in Australia. Suggest reasons why this is the case.

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**FIGURE 2** Climate classification of Australia

**Source:** Data copyright Commonwealth of Australia, 2013 Bureau of Meteorology. Map drawn by Spatial Vision.

**FIGURE 3** Major biomes of the world

**Source:** Redrawn by Spatial Vision based on the information from the Nature Conservancy and GIS Data

## Checklist

I have:

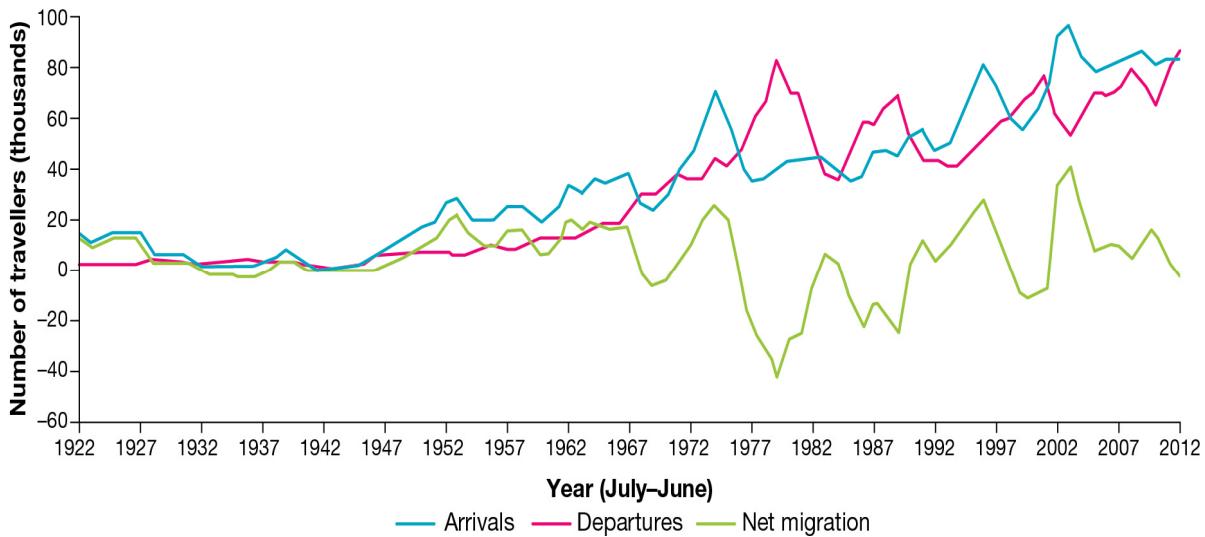
- clearly identified which features on thematic maps are linked or interconnected
- pointed out obvious anomalies, where no linkages or interconnections can be observed
- described the extent of interconnections (for example, as strong or weak).

## SkillBuilder: Describing divergence graphs

Student: ..... Class: ..... Due date: .....

- 1. Using the graph shown in FIGURE 2, explain what has happened to the level of migration in New Zealand. Use the net migration line as the basis for your answer.**

**FIGURE 2** New Zealand migration trends: Annual permanent and long-term arrivals, departures and net migration, 1992–2012



- 2. Apply your skills to answer the following questions. Use the checklist to ensure you have covered all aspects of the task.**

- a. What is the trend for the line indicating the number of arrivals?**

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- b. What is the trend for the line indicating the number of departures?**

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- c. In which years did the population of New Zealand lose more people than it gained?

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- d. Identify a period of time when increases happened slowly and a period when they happened quickly. Identify a period of time when decreases happened slowly and a period when they happened quickly.

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- e. If net migration is the difference between arrivals and departures, what has happened to people's attitudes towards migration to New Zealand?

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## Checklist

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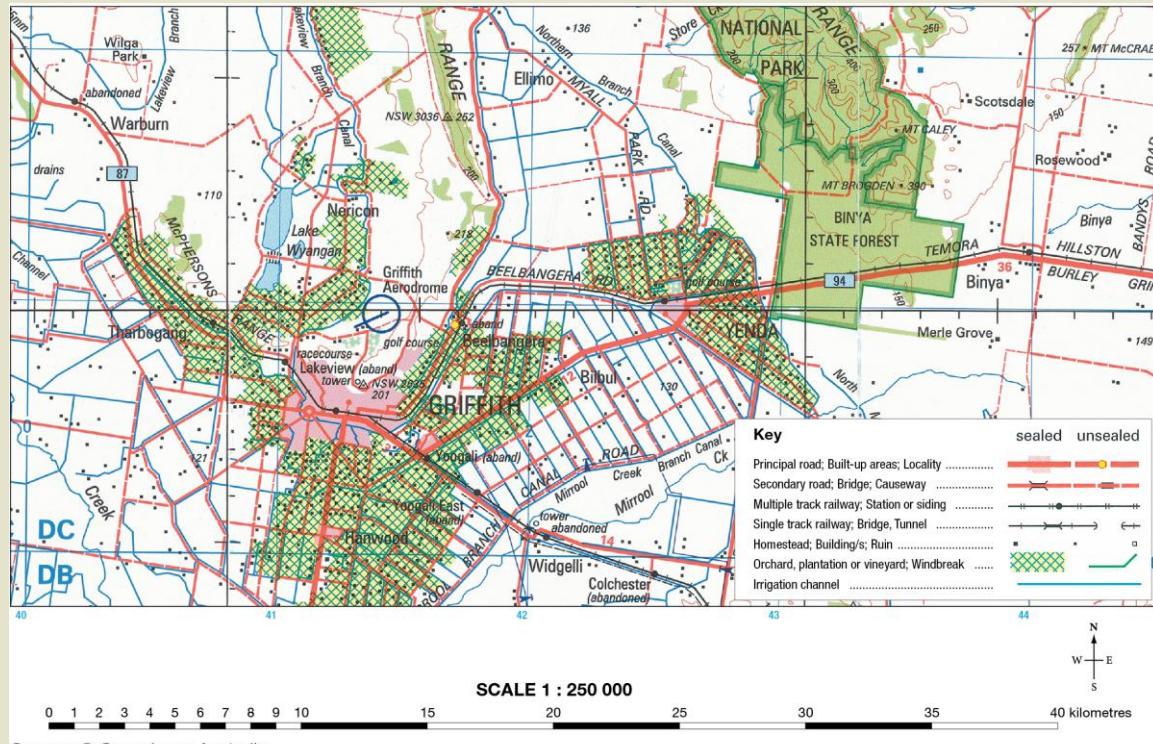
- identified and communicated key features such as patterns, peaks and troughs
- clearly represented and communicated the data about a specific place.

# SkillBuilder: Describing patterns and correlations on a topographic map

Student: ..... Class: ..... Due date: .....

- Using the topographic map of the Griffith area (FIGURE 2 in subtopic 12.2) write a paragraph identifying any patterns and correlations that are evident. Use the checklist to ensure you cover all aspects of the task.

**FIGURE 2** Topographic map extract, Griffith, New South Wales. Using the map, landmarks can be located by their absolute location or location relative to other places on the map.



Source: © Geoscience Australia

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**2. Apply your skills to answer the following questions.**

- a. Why are the water channels straight? Is there an interconnection between slope and water resources? Explain your answer.

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- b. To what extent is there a correlation between orchards and slope? Explain your answer.

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- c. Describe the direction of development of Griffith township. Suggest why it has developed in this way.

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- d. How do we know that the irrigated orchards are smallholdings?

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- e. Is there a correlation between land slope and agricultural land use?

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## Checklist

I have:

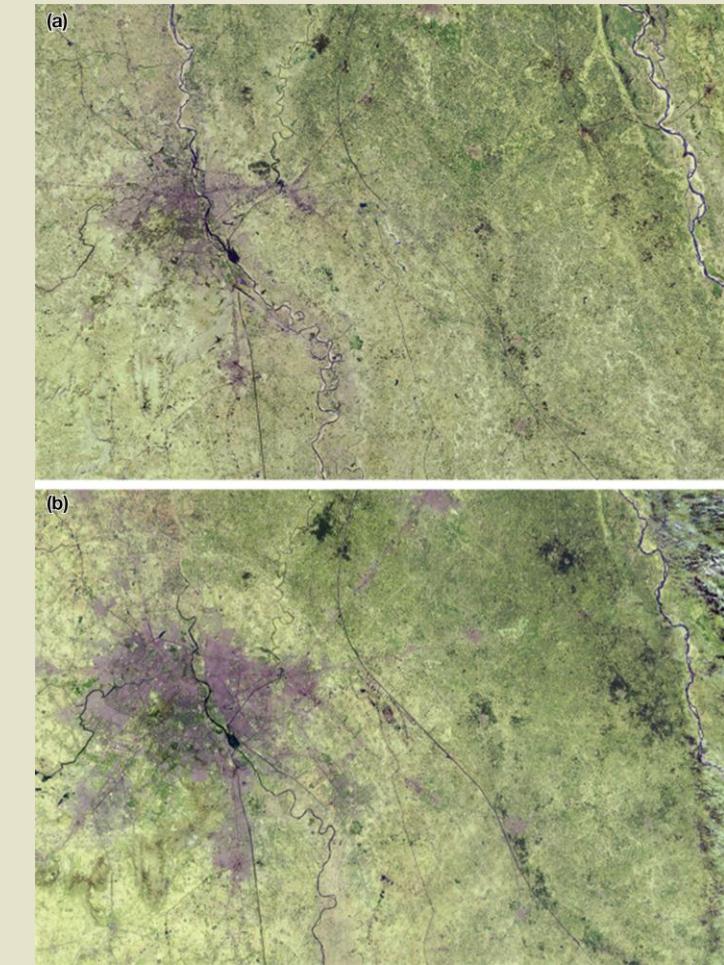
- used place names
- mentioned distances
- identified regions
- identified connections
- noted anomalies
- written in paragraphs and included an introduction that identifies the place and a conclusion that summarises the key findings

# SkillBuilder: Interpreting satellite images to show change over time

Student: ..... Class: ..... Due date: .....

1. Refer to the satellite images of New Delhi in 1989 and 2018 shown in FIGURES 2(a) and (b).

**FIGURE 2** New Delhi, India in (a) 1989 and (b) 2018



Write a description of the change that has occurred over time to the boundaries of New Delhi. Use the checklist to ensure you cover all aspects of the task.

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2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

a. Is New Delhi a growing or declining city? Explain your answer.

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b. How has the vegetation cover of the area changed?

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c. How has the road pattern changed?

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d. How has the growth of New Delhi affected food security in the area?

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## Checklist

I have:

- translated the false colours
- identified patterns
- made logical inferences
- used distance and direction to locate places

# SkillBuilder: Constructing and describing a transect on a topographic map

Student: ..... Class: ..... Due date: .....

1. Using the topographic map for Dalywoi Bay provided (you can download a copy of the map from the Resources tab, if you wish), construct a transect from grid reference 017310 to grid reference 080295. Use the categories of landforms, vegetation and land use. Also calculate the vertical exaggeration of your transect. Once complete, write a description of the transect. Use the checklist to ensure you cover all aspects of the task.

Drawing of a transect from grid reference 017310 to grid reference 080295

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2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

- a. List the biomes found on your transect.

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- b. Using the scale, mark the horizontal distance on your transect where the land is affected by water.

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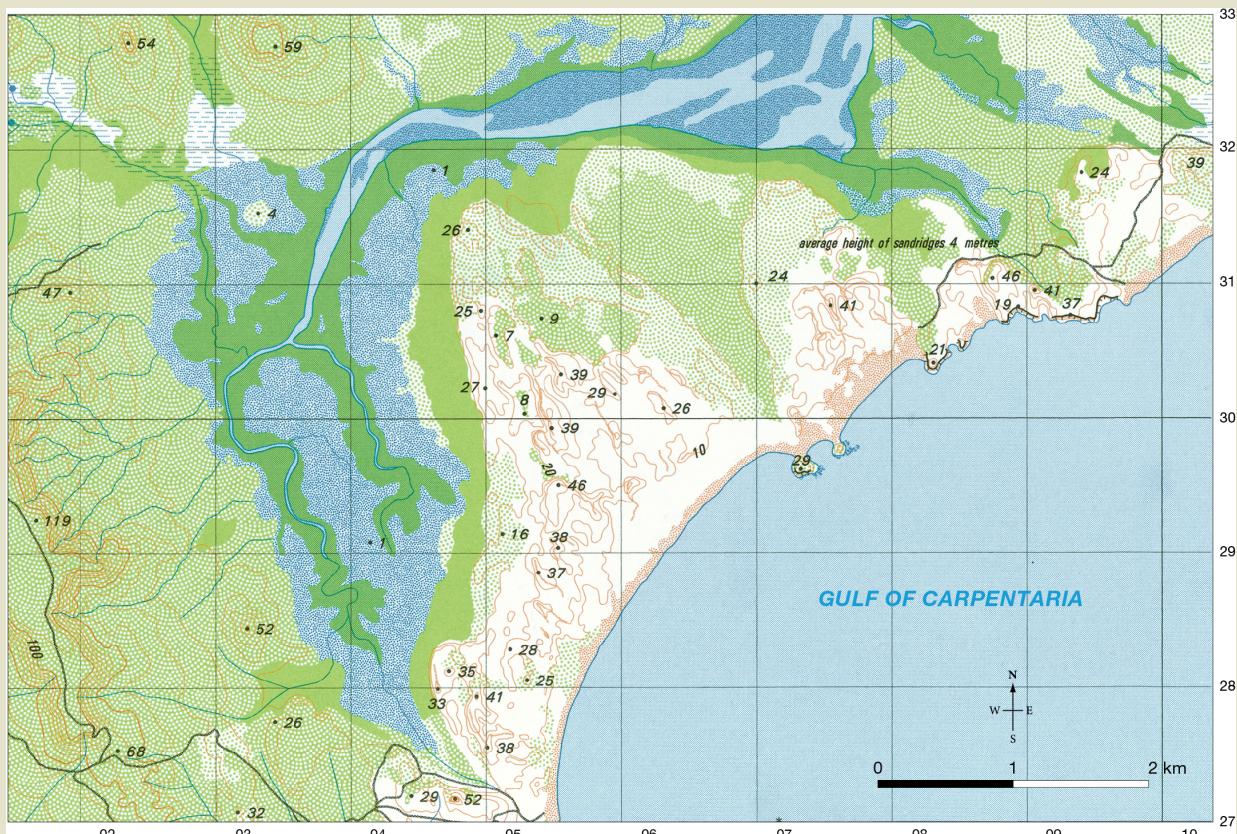
## Checklist

In drawing a transect, I have:

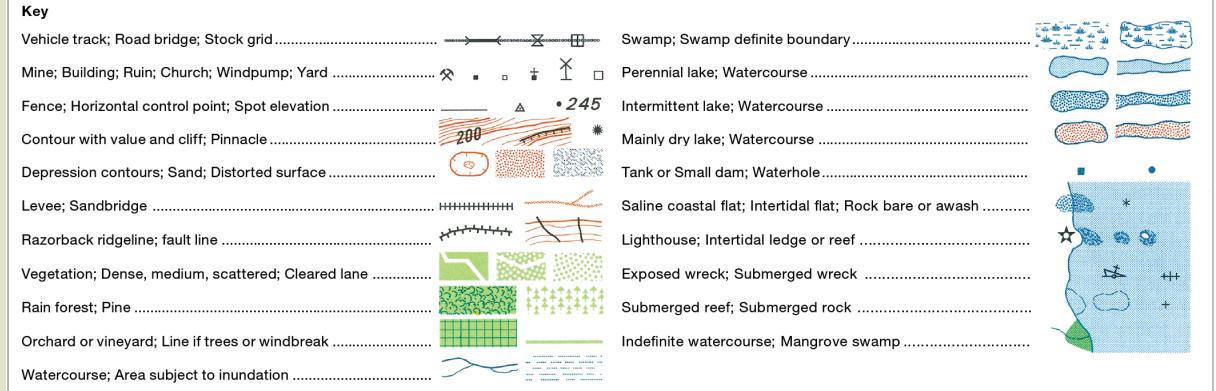
- drawn in pencil
- ruled the axes
- labelled the axes
- used small dots
- drawn with a smooth curve
- identified key aspects such as slope, landform, vegetation and land use
- included a title.

In describing a transect, I have:

- described the key aspects of slope, landforms, vegetation and land use
- identified interconnections between the key features
- noted any anomalies.

**FIGURE 6** Dalywoi Bay, Northern Territory

**Source:** The Australian Army © Commonwealth of Australia 1999



# SkillBuilder: Constructing multiple line and cumulative line graphs

Student: ..... Class: ..... Due date: .....

1. Use the data in TABLE 2 to construct a multiple line graph and a cumulative line graph for four Asian countries to which Australia exports food. Use the checklist to ensure you cover all aspects of the task.

**TABLE 2 Australian total food exports by selected destination, A\$ million, 2006–12**

Country	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12
China	664	917	1178	1426	1540	2174
Indonesia	1566	1702	2652	2129	2288	2272
Japan	4752	4553	5517	4278	4207	4448
Republic of Korea	1850	1655	1873	1925	1994	2338

Source: © DAFF 2013, *Australian Food Statistics 2001–12*. Department of Agriculture, Fisheries and Forestry, Canberra. CC BY 3.0.

**Multiple line graph for four Asian countries to which Australia exports food**

**Cumulative line graph for four Asian countries to which Australia exports food**

**2. Apply your skills to answer the following questions.**

- a. Which country received the greatest value of food exports from Australia?**

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- b. Which country showed the greatest change in its level of importation of food from Australia?**

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- c. From 2006 to 2012, which country was most consistent in its level of importation of food from Australia?**

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- d. Suggest why these Asian countries need to import food from Australia.

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- e. Which graph showed you a clearer picture of the data: the multiple line graph or the cumulative line graph? Explain.

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## Checklist

I have:

- labelled the axes
- included a clear title or caption that identifies places and dates for the data.

## SkillBuilder: Constructing a land use map

Student: ..... Class: ..... Due date: .....

- 1. Complete a land use map of your local area by walking along a street and mapping the land uses.**  
First, create a base map by identifying the main features of the environment such as major roads, waterways, vacant land and parks. Colour the various land uses on your base map and add those colours to the key. Complete the task according to the steps in the Show me section of this SkillBuilder. Use the checklist to ensure you cover all aspects of the task.

**2. Apply your skills to answer the following questions.**

- a. With which land use is most of the map taken up?**

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- b. Which of the land uses on your map have been built by people?**

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- c. What proportion of your land use map is natural environment?**

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- d. Suggest why there are trees in the built environment.**

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- e. Suggest how the environment might change over time.**

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## Checklist

I have:

- drawn in pencil
- added colour
- incorporated a key/legend
- included labelled features as necessary
- included a clear title.

## SkillBuilder: Creating a survey

Student: ..... Class: ..... Due date: .....

- 1. a.** Design a questionnaire to discover places that students from your year level, or people in the wider community, have visited as tourists in the past five years. To help you work out what questions to ask in your survey, look at Activities question 2 for details of what you will need to report. Use the checklist for creating a survey to ensure you cover all aspects of the task.

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- b.** Ask people in your class, year level or local area to complete your survey. When you come back to school, tally your results and see if you can draw some conclusions. Write a paragraph on what your survey has shown you.

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- 2. Apply your skills to answer the following questions.**

- a.** From your survey responses, what percentage of people have travelled somewhere as tourists within the past five years?

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- b.** What trends emerged from your survey regarding travel within Australia in comparison to overseas travel?

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- c. Is there a relationship between how far people travel and how frequently they go? Is there a relationship between how far people travel and how long they stay?

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- d. What were the main recreational activities people were involved in when they travelled to other places as tourists?

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- e. Describe the key features of your respondents' travel patterns. For example, were there particular continents or countries, or even regions within countries that were more popular than others?

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## Checklist

I have:

- asked no more than 10 questions
- ensured that each question focuses on one thing
- made almost all questions closed questions, providing choices for participants to select from
- used simple and direct language
- included questions respondents will be able to answer without needing too much time to think
- ensured questions can be answered briefly
- put questions in a logical order
- ensured that questions avoid bias
- not included questions that are of a personal nature
- ensured that data/results can be summarised.

## SkillBuilder: Constructing ternary graphs

Student: ..... Class: ..... Due date: .....

- 1. Use the data presented in TABLE 2 to construct a ternary graph on labour force by occupation, 2011–12, in selected countries. Use the checklist to ensure you cover all aspects of the task.**

**TABLE 2 Labour force by occupation, 2011–12, selected countries**

Country	Agriculture %	Manufacturing %	Services %
Australia	4	21	75
Colombia	18	14	68
Finland	4	24	74
Germany	2	24	74
India	53	19	28
Indonesia	38	13	49
Italy	4	28	68
Sri Lanka	32	26	42
South Korea	6	24	70
Thailand	41	13	46
Venezuela	7	22	71
Vietnam	48	22	30

**Ternary graph on labour force by occupation, 2011–12, in selected countries**

2. Apply your skills to answer the following questions.

a. Which country has the greatest percentage of its population employed in agriculture?

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b. Which country has the greatest percentage of its people employed in services?

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c. Which countries have the lowest percentage of people employed in manufacturing?

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d. Which country has the most even distribution across the three areas of employment?

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e. On your graph, plot where you think the following countries would be placed: the United States, Gambia and Argentina. Explain your answer.

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## Checklist

I have:

- constructed an equilateral triangle
- divided each side of the triangle into 10
- drawn lines across the triangle that always total 100 per cent
- accurately plotted the data
- labelled the axes
- provided a clear title.

# SkillBuilder: Constructing and describing proportional circles on maps

Student: ..... Class: ..... Due date: .....

1. Using the data on WFP funding contributors in TABLE 2, complete a proportional circles map to show the level of WFP funding across the world in 2018. Use the checklist for drawing proportional circles to ensure you cover all aspects of the task.

**TABLE 2 Selected funding contributors to the World Food Programme in 2018 (US\$)**

United States of America	2 541 479 166	Italy	35 421 720
Germany	849 141 329	China	32 644 030
United Kingdom	617 188 873	Ireland	28 191 994
Canada	222 172 109	Belgium	16 053 224
Sweden	148 185 097	Finland	15 939 371
Japan	130 001 824	Pakistan	15 930 489
Norway	89 996 849	Benin	13 461 901
Switzerland	75 520 814	Luxembourg	11 153 437
Netherlands	71 558 728	Burundi	8 476 285
Australia	71 268 872	New Zealand	5 661 439
Republic of Korea	67 897 569	South Sudan	5 066 242
Denmark	55 940 285	Brazil	444 977
Russian Federation	44 882 539	Colombia	405 856
Figures current as at 28 April 2019			

- 2. Describe the distribution pattern revealed by your map. Use the checklist for describing proportional circles to ensure you cover all aspects of the task.**

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- 3. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.**

- a. On which continent/s are the countries that have made the greatest financial contribution to the WFP?**

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- b. Which other region has a number of countries that have made significant contributions?**

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- c. Describe the pattern of WFP contributions across the world.**

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- d. Are there any countries that surprised you in their level of contribution to the WFP? Explain your answer.**

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## Checklist

In drawing a map of proportional circles I have:

- drawn in pencil using a mathematical compass
- drawn circles that are accurate according to the scale provided in the legend
- included a key/legend to show the proportions of the circles
- included a title.

In describing a map of proportional circles, I have:

- effectively communicated differences in values or amounts of something over space
- identified places
- used directions.

# SkillBuilder: Constructing and describing isoline maps

Student: ..... Class: ..... Due date: .....

1. Use the data in TABLE 1 and base map provided in FIGURE 3 to construct an isoline map of the travel times by bicycle throughout Copenhagen to the city centre. Use the following steps to help you.

**TABLE 1 Travel times by bicycle to Copenhagen city centre**

Suburb of Copenhagen	Travel time (minutes)
Albertslund	45
Ballerup	48
Brøndby	40
Frederiksberg	25
Furesø	50
Gentofte	33
Glostrup	40
Gladsaxe	38
Herlev	48
Hvidovre	34
Ishøj	55
Lyngby–Taarbæk	45
Rødovre	35
Tårnby	30

**FIGURE 3** A base map of the suburbs around Copenhagen city centre



**Source:** Spatial Vision

- Plot on the map the number of minutes it takes to travel from each place to Copenhagen city centre by writing the number of minutes by the dot beside each placename.
- Draw a line (an isoline) connecting all the places from which it would take 30 minutes to travel to the centre of Copenhagen.
- Draw in additional isolines at 5-minute intervals to show travel times to Copenhagen city centre. Use the checklist for constructing isoline maps to ensure you cover all aspects of the task.

**FIGURE 3** A base map of the suburbs around Copenhagen city centre



**Source:** © Open Street Map contributors. Map drawn by Spatial Vision

- Describe the pattern evident on your isoline map. Use the checklist for describing isoline maps to ensure you cover all aspects of the task.
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- Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

- Is Copenhagen city centre more accessible to Furesø or Hvidovre by bicycle? Use figures in your answer.
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- b. Does Tårnby or Brøndby provide easier bicycle access to the city? Quote the distances involved.**

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- c. From which direction would you have the greatest level of access to the city centre by bicycle? Use figures in your answer.**

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- d. Which part of the map would encourage cyclists to live in the area? Explain your answer using figures.**

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- e. In which area of the city would you prefer to live if you had to cycle to the city centre each day for work? Explain your answer, including figures.**

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## Checklist

In drawing an isoline map I have:

- plotted data using small dots
- joined the dots to create a fine isoline
- drawn using pencil
- coloured or shaded between the isolines
- completed my map with BOLTSS.

In describing an isoline map I have:

- identified and communicated key features
- clearly represented and communicated the data.

## SkillBuilder: Constructing and describing a flow map

Student: ..... Class: ..... Due date: .....

- 1. Using a blank world map and the data in TABLE 1, construct a flow map of ivory smuggled from Africa to Asia. Think carefully about the scale you choose, as the data for China is high. Note that the flow is from Africa to Asia, so the arrows need to go from Africa to the appropriate country in Asia. Use the checklist for drawing a flow map to ensure you cover all aspects of the task.**

**TABLE 1 Ten Asian countries with the most ivory seized, 1989–2011 — total weight of seizures in kilograms**

India	Singapore	Malaysia	Japan	Philippines	Vietnam	Taiwan	Hong Kong	Thailand	China
6758	8028	8527	8618	10 659	13 426	18 370	20 638	21 364	41 095

**Source:** TRAFFIC, Tom Milliken



**Flow map of ivory smuggled from Africa to Asia**

- 2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.**

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**3. Apply your skills in interpreting a flow map to answer the following questions.**

**a. Which Asian country had the most smuggled ivory seized?**

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**b. Which Asian country had the least smuggled ivory seized?**

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**c. Describe the areas of Asia to which smaller quantities of ivory are smuggled and the areas to which larger quantities are smuggled.**

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**d. Does distance seem to affect the amount of ivory smuggled? Explain your answer, using the map scale to help you.**

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**e. Does the level of a country's development influence the smuggling of ivory? Explain your answer.**

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## Checklist

In drawing a flow map I have:

- drawn in pencil initially and then coloured appropriately
- used arrows to indicate flow directions
- used scaled arrow widths, which are also explained in a key/legend
- included labelled features as necessary
- provided a clear title, which identifies places and dates.

In interpreting a flow map I have:

- identified and communicated key features of the movement, patterns and places shown
- clearly represented and communicated the data with the use of statistics, places and dates.

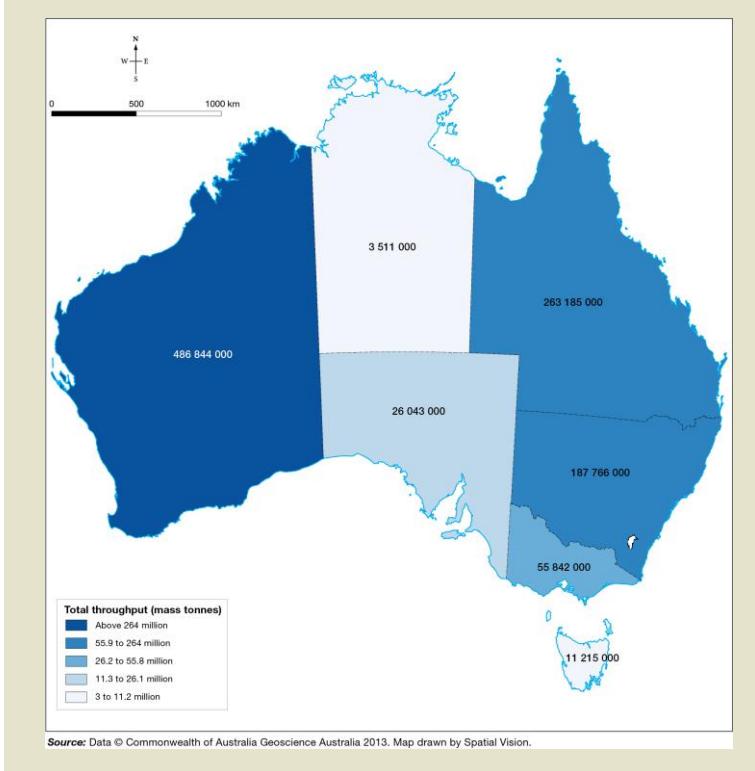
**GEOGRAPHY**

# SkillBuilder: Constructing a table of data for a GIS

Student: ..... Class: ..... Due date: .....

1. Create tables of data for the two maps shown in FIGURES 6 and 7. TABLE 1 should be for the polygons (states) and TABLE 2 for the points (ports). TABLE 1 should have two columns, or fields, and TABLE 2 should have four columns. Identify the text and integer fields in each table. Use the checklist to ensure you cover all aspects of the task.

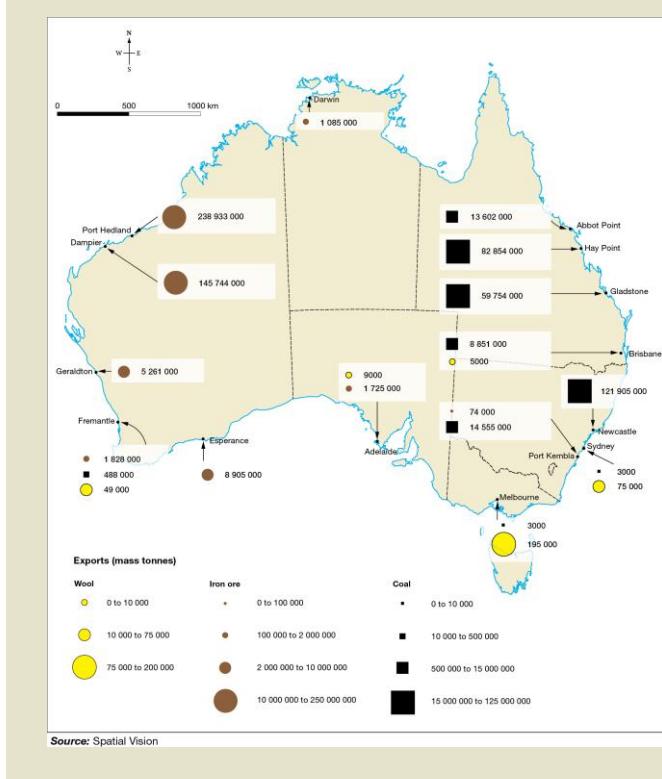
**FIGURE 6** Cargo handled by ports in Australian states and territories, in mass tonnes, 2011–12



**TABLE 1**

State/territory	Mass (tonnes)
Western Australia	486 844 000
Northern Territory	3 511 000
Queensland	263 185 000
New South Wales	187 766 000
Victoria	55 842 000
South Australia	26 043 000
Tasmania	11 215 000

**FIGURE 7** Ports exporting iron ore, coal and wool, in mass tonnes, 2011–12



**TABLE 2**

Port	Wool (tonnes)	Iron one (tonnes)	Coal (tonnes)
Port Hedland	0	283 933 000	0
Dampier	0	145 744 000	0
Geraldton	0	5 261 000	0
Fremantle	49 000	1 828 000	488 000
Esperance	0	8 905 000	0
Adelaide	9000	1 725 000	0

2. Then apply your skills to answer the following questions.

- a. Which state handled the most cargo by tonnage in 2011–12, and which two states handled the least cargo?

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**b. Name the two main ports exporting:**

- i. iron ore

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- ii. coal

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**c. Compare the distribution of coal-exporting ports with that of iron ore-exporting ports. What does this tell us about the location of these resources in Australia?**

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**d. Why are the values for wool exports much smaller than those for iron ore and coal?**

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**e. Why is wool exported from ports in the southern part of Australia?**

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## Checklist

I have:

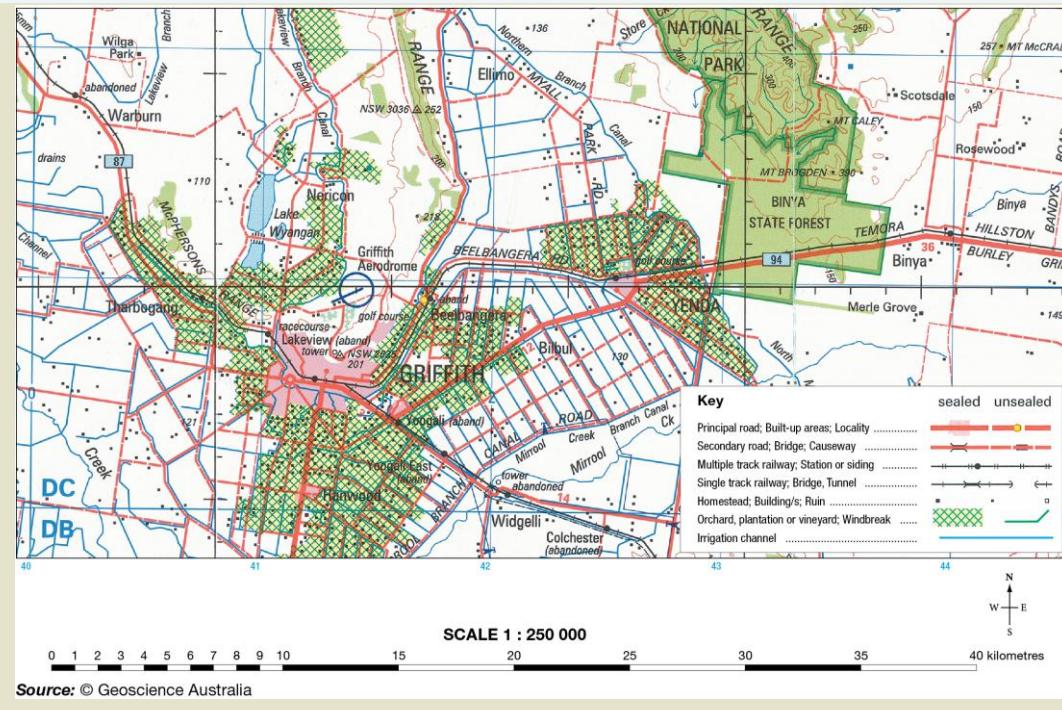
- created separate tables for polygon and point data (and line data, where relevant)
- created rows in the table that relate to the points, lines or polygons on the map
- identified the text and numeric fields
- ensured that the field headings have been shortened if necessary and contain no spaces
- entered the data as correctly as possible
- added explanatory notes (metadata) about the source of the data and the values in each field
- included a title for the tables.

# SkillBuilder: GIS — deconstructing a map

Student: ..... Class: ..... Due date: .....

1. Use the map of Griffith provided in the Resources tab. Choose one point feature, one line feature and one polygon feature and create three tracing-paper overlays. Organise the layers appropriately and add BOLTSS to your map. Use the checklist to ensure you cover all aspects of the task.

**FIGURE 2** Topographic map extract, Griffith, New South Wales. Using the map, landmarks can be located by their absolute location or location relative to other places on the map.



2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

- a. What is the name of the district through which the Murrumbidgee River flows?

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- b. The original biome for this area is likely to have been forest. What has happened to this biome and how would you describe the distribution of forest in the area today?

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- c. Compare the number of creeks in the map in FIGURE 1 with the number of channels. What is the purpose of the many channels and canals?

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- d. FIGURE 1 shows a part of Australia that has undergone change. Using Google Earth and the map, identify the area where there has been the least change and the area where there has been the most change. Explain your choice.

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- e. This area is an example of intensive farming. What does this mean? Provide at least one piece of evidence from both the map in FIGURE 1 and the satellite image in FIGURE 2 (or Google Earth) to support this statement.

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## Checklist

I have:

- traced each set of point, line and polygon data onto a separate piece of tracing paper
- used appropriate colours for the features
- layered the features, with points on top, lines underneath and polygons on the bottom
- included BOLTSS

## SkillBuilder: Interpreting a geographical cartoon

Student: ..... Class: ..... Due date: .....

- 1. Using the steps outlined in the Show me section, write a paragraph analysing the geographical issue portrayed in the FIGURE 2 cartoon. Use the checklist to ensure you cover all aspects of the task.**

**FIGURE 2** Unsustainable fishing



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2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

- a. Why is the fishing trawler drawn so small?

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- b. Has the trawler caught many fish? Explain your answer.

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- c. Explain the discussion between the two fish.

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- d. What message do you think is being conveyed in this cartoon?

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- e. How does this cartoon make you feel?

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## Checklist

I have:

- recognised the issue
- analysed the components of the cartoon
- identified the cartoonist's personal opinion or message
- stated my personal response on the geographical topic.

# SkillBuilder: Using advanced survey techniques — interviews

Student: ..... Class: ..... Due date: .....

1. Create a set of interview questions that seek the opinion of your local community on technology consumption and e-waste management (look at question 2 to ensure your survey provides you with the information you will need to answer these questions). Conduct your survey, organise your data and summarise your findings. Use the checklist to ensure you cover all aspects of the task.

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2. Apply your skills to answer the following questions.

- a. What did people understand by the term e-waste?

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- b. Does the community dispose of its e-waste effectively?

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- c. Are there enough e-waste recycling depots for the community?

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**d. Is there enough advertising about how to deal with e-waste?**

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**e. Which local community groups ought to be responsible for e-waste management?**

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## Checklist

I have:

- thought about the information that needs to be gathered
- worked out which groups of people to interview
- decided when is the best time to conduct the interview
- decided where is the best place to conduct the interview
- written a set of longer and more detailed predetermined questions
- written open-ended questions that allow the interviewees to express their opinions
- included no more than about 15 questions to ensure people retain interest in the interview
- developed supplementary questions in response to anticipated answers
- set a time limit of 15 to 20 minutes.

# SkillBuilder: Using advanced survey techniques — interviews

Student: ..... Class: ..... Due date: .....

1. During Year 9 Geography, your class should undertake fieldwork. This SkillBuilder can only be completed after that has taken place. Some of the activities in this topic suggest undertaking fieldwork in the school grounds or at a local environment. Practise an AVD layout to report your findings for one of these environments. Use the checklist to ensure you cover all aspects of the task.

2. Apply your skills to answer the following questions.

- a. What forms of land degradation might you find in this environment?

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- b. How would you rate your local environment in terms of degradation?

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- c. Can you suggest some activities that could help to improve the environment?

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**d. Which local authorities ought to be concerned about this environment?**

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**e. How might you alert the local community to the degradation taking place?**

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## Checklist

I have:

- clearly structured the layout
- included a title and introduction
- provided statements of findings from a range of data sources — various graph types, tables and photographs
- provided evidence that I have identified patterns in the data, been able to describe the current situation, and synthesised data to show a clear understanding of the topic
- clearly stated limitations and successes
- added a conclusion.

# Reflection

Student: ..... Class: ..... Due date: .....

**1. Which parts of this topic did you enjoy most? Why?**

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**2. Which parts of this topic did you enjoy least? Why?**

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**3. For each of these statements, tick the box that you think is correct for you.**

Statements about my learning in this topic	Strongly agree	Agree	Disagree	Strongly disagree
I enjoyed learning through group discussions.				
I enjoyed learning through completing activities.				
I used my learning time effectively, finishing all set tasks.				
I cooperated and contributed in group tasks.				
Pictures and diagrams helped my learning throughout this topic.				

**4. What ideas and information in this topic were a surprise to you?**

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**5. What would you like to learn more about?**

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