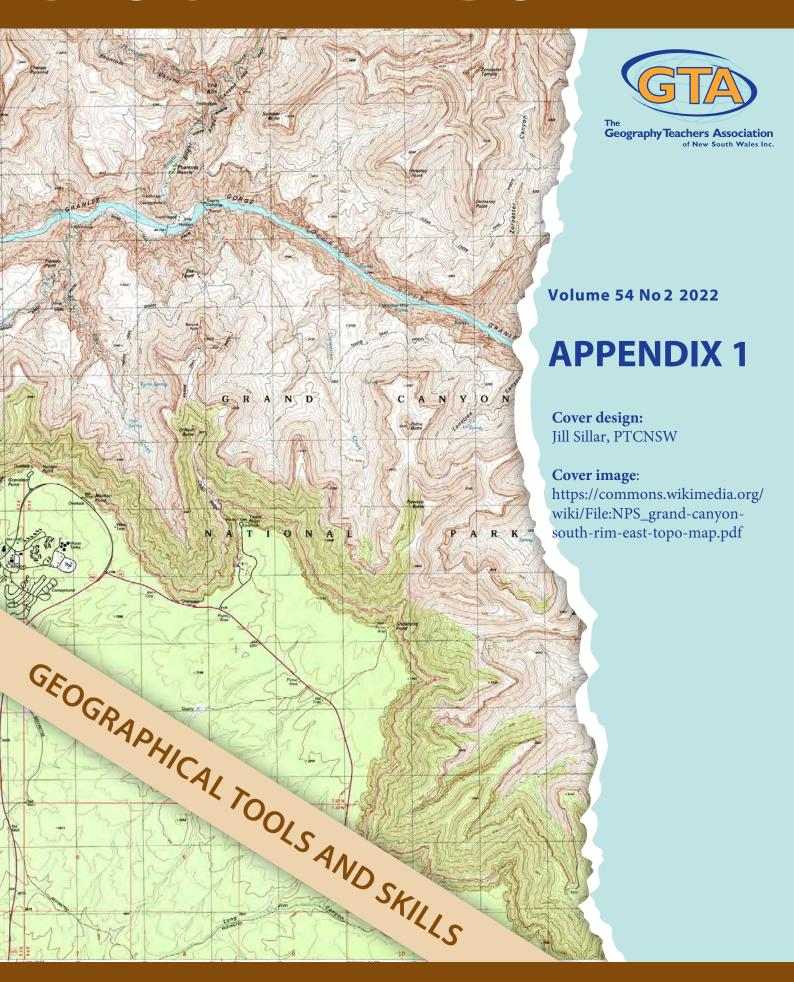
# GEOGRAPHY BULLETIN



# **APPENDIX 1: GEOGRAPHY BULLETIN 2, 2022**

# Volume 54, No 2, 2022

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Also, with this Edition on the GTANSW & ACT Website

APPENDIX 2: PPT Sustainable Biomes: An introduction to biomes

Supports Worksheet 4

APPENDIX 3: PPT Environmental change: Earth's Forest Loss over 10,000 years
Supports Worksheet 6



# Water in the World



# 1. WEATHER and CLIMATE WORKSHEET

You will need a copy of the GTANSW & ACT Geography Bulletin Resource on Weather and climate to complete this worksheet.

SYNOPTIC CHARTS
The difference between weather and climate.
2.
a. My evidence suggesting that this is a summer weather map is
b. Air pressure
- 30 South, 160 degrees East
- Melbourne
c. Wind direction and wind speed
- Perth
- Adelaide
d. The feature at 15 degrees South, 150 degrees east.
e. It rained along the east coast of Australia because
It rained in the southwest corner of Western Australia because
f. The changing weather condition at Perth changed over the previous day from
Challenge question
There is a low-pressure cell south of the cold front because
3. a. Air pressure
- Perth - Alice Springs
b. The highest air pressure on the map is
- O m h m h m h

# Water in the World

c. The lowest air pressure on the map is
d. Wind direction and wind speed
- Port Headland
- Alice Springs
e. The weather at
- Perth
- Townsville
f. The spatial pattern of rainfall
a special process of the second secon
It has rained in this location because
My prediction for the weather in the next 24 hours is
CUMANTIC CRADUC
CLIMATIC GRAPHS
4.
a. The hottest and coldest months of the year
b. Average daily temperature for May.
c. Annual rainfall is distributed
c. / windar rainfair is distributed
d. Annual Precipitation.
e. My reason why station X would be located in coastal Queensland and not in Tasmania or
Japan is
5. Use the template on the following page to graph the climate statistics for STATION Y
3. ose the template on the following page to graph the climate statistics for 377 thort i
6. The climate at STATION Y

# **Water in the World**

# Climate graph

Station:							(	Counti	ry				
Latitude:			L	ongitu	de:				ŀ	Elevati	on:		
Temperature (°C)		<u> </u>											Rainfall (mm)
		<u> </u>											-
		<u> </u>											<u> </u> 
			<u> </u>										-
		<del>                                     </del>	<u> </u>	<u> </u>	<u> </u>				<u> </u>	<u> </u>			
			<u> </u>	<u> </u>									
		-	<u> </u>	<del> </del>									-
		<del>                                     </del>											
		<del>                                     </del>		<del> </del>									
		-											
Month	J	F	М	Α	М	J	J	Α	s	0	N	D	Year
Av. max. temp. (°C)													Av.
Av. min. temp. (°C)													Av.
Precipitation													Total

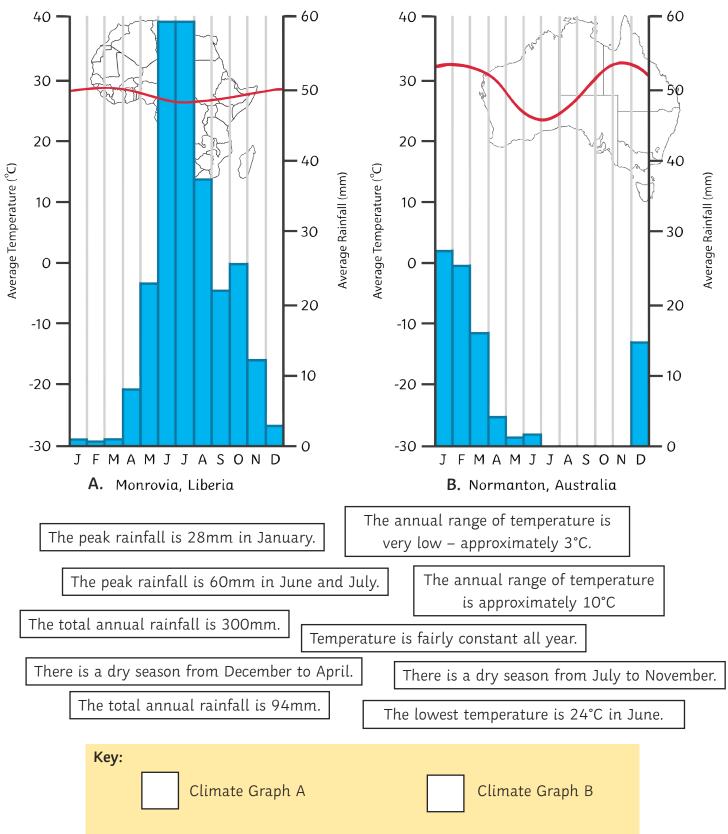
# **Comparing Climate Graphs**

Study the two climate graphs below. They show very different climates!

Can you work out which statement describes each climate graph?

Colour code your answers and complete the key.





4

SOURCE twinkl.com



# 2. THE GRAND CANYON WORKSHEET

# EXPLAINING FEATURES AND FORMATION / PREDICTING FUTURES

Use the material on the Grand canyon in Geography Bulletin, No. 2, 2022 to complete these activities.

# **INTRODUCTION**

Watch the short video clip to start you thinking.

How was the Grand Canyon formed? https://www.youtube.com/watch?v=t6IBg4Srb6E

# **ACTIVITY 1: ANNOTATED DIAGRAM**

Annotate the diagram with examples of landscapes and / or landforms caused by each of the geomorphic processes shown in the diagram. Name places in your answer.

# **CHANGES TO THE EARTH**



Source: Shutterstock



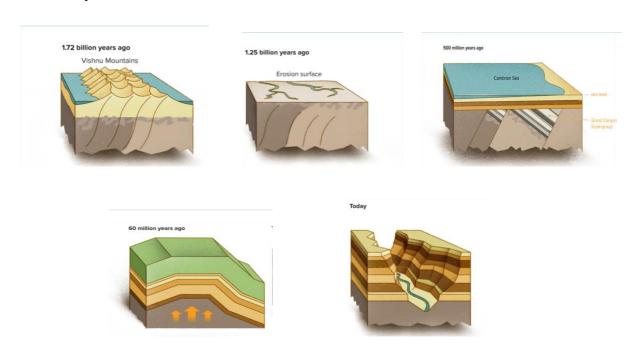
# ACTIVITY 2: PHOTO AND MAP INTERPRETATION. THE GRAND CANYON

<b>a.</b> What is it? Describe the landscape you see in the photographs of the Grand Canyon. Using geographical language and refer to any distinctive landforms you can observe.
b. Where is it?
Describe the location of the Grand Canyon using the map collection. Refer to places, distances, and directions in your answer.
c. Why is it there? Develop your own explanation of how this landscape was formed. Use geographical terms in a written answer.



# **ACTIVITY 3: EXPLAINING CHANGE OVER TIME**

a. Use ARROWS to match the diagrams with the text boxes that explain the formation of the Grand Canyon over time.



 $(Diagrams\ Knowable\ magazine\ \underline{\ \ }\underline{\ \ \ }\underline{\ \ }\underline{\ \ }\underline{\ \ }\underline{\ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\$ 

	Explanation
1	The Colorado River carved down through the plateau exposing the ancient
	layers of rock seen today.
2	Erosion levelled the mountains and created a flat plain on which new layers were deposited.
3	Basement rocks form deep below a mountain range.
4	Layers of rock are titled by tectonic forces; the area was covered by water and more layers deposited.
4	Colliding tectonic plates pushed upwards creating the Colorado Plateau at a high elevation.

b. Predict what the landscape will look like in another 50 million years under two scenarios:The future climate is wetter than today with 1000 mm additional rainfall a year.

<u> </u>			

- The continent experiences a new tectonic uplift of 1000 metres. Explain your predictions.



# **ACTIVITY 4: THE PHYSICAL EVIRONMENT**

a. Refer to the climate	statistics for Page in the Geography Bulletin.
i. Calculate the annual p	recipitation and number of rainy days.
Precipitation	Rainy Days
ii. Describe the variation	in temperatures between January and July.
iii. What would be the b	est time of year for a hiker to visit the Grand Canyon? Explain.
J	on profile in the Geography Bulletin  a vegetation from the bottom to the top of the south facing slopes of
	n 0 to 4,000 metres altitude)
ii. Suggest why the high	er areas are more vegetated.
c. Synthesis	
i. How does the climate you have observed in ph	of the Grand Canyon affects the landscape of the Grand Canyon that otographs and maps?
ii. Where do you think the	he water in the Colorado River comes from?



# **ACTIVITY 5: TOPOGRAPHIC MAPPING**

Visit the following website to use or download a topographic map of the Grand Canyon. Southeast Rim https://commons.wikimedia.org/wiki/File:NPS\_grand-canyon-south-rim-east-topo-map.pdf

- a. Locate the following places Grand Canyon Village
  - Colorado River
  - Clear Creek
  - Bright Angel Canyon
  - Granite Gorge
  - Lyell Butte and Pattie Butte
- b. Study the patterns of contour lines on the map.

What does the pattern of contour lines tell you about the following?

- the landscape northeast of Grand Canyon Village compared to south of the village.
- the width, depth and shape of Granite Gorge and Bright Angel Canyon?
- the size and shape of buttes.
c. You take a helicopter flight from the Visitor Centre in the Grand Canyon Village to Phantom Ranch in Bright Angel Canyon.
i. Calculate the straight-line distance you travelled (km).
ii. State the direction you travelled
iii. Describe the landscape you observed along the way. Your description should refer to landforms and vegetation.
The following video may assist you to visualise and describe your flight. Grand Canyon - US National Parks 3D Maps <a href="https://www.youtube.com/watch?v=eTzj7yyha_M">https://www.youtube.com/watch?v=eTzj7yyha_M</a>
d. State three pieces of evidence that this area caters for tourists.



# 3.TOPOGRAPHIC MAPPING SKILLS WORKSHEET

You will need a copy of the GTANSW & ACT Geography Bulletin resource on Topographic Maps to complete this worksheet.

Figure 1. Map
a. Identify two landforms are
b. The shipwreck is in AR
c. The direction of Point A from Point C is
d. The bearing of the shipwreck from Point C is
e. The straight-line distance between Point B and Point C is
f. The gradient of the slope between Point A and Point B is Show your calculations here
g. The aspect of the slope along A to B is
h. Cross section
i. Describe your journey walking from A to B to C.
Challenge Questions
i. Calculate the Vertical Exaggeration of your cross section.
j. Represent the scale of the map as a ratio.
Created by Lorraine Chaffer for GTANSW & ACT Geography Bulletin, Volume 54, No 2, 2022



# Figure 2. Rivertown

- a. The direction of the train station from the bridge is \_\_\_\_\_
- b. The distance from the northernmost trig station to the bridge is \_\_\_\_\_
- c. The area of land covered by pine forest is \_\_\_\_\_
- d. A grid reference suited to planting a tree is \_\_\_\_\_
- e. Circle the cross section that best represents the topography travelling south-east from the trig station in AR 2240 to the trig station in AR 2436

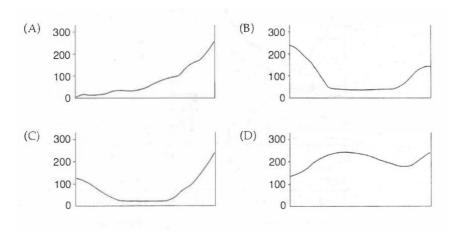


Figure 3. Lloyds Inlet

- a. Grid References bridge \_\_\_\_\_\_, the steepest slope\_\_\_\_\_
- b. Straight-line distance Point A and Point B \_\_\_\_\_ Point C and Point D\_\_\_\_\_
- c. The direction from the bridge to Point A \_\_\_\_\_
- d. The direction water flows in Clear Creek \_\_\_\_\_\_, Pine Creek \_\_\_\_\_
- e. The gradient between Point C and Point D is \_\_\_\_\_\_ Show your calculations here

- f. The approximate area of the lagoon \_\_\_\_\_
- g. The locations GR 020567 and GR 021562 are unsuited to crop growing because

\_\_\_\_\_



h. Label the cross section below with features located at each arrow.

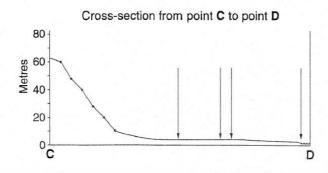
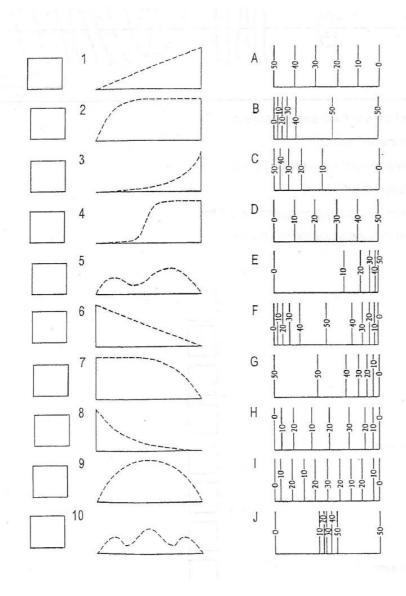


Figure 4

Draw connections between the pattern of contour lines with the landform they represent. *Challenge question:* Name each feature beside the pattern of lines





# 5. CHARACTERISTICS OF BIOMES WORKSHEET

You will need a copy of the GTANSW & ACT Geography Bulletin Resource to complete this worksheet.

# Inquiry questions.

What is the spatial distribution of the world's biomes? What are the main characteristics that differentiate the world's Biomes?

**ACTIVITY: MAP THE GLOBAL DISTRIBUTION OF BIOMES** 

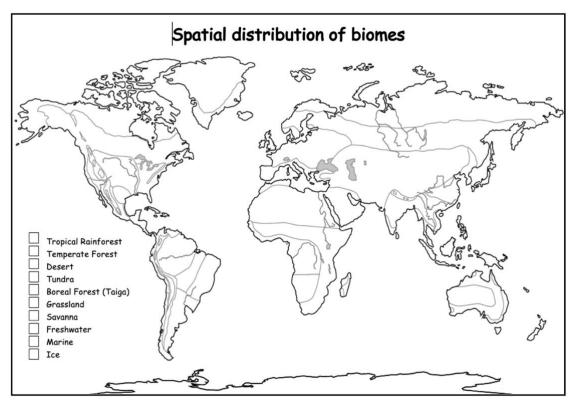


Image https://askabiologist.asu.edu/sites/default/files/resources/coloring\_pages/pdf/aab-biome-activity.pdf

**ACTIVITY 2: CONSTRUCT A PIE GRAPH for the world coverage of biomes** 



# 6. BIOMES: PLACE, SPACE AND CHANGE WORKSHEET

You will need a copy of the GTANSW & ACT Geography Bulletin Resource BIOMES: PLACE, SPACE AND CHANGE WORKSHEET to complete this worksheet.

# A. GRAPH STUDY: THE WHERE and WHY OF BIOMES

**TASK**: Use your knowledge and understanding about biomes to identify the factors that influence the global location of biomes.

Refer to Figure 1
a. Name the type of forest biome found closest to the equator (at low latitude).
b. Describe how biomes change from low to high altitude locations.
c. Why is there a change in biomes as altitude increases?
d. What factor is the main cause of the change from forest at the equator to tundra near the ice caps?
d. State one climatic factor that would influence the location of desert and grassland biomes.
e. Predict what might happen to the zonation of biomes with climate change.
Refer to Figure 2
f. Name the biome that can be found where average yearly temperatures reach minus 10 $^{\circ}\text{C}$ and annual precipitation is less that 20 cm (200 mm).
g. State the climatic conditions that influence the biomes at A and B.



# B. PHOTO STUDY: PEOPLE CHANGE BIOMES TO PRODUCE FOOD

# Figure 3

a. Suggest the natural biome that once occupied this location. You may refer to Figure 1 to guide your response. Give a reason for your answer.
b. Explain how the biome was changed to produce food. Use geographical concepts.
c. Name a country or place you know where a biome has been changed in a similar way.
d. Explain potential consequences of the change (positive and negative).
Represent your ideas here using a flow diagram or consequence chart.  Draw here or use a template on the following pages
e. Propose a solution to ONE negative consequence of change.



# For Figure 4

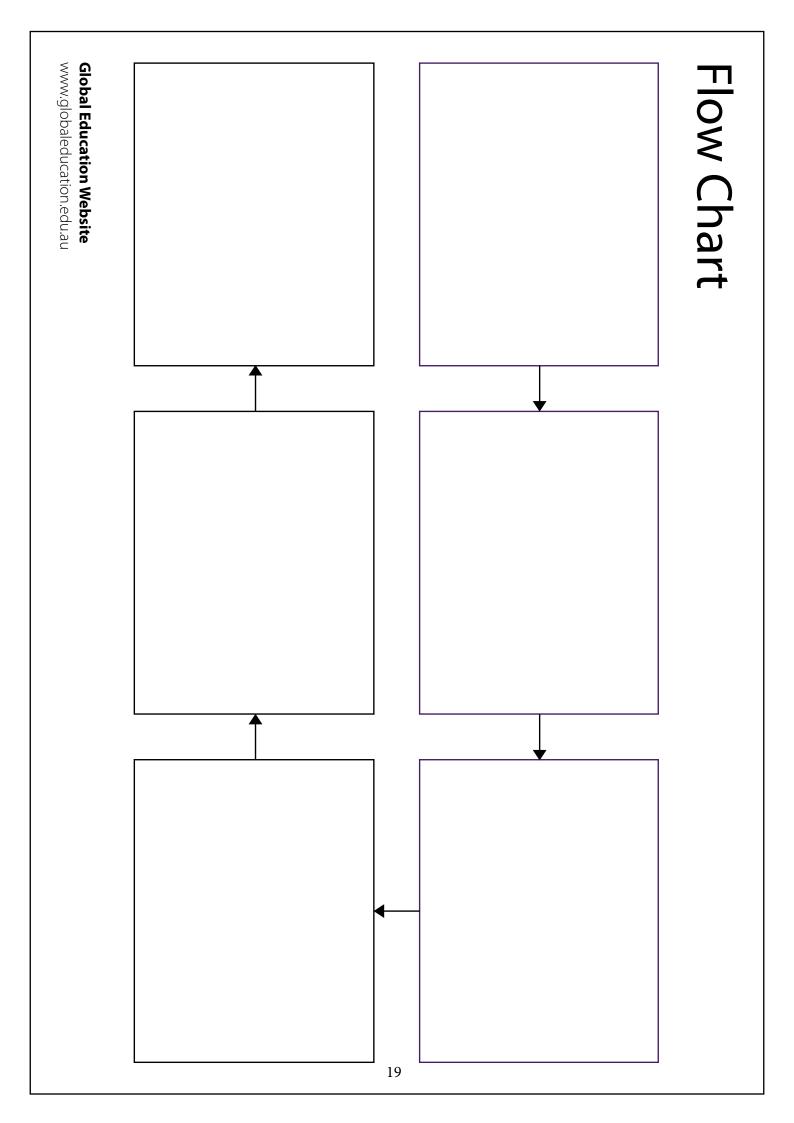
a. Suggest the natural biome that once occupied this location. You may refer to Figure 1 to guide your response. Give a reason for your answer.
b. Explain how the biome was changed to produce food. Use geographical concepts.
c. Name a country or place you know where a biome has been changed in a similar way.
d. Explain potential consequences of the change (positive and negative).
Represent your ideas here using a flow diagram or consequence chart.  Draw here or use a template on the following pages
e. Propose a solution to ONE negative consequence of change.



# For Figure 5

a. Suggest the natural biome that once occupied this location. You may refer to Figure 1 to guide your response. Give a reason for your answer.		
b. Explain how the biome was changed to produce food. Use geographical concepts.		
c. Name a country or place you know where a biome has been changed in a similar way.		
d. Explain potential consequences of the change (positive and negative).		
Represent your ideas here using a flow diagram or consequence chart.  Draw here or use a template on the following pages		
e. Propose a solution to ONE negative consequence of change.		

# www.globaleducation.edu.au **Global Education Website** Consequences Chart 18





# C. PHOTO STUDY: THE FASCINATING WORLD OF FOOD PRODUCTION

# Photograph 1. Layers of inference

What does the photograph definitely tell me?
What can I infer from the photograph? What guesses can I make?
What does the photograph not tell me?
What else would I like to find out?
Critical thinking

Photo 1 (Give it a name)	Description (Select a letter from table)	Country (Select from the table)
Reason for my choices above		
My questions about this example of	food production	
	<u>,                                    </u>	



# Photograph 2 Layers of inference.

What does the photograph definitely	y tell me?	
What can I infer from the photograp	oh? What guesses can I make?	?
What does the photograph not tell n	ne?	
What else would I like to find out?	What other questions do I nee	d to ask?
Critical thinking		
Photo No (Give it a name)	Description (Select a letter from table)	Country (Select from the table)
December was about a bout		
Reason for my choices above		
My Key Inquiry Question for this ex	xample of food production	



# Photograph 3 Layers of inference.

What does the photograph definitely	y tell me?	
What can I infer from the photograp	oh? What guesses can I make?	?
What does the photograph not tell n	ne?	
What else would I like to find out?	What other questions do I nee	ed to ask?
Critical thinking		
Photo No (Give it a name)	Description (Select a letter from table)	Country (Select from the table)
Reason for my choices above		
My Key Inquiry Question for this ex	xample of food production	



# Photograph 4 Layers of inference.

What does the photograph definitely tell me?
What can I infer from the photograph? What guesses can I make?
What does the photograph not tell me?
What else would I like to find out? What other questions do I need to ask?

# Critical thinking

Photo No (Give it a name)	Description (Select a letter from table)	Country (Select from the table)
Reason for my choices above		
My Key Inquiry Question for this e	xample of food production	
Try frey inquity Question for this e	numpre of food production	



# Photograph 5 Layers of inference.

What does the photograph definitely tell me?
What can I infer from the photograph? What guesses can I make?
What does the photograph not tell me?
What else would I like to find out? What other questions do I need to ask?

# **Critical thinking**

Photo No (Give it a name)	Description (Select a letter from table)	Country (Select from the table)
Reason for my choices above		
My Key Inquiry Question for this e	xample of food production	



# 6. ENVIRONMENTAL CHANGE OVER TIME WORKSHEET

You will need a copy of the GTANSW & ACT Geography Bulletin Resource on CREATING TEXT USING INFOGRAPHICS. to complete this worksheet.

# **ACTIVITY 1: Put it into words**

Guiding questions.		
• 1800 wasyears ago		
• years are covered by this series of in	fographics	
Habitable land is		
The two main components of habitable land are and		
An essential requirement for people to use habitable land is		
of Earth's surface is uninhabitable. It is unin	nhabitable because	
of Earth's habitable land had been cropping, and grazing by 1800.	cleared for urban landuse,	
My paragraphs		
Figure 1		
Figure 2		



Figure	23
Figure	e 4
Figure	e 5
ACTI	VITY 2: Calculations
•	The letters M and B represent
and	
•	Forests changed between 1800 and 2018 byhectares OR
	% of habitable land.
•	Over time, Earth's grasslands
•	In 2018 Earth's grasslands
•	The percentage change in habitable land occupied by forests from 1800 to 2018 was
•	The annual rate of change in forest cover over the last 10,000 years was



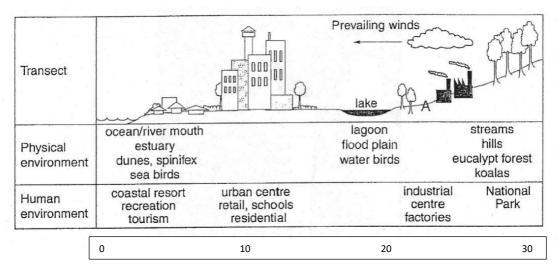
My extra calculations
ACTIVITY 3: ORGANISE YOUR IDEAS
My heading
My introduction
My conclusion.
My key message

NOW CREATE YOUR ARTICLE.



# 7. ENVIRONMENTAL CHANGE SCENARIO WORKSHEET

There is a proposed major expansion of the industrial estate at point A on the transect.



1. Explain how the proposed industrial expansion could impact on ONE part of the

Distance in km

geographical concepts in your answer.
Physical environment
Human environment



2. You are an environmental consultant working for a residents' community action group concerned about the proposed expansion of the industrial estate. Describe TWO fieldwork techniques you could use to investigate the impact of the proposed industrial expansion.
3. Outline ways that individuals opposed to the industrial expansion could also influence decision making about the proposal.
4. What do the concepts 'informed <i>citizenship</i> ' and 'active citizenship' mean to you?
Informed citizenship
Active citizenship

# 8. HUMAN WELLBEING AT A RANGE OF SCALES WORKSHEETS

# A. Mapping Human Wellbeing at a global scale

Collect the data to create a choropleth map

1. Use <u>CIA World Factbook</u> to collect data and fill in the table below:

	Life Expectancy (years)	Infant Mortality Rate (per 1000 live births	Birth Rate (per 1000 population)	Obesity - adult prevalence rate (%)	Literacy (%)	GDP - per capita (PPP)
Australia						
India						
Norway						
Sudan						
Peru						
Iran						
Canada						
Indonesia						

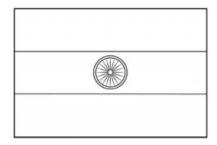
2. Use the data collected above to decide on differing levels for each indicator on the table below:

	Life Expectancy (years)	Infant Mortality Rate (per 1000 live births	Birth Rate (per 1000 population)	Obesity - adult prevalence rate (%)	Literacy (%)	GDP - per capita (PPP)
Low						
Medium						
High						

- 3. Choose 2 indicators to create a choropleth map (on the world map attached). On the map you will need a key with high, medium, and low for each indicator [you could use colour for one and shading/patterns for the other]. Also ensure you have BOLTSS.
- 4. Explain your choropleth map. Hint: consider interconnections between indicators

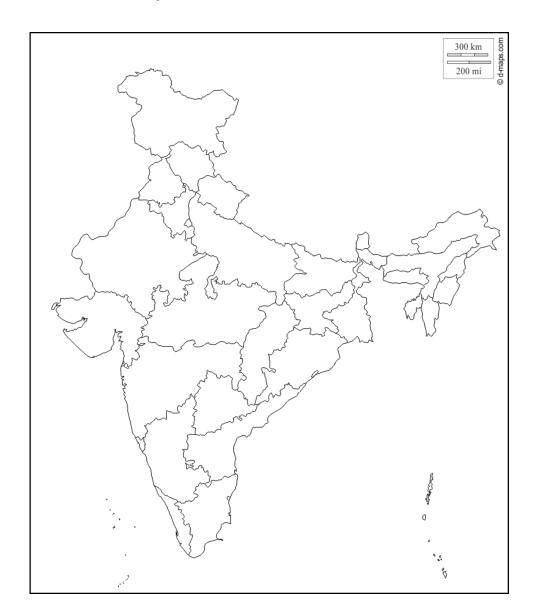
# B. SPATIAL VARIATIONS IN HUMAN WELLBEING WITHIN INDIA

# 1. Colour the flag of India



# 2. On the map of India below label:

Each state and territory of India, Mumbai, New Delhi, and Kolkata.



3. Complete the table below with data for the states of Bihar and Kerala

Bihar. <a href="https://globaldatalab.org/profiles/region/INDr103/">https://globaldatalab.org/profiles/region/INDr103/</a> Kerala <a href="https://globaldatalab.org/profiles/region/INDr110/">https://globaldatalab.org/profiles/region/INDr110/</a>

- 4. Represent the statistics in a graph using a tool such as Excel.
- 5. Collect media reports on inequality in India. On a copy of the article highlight references to inequality and annotate the nature of the inequality e.g., housing, education, health care.

	Kerala value	Bihar value
Level of development	Value	Value
Subnational Human Development Index		
International Wealth Index (IWI)		
Gross National Income per capita (2011\$ ppp)		
Poverty	Value	Value
Percentage poor households (IWI value under 70)		
Percentage poorer households (IWI value under 50)		
Percentage poorest households (IWI value under 35)		
Educational attendance	Value	Value
Educational attendance children aged 6-8 (%)		
Educational attendance children aged 15-17 (%)		
Position of women	Value	Value
T + 1 C + 114		
Total fertility rate		
Mean age at first marriage of women aged 20-50		
Mean age at first birth of women aged 20-50	X 7 1	T / 1
Position of children	Value	Value
Infant mortality rate		
Percentage underweight children		
Percentage overweight children		
Asset ownership	Value	Value
Percentage households with a TV		
Percentage households with a refrigerator		
Percentage households with a washing machine		
Percentage households with a motorbike		
Access to public services	Value	Value
Percentage of households with piped water		
Percentage of households with electricity		
Percentage households with a phone		
Population	Value	Value
Percentage population in urban areas		
Quality of housing	Value	Value
Percentage households with flush toilet		
Percentage households with a natural floor (earth, sand,		
dung etc.)		
Percentage households with three or more sleeping rooms		
Percentage households cooking on wood, straw, grass,		
dung etc.		

## C. VARIATIONS IN HUMAN WELLBEING IN AUSTRALIA: EDUCATION

There are spatial variations in Human Wellbeing within countries. For this task you are to choose **ONE area from List A** and compare it to **ONE area within List B**.

List A	List B
Ceduna, SA	Berrimah, NT
Moree, NSW	Portsea, VIC
Charleville, QLD	Toorak, VIC
Buloke, VIC	Cottesloe, WA
Croydon-Ethridge, QLD	Bellevue Hill, NSW
Yuendumu – Anmatjere, NT	North Adelaide, SA
Halls Creek, WA	Ascot, QLD
Anindilyakwa, NT	Sandy Bay, TAS
Orbost, VIC	Balmain, NSW
Fairfield, NSW	Forrest, ACT

NB, ABS Quickstats search using Statistical area (SA2).

-----

Nelson Mandela once said "Education is the most powerful weapon which you can use to change the world." Education is the key to eliminating gender inequality, to reducing poverty, to creating a sustainable planet, to preventing needless deaths and illness, and to fostering peace.

The main focus is a **comparison** of education in your two areas. Consider:

- Collecting statistical data on education from reputable sources eg, a good place to start would be the Australian Bureau of Statistics both Quickstats and the Socio-Economic Indexes for Areas (SEIFA).
- Dig deeper into the factors (causes) that hinder education (why can't all children access school? eg, domestic violence, disability, hunger, distance to school)
- Research rates of tertiary education eg, TAFE or university. How does tertiary studies link to income levels?
- Education scoring eg HSC and NAPLAN results

# **Part 1: Collecting Data**

For your TWO areas, you must collect data that will best represent education in your areas. You must show 10 different statistics in the table below:

# Part 2: Analyse the Data

You will now use the data you collected in Part 1 to analyse the difference between the two areas in 700 words.

# **Part 1: Collecting Data**

For your TWO areas, you must collect data that will best represent education in your areas. You must show 10 different statistics in the table below:

	Name of Statistic:	List A Area Name	List B Area Name	Source
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Part 2: My analysis

# D. SPATIAL VARIATIONS IN WELLBEING: CENTRAL COAST NSW

# A. Collect data to complete Figure 1 Census data using the link below

https://www.abs.gov.au/websitedbs/censushome.nsf/home/quickstats?opendocument&navpos=220

Woy- Blackwall   Avoca (SA2)   Charmhaven (SA2)   W   W		Woy	Terrigal-	The	Gorokan-	Morisset-	NSW	Australia
Blackwall   Avoca   (SA2)   Charmhaven   (SA2)								
Content   Cont			Avoca	(SA2)	Charmhaven			
-0-14 years - 80 years + Education University / tertiary institution Level of education Bachelor Degree Personal Family Clerical/ Admin Top industry of employment status-both not working Household income Se500/week S33000/week Household Median monthly mortgage repayments Median weekly Median weekly Median weekly Median mortgage repayments Median weekly Median monthly mortgage repayments Median weekly Median median media mediants in the status weekly Median median mediants in the status weekly Mediants in the statu		(SA2)	(SA2)		(SA2)			
-80 years + Education University / tertiary institution Level of education Bachelor Degree Year 12 Year 10 Year 9 or below Employment 35 hours or more Professionals Managers Technicians/ Trades Labourer Clerical/ Admin Top industry of employment (name industry) Income Personal Family Employment status-both not working Household income <\$6500/week \$3000/week Household Median monthly mortgage repayments Median weekly	Age							
Education	-0-14 years							
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# Collect data to complete Figure 2

# Figure 2. Income variation: Macquarie University Interactive map

Use the interactive map from Macquarie University to complete the table <a href="https://www.smh.com.au/education/where-you-live-is-determining-your-school-s-naplan-score-20181126-p50ibg.html">https://www.smh.com.au/education/where-you-live-is-determining-your-school-s-naplan-score-20181126-p50ibg.html</a>

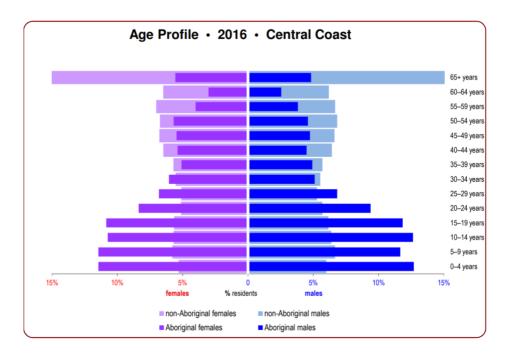
Place	% of income earners in the top income bracket (\$3000/week)
Central Coast	
Hornsby	
Mosman	
Parramatta	
Fairfield	
Waverly	
Southerland Shire	

# Interpret the data and communicate your findings

1. Using data explain the differences in EDUCATION across the Central Co	1. J	Using data	explain the	differences i	in EDUCATION	across the Ce	entral Coas
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- 2. Use the <u>interactive map</u> from Macquarie Uni to identify areas that:
- a. Perform above the average for Year 5 writing results
- b. Perform below the average for Year 5 writing results
- 3. Using data explain the differences in EMPLOYMENT across the Central Coast.
- 4. Using data explain the differences in INCOME across the Central Coast.
- 5. Using data explain the differences in HOUSEHOLD mortgage and rent repayments across the Central Coast.
- 6. Outline any general trends you can identify between the different categories of human wellbeing.

**REFER TO FIGURE 3: Indigenous population on the Central Coast** 

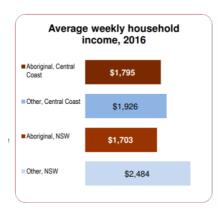


7. Using statistics describe the profile of indigenous males and females aged 0-29 years as compared to the non-indigenous profile.

8. Using statistics describe the profile of indigenous males and females aged 30 years + as compared to the non-indigenous profile.

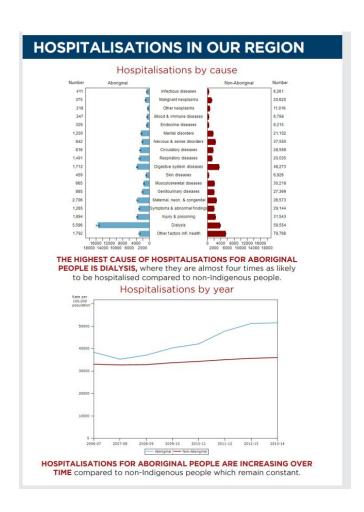
# **REFER TO FIGURE 4: Aboriginal Incomes**

9. Refer top Figure 2 Describe the differences in average weekly household incomes between Aboriginal and "others" on the Central Coast.



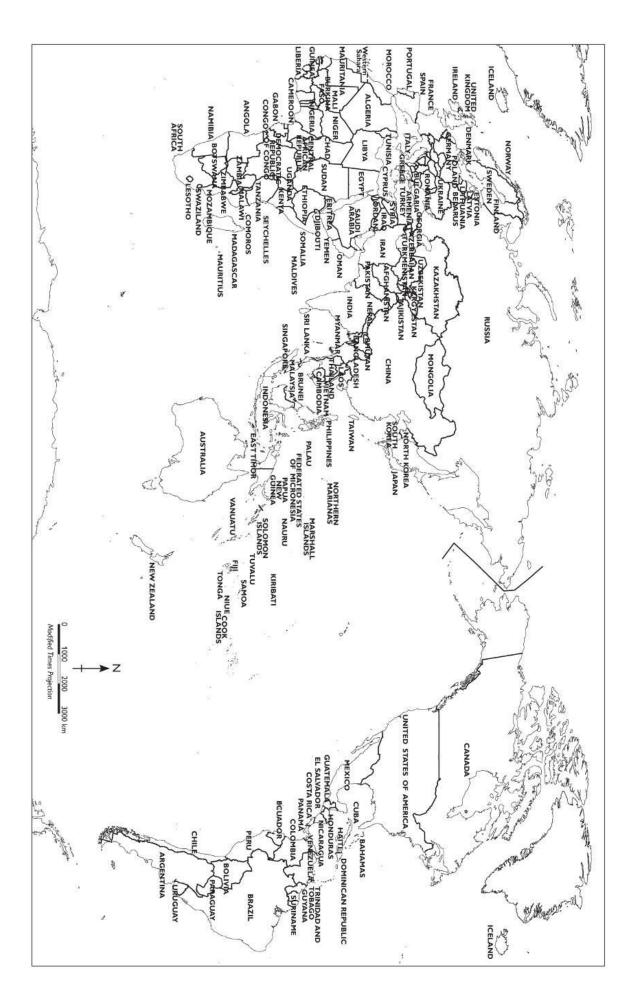
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# **REFER TO FIGURE 5: Aboriginal hospitalisations**



10. Using data, describe the hospitalisations in our region for Aboriginal peoples.

11. Make a judgement based on statistics collected about human wellbeing on the Central Coast.



# **Human Wellbeing**



# 9. SUSTAINABLE DEVELOPMENT GOALS

You will need a copy of the GTANSW & ACT Geography Bulletin Resource on Sustainable Development Goals - Making Progress to complete this worksheet.

Refer to SOURCE A
1. Identify the SDG that targets Gender Equality.
2. Explain in your own words the meaning of Gender Equality.
3. The United Nations' calls on countries to pursue gender equality in all aspects of society, including equal access to education, health care, decent work, and political representation and states gender equality would help to achieve all 17 of the Global Goals
Choose ONE SDG from the infographic and explain how gender equality could help to achieve the selected goal.
Refer to SOURCE B
4. Goal: By 2030 give women equal rights to economic resources and access to ownership and control over land and other forms of property.  Measure: the percentage of women who solely own land legally registered to their name
a. Name the country in Source B that performed the worst on female land ownership.
b. Name the country in Source B where land ownership is most equal
c. Describe the global location of the countries shown in the graph.

# **Human Wellbeing**



d. Write a statement describing the status of gender equality in the countries shown on the graph.
e. True or false - The countries closest to the diagonal line have similar rates of land ownership between men and women.
Refer to SOURCE C
5. Gender Inequality Index (GII)
a. How many countries achieved scored over 90 on the GII in 2021
b. Name four countries that achieved scores of 50-60 on the GII in 2021
c. Calculate the % women and girls living in countries that scored very poorly on the GII
d. Describe Australia's score on the 2021GII at a global scale and within countries that also scored a good result.
e. Calculate the difference in performance on the GII between Denmark and Chad.
f. Explain why the infographic is titled 'World off track on gender equality targets.'