Question 1

This document has been uploaded so that teachers or students can look over the questions that students have answered correctly or incorrectly. They contain none of the interactive elements of the online competition. Some of the wider graphics are missing their edges but the skill/knowledge required by the student to answer the question remains clear.

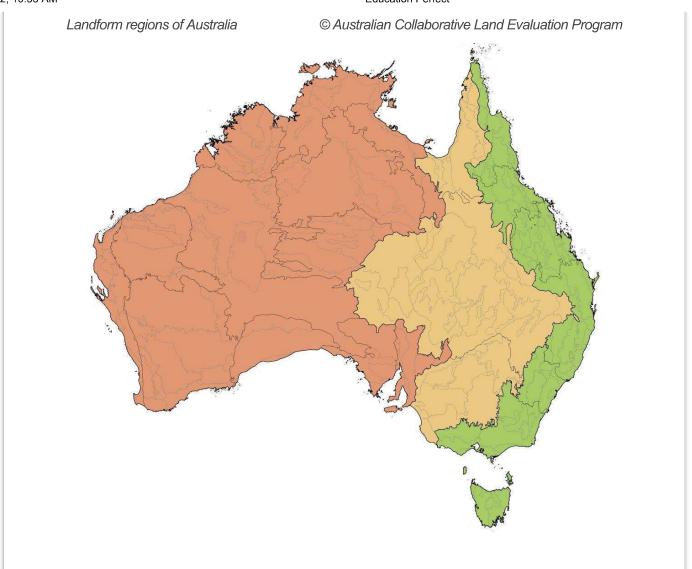
1. Australia has three major landform regions, as shown on the map.

Which landform regions match the descriptions in the table?

Eastern Uplands Interior Lowlands Western Plateau

Landform region	Description
Interior Lowlands	a large area of very flat, low-lying plains
<u>Eastern Uplands</u>	a series of high plateaus with a steep escarpment on the coastal side and a gentler slope inland
Western Plateau	a vast area of relatively flat tablelands including stony and sandy deserts

The map is on the next page in this pdf.



Question 2

2. Which type of landform is depicted inside the black circle on the map?

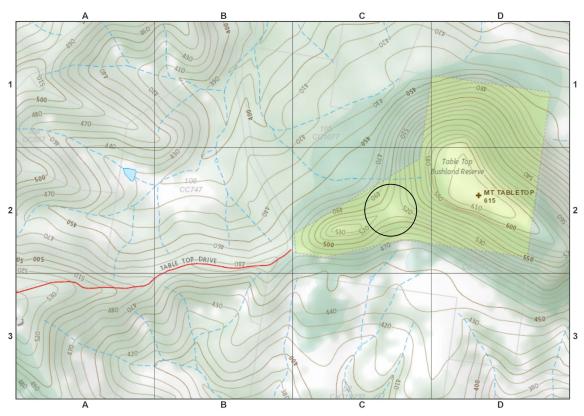
Choose the answer from the drop-down menu.

cliff saddle valley spur

The landform shown inside the black circle is a



© State of Queensland, Department of Resources



Question 3

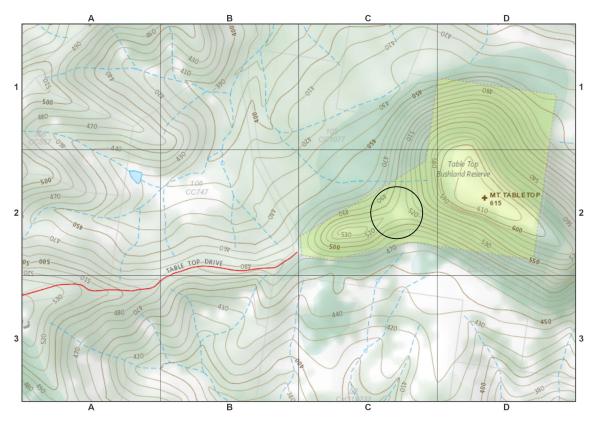
3. What is the height of the highest point on the map?

Enter the number in the box.

615 m

Mount Tabletop map extract

© State of Queensland, Department of Resources



Question 4

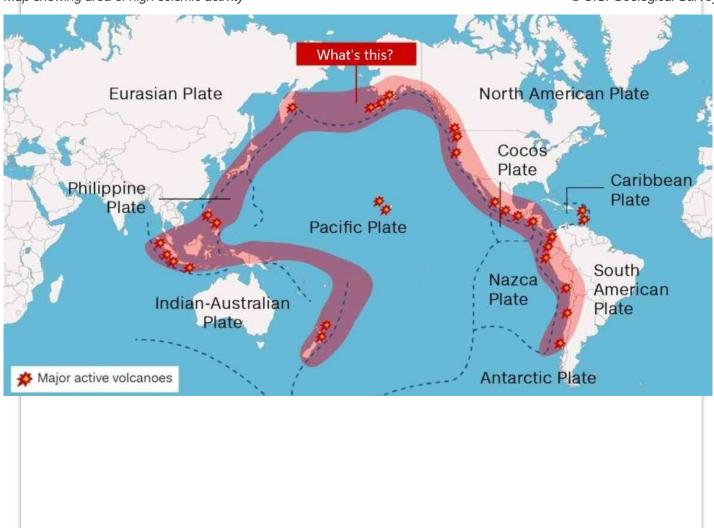
4. What is the name given to the area of high seismic activity (volcanic eruptions and earthquakes), shaded pink on the map?

Choose the answers from the drop-down menus.

The area is commonly called the Asian Asian Ring of Atlantic Mediterranean Pacific Ring of Magma Volcanoes

Map showing area of high seismic activity

© U.S. Geological Survey



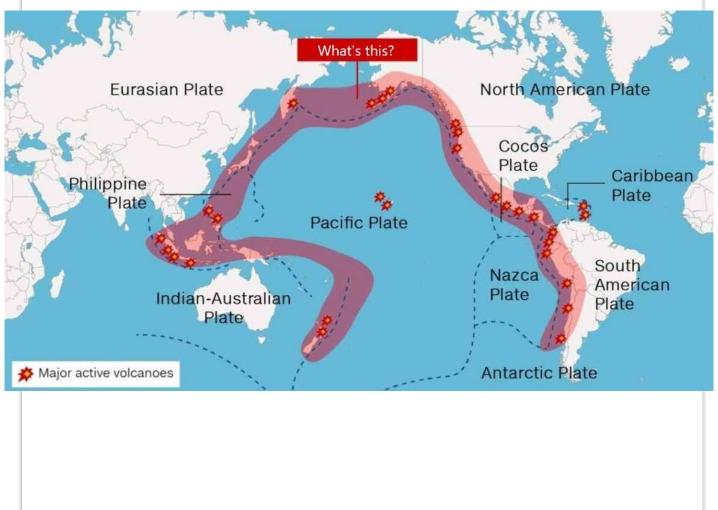
Question 5

5. What is the main cause of the phenomenon highlighted on the map?

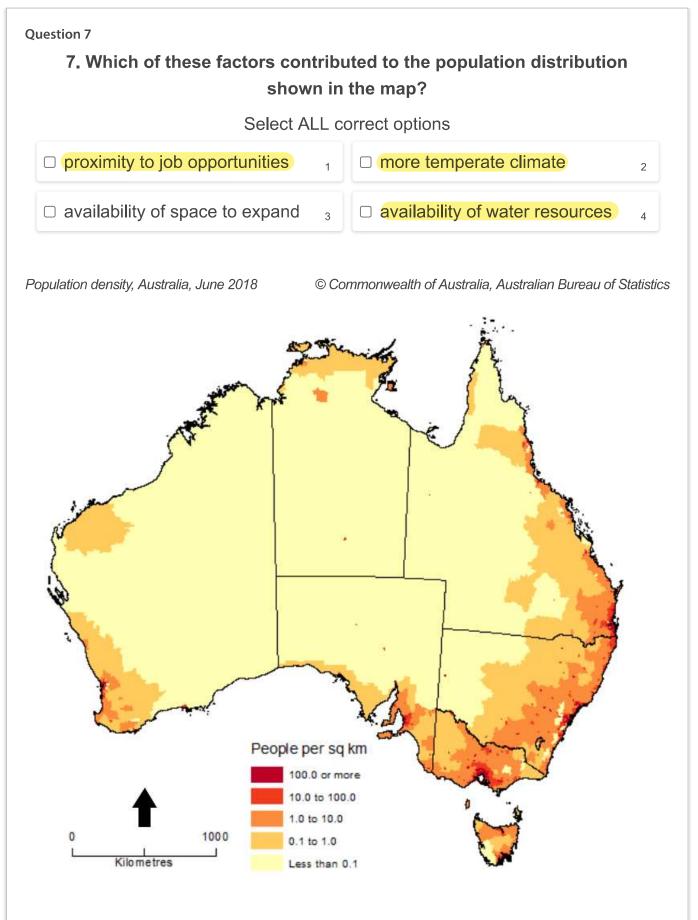
O plate divergence	1	o volcanoes	2
O hot spots	3	O plate convergence	4

Map showing area of high seismic activity

© U.S. Geological Survey



Question 6		
6. Which of these forr	n part of government countermeasur	es to
	oll in the event of a Tokyo earthquake	
Se	elect ALL correct options	
□ strategies to tackle	e business continuity	1
upgrading the seis	smic resistance of buildings	2
	mber of buildings with fire proofing in	3
densely populated	d areas	
□ support for volunta	ary disaster management organisations	4



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8. Classify the liveability factors below as to whether they can easily be measured quantitatively (in numbers) or are usually measured qualitatively (in words).

Choose the answers from the drop-down menus.

Liveability factor	Measurement
feelings of community connection	qualitative ~
environmental quality	quantitative
infrastructure	quantitative
traditional and spiritual associations	qualitative ~
climate	quantitative ~

Question 9

Animation file loaded separately – see Sydney_Landsat.gif

9. Which phenomenon is illustrated in the satellite image animation of western Sydney? edge expansion

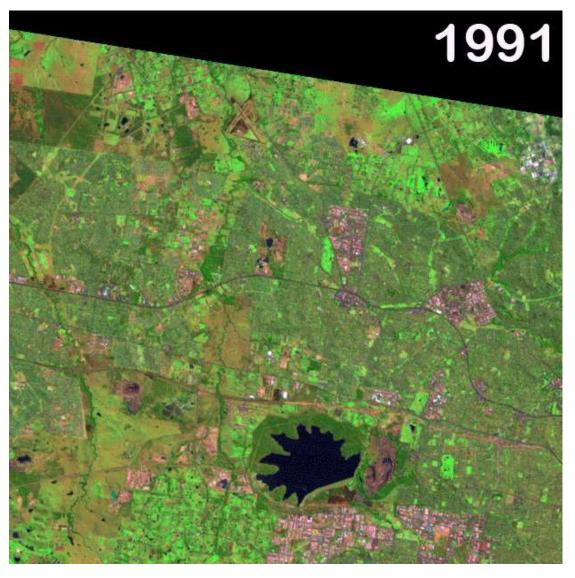
Choose the answer from the drop-down menu.

edge expansion rural-urban migration tree change urban sprawl

The animation represents

Western Sydney, 1991, 2002, 2019

Source images © U.S. Geological Survey



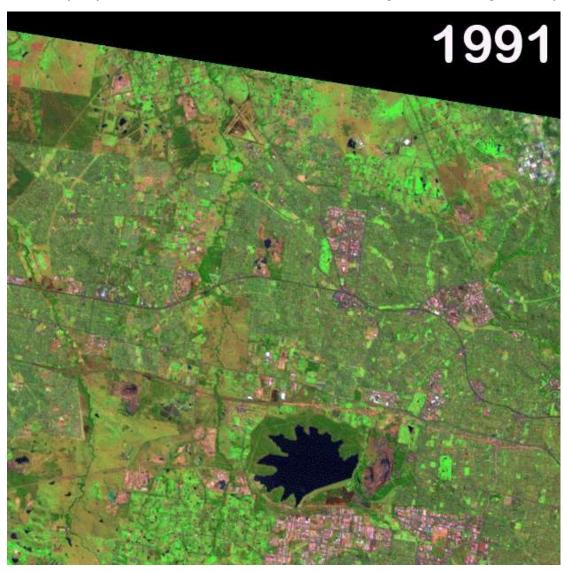
Question 10 Animation file loaded separately – see Sydney_Landsat.gif

10. Which is the most sustainable and efficient transport strategy to address impacts arising from the changes seen in the animation?



Western Sydney, 1991, 2002, 2019

Source images © U.S. Geological Survey



Question 11

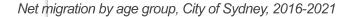
11. What is the most likely reason for the migration flow in the 20-24 years age group, as seen in the graph?

People moving to the City of Sydney have many dependants aged 20-24.

The City of Sydney is a well-known tourist destination.

Students are moving to the City of Sydney to be close to its two universities.

The City of Sydney has high quality health facilities.



© .id (informed decisions)



Age group (years)

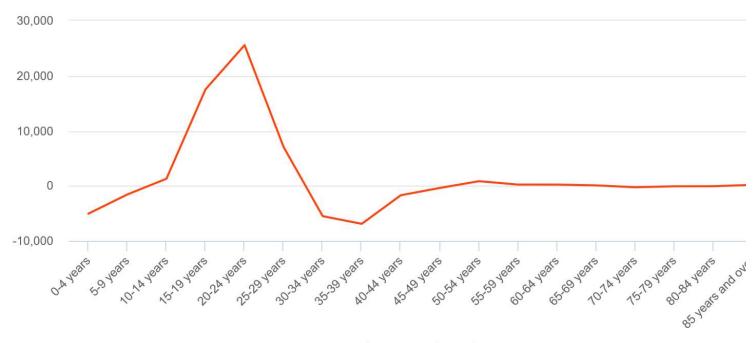
Question 12

12. What is the most likely reason for the migration flow of people in their 30s and 40s, as seen in the graph?

- Many people leave the City of Sydney after completing University.
- People that age are likely to be settled in their permanent careers.
- The City of Sydney is not a popular tourist destination for that age group.
- Young families seek housing opportunities elsewhere.

migration by age group, City of Sydney, 2016-2021

© .id (informed decis



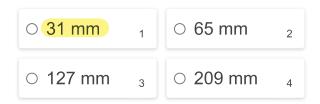
Age group (years)

7/29/2

a comprising a nerged into one

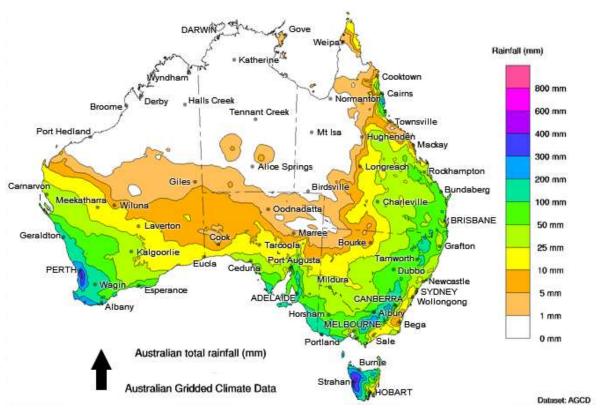
Question 14

14. How much rain did Kalgoorlie (WNW of Perth) receive in the month presented in the map?



Australian total rainfall for selected month in 2021

© Commonwealth of Australia, Bureau of Meteorology



Question 15

15. Given the pattern of rainfall, from which season is the data in the map?

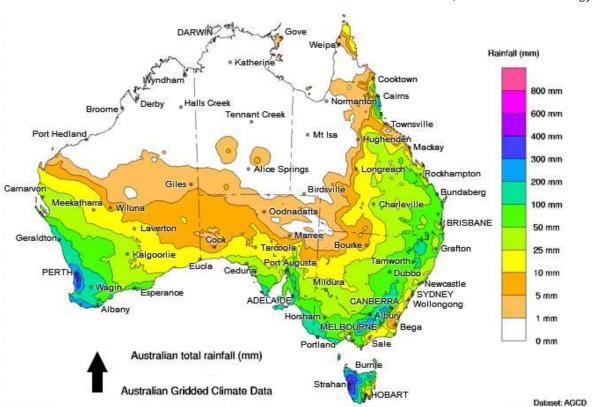
Drag and drop the answer.

autumn spring winter summer

The map is for a month in winter.

Australian total rainfall for selected month in 2021

© Commonwealth of Australia, Bureau of Meteorology



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C II	Jestion	- 1	n

16. Using the data in the table, how much rain does Tunis receive in winter on average?

Enter the number in the box. You may use a calculator.

183 mm

Climate data, Tunis, Tunisia

Source: World Meteorological Organization

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average temp. °C	11.5	12.0	13.2	15.6	19.3	23.2	26.3	26.8	24.4	20.4	15.9	12.5
Average rainfall mm	59	57	47	38	23	10	3	7	32	65	56	67

_			
Oι	lestion	1	7

17. Based on the data in the table, which type of climate does Tunis have?

o continental	1	○ arid	2
O Mediterranean	3	○ tropical	4

Climate data, Tunis, Tunisia

Source: World Meteorological Organization

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average emp. °C	11.5	12.0	13.2	15.6	19.3	23.2	26.3	26.8	24.4	20.4	15.9	12.5
Average ainfall mm	59	57	47	38	23	10	3	7	32	65	56	67

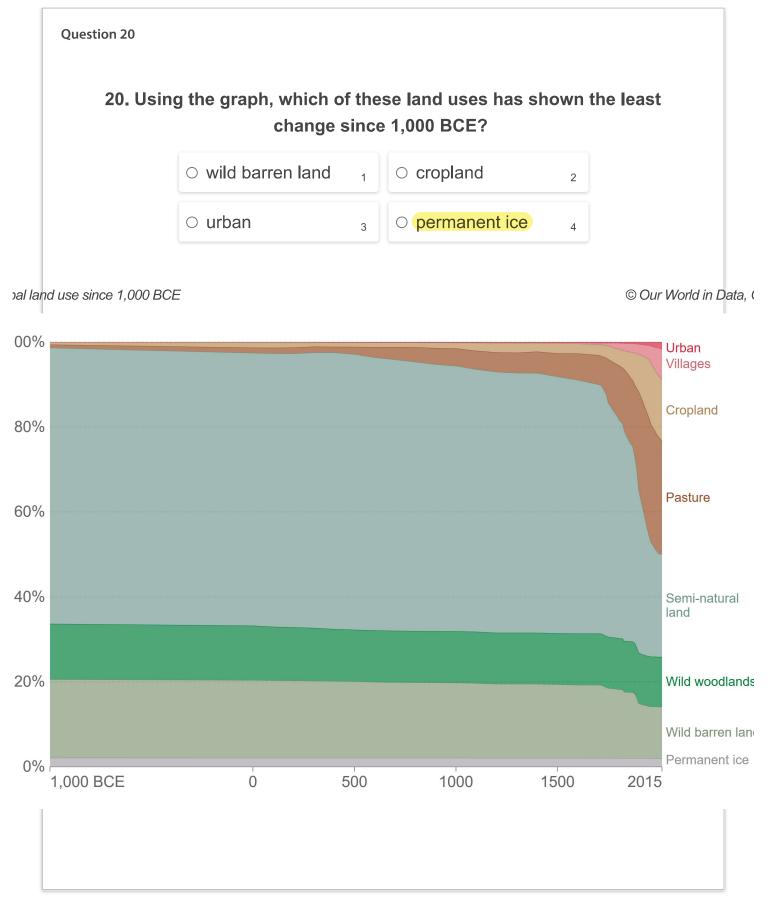
Questi	on 18
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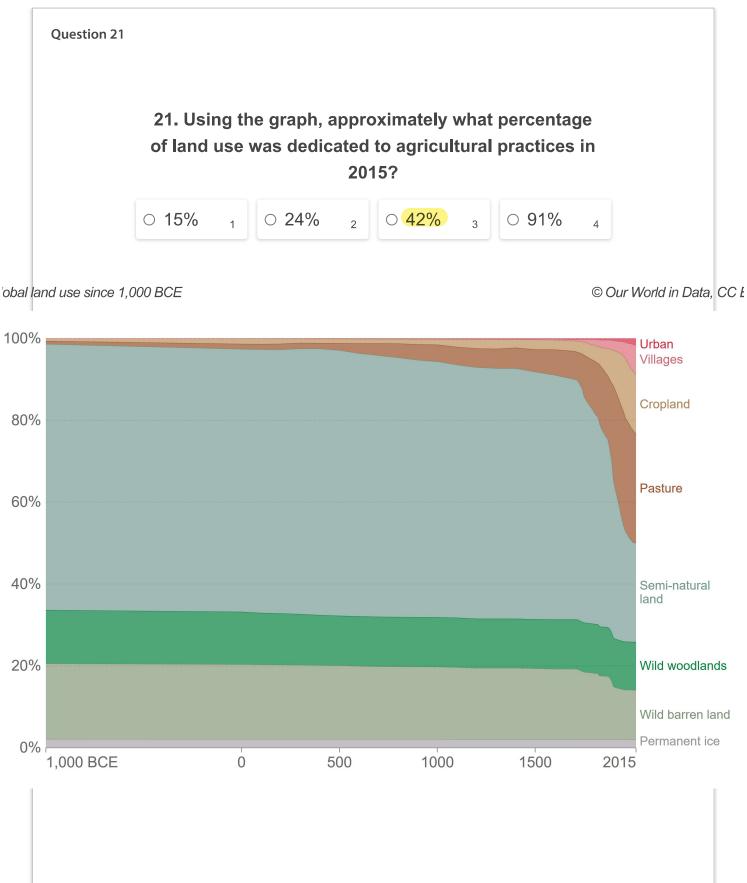
18. What are the steps in the formation of a rain shadow? Number the events in the table in the correct sequence.

Enter the numbers in the boxes.

Order	Rain shadow formation steps
3	On the far side of the mountain range, the air has lost most of its moisture and warms as it descends.
2	The moist air cools as it rises, condensing and producing rain.
4	This warmer, drier air means rain is less likely on the far side of the mountain range.
1	Moist prevailing winds blowing in from the ocean rise up when they are blocked by a mountain range.

19. Which of these is the definition of water scarcity?	
○ a finite amount of water; once used it cannot be used again	1
one of the resources provided by nature	2
o not enough water to meet standard demands	3
areas with low rainfall	4



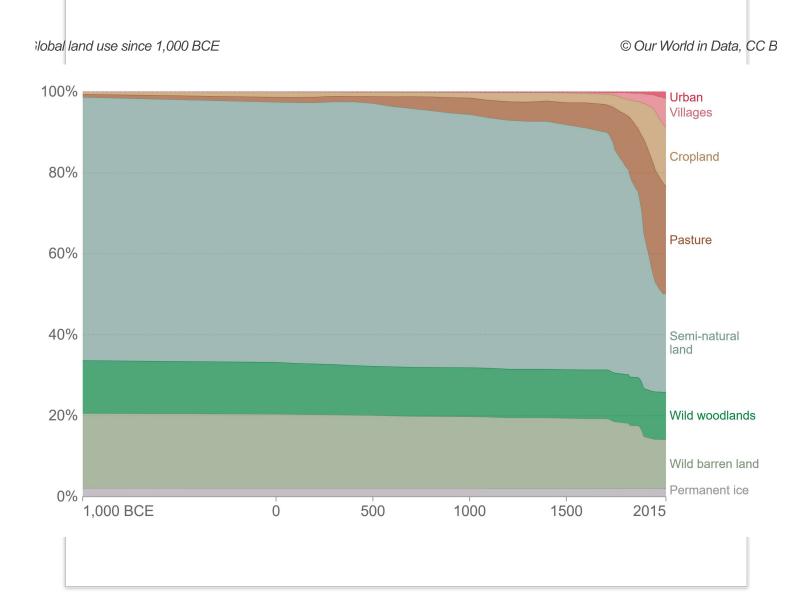


Question 22

22. Which of these is the best conclusion from the data provided in the graph?

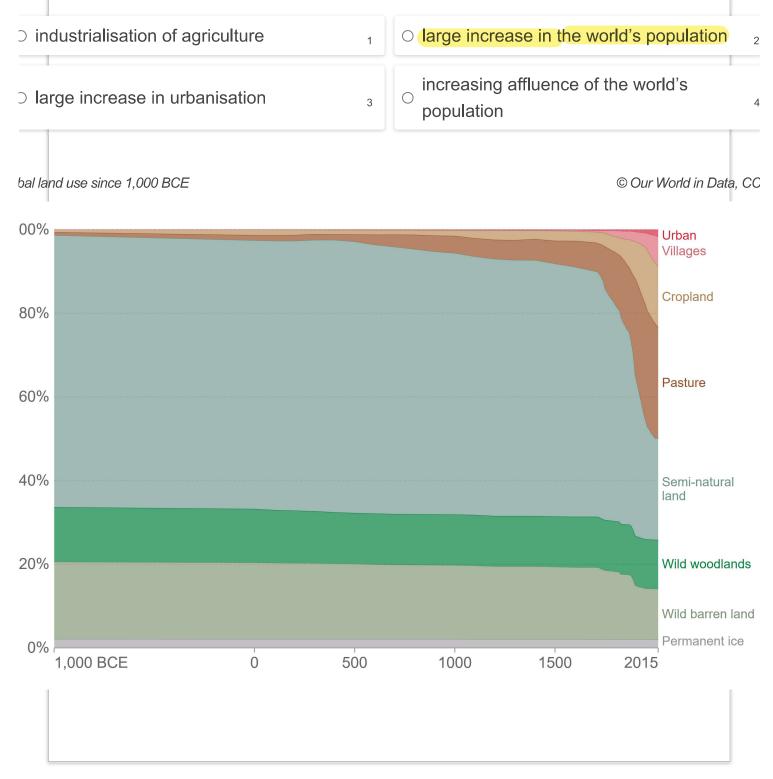
The expansion of agriculture in the last 250 years:

- has led to the expansion of villages at the expense of urban areas
- has led to the loss of permanent ice due to climate change
- has led to the loss of semi natural land
- means that it now takes up more than half of all land use



Question 23

23. What has been the main reason for the rapidly changing land use patterns over the last 250 years, as shown in the graph?



Question 24		
24. A	nthropogenic biomes can best be described as bion	nes that:
	are a type of ecosystem where organisms interact with each other	1
	O have been greatly influenced by climate	2
	are the result of sustained direct human interactions with ecosystems	3
	are where humans have lived for thousands of years	4
	with ecosystems are where humans have lived for thousands of	3

Question 25

25. Which biome has been cleared in the area shown in the photo?

O deciduous forest	1	○ shrubland	2
o coniferous forest	3	o rainforest	4

Land clearing for oil palm plantation, Sabah, Malaysia

© Mongabay.com



Question 26		
26. An	oil palm plantation is an	example of:
	○ horticulture	1
	 subsistence farming 	2
	o crop rotation	3
	o a cash crop	4

27. Which of these environmental problems was most likely to have been caused by the clearing shown in the image?

O acid rain

O desertification of surrounding land
Siltation of waterways

Salinisation

4

Land clearing for oil palm plantation, Sabah, Malaysia

© Mongabay.com



Question 28

28. Which of these geographical concepts is best illustrated in the photo?

○ space	1	o scale	2
○ change	3	o place	4

Land clearing for oil palm plantation, Sabah, Malaysia

© Mongabay.com



Question 29			
29. Using the v		nth in 2004 was the n Australia?	most land burnt
	○ September ₁	October 2	
	O November 3	O December 4	
Video loaded	I separately - see Nort	h_Aust_HotSpots_edit	ted.mp4
A comparison of two extrer	me fire condition vears in N	orthern Australia	
			Rangelands Fire Information

30. Australia's First Nations peoples have used fire as a management tool for their country for thousands of years. Which word best describes their approach to land management?
tool for their country for thousands of years. Which word best describes their approach to land management?
tool for their country for thousands of years. Which word best describes their approach to land management?
tool for their country for thousands of years. Which word best describes their approach to land management?
tool for their country for thousands of years. Which word best describes their approach to land management?
Which word best describes their approach to land management?
○ destructive 1
○ vigilant 2
○ careful 3
Quetodial
Custodial 4

Question 31			
31. Which pressure	most affects endanger	ed s	pecies in Australia?
	O habitat loss	1	
	 overexploitation 	2	
	o pollution	3	
	o introduced species	4	

Question 32

32. Look at the lower panel of the diagram.

Are the illustrated management strategies hard or soft engineering?

Choose the answers from the drop-down menus.

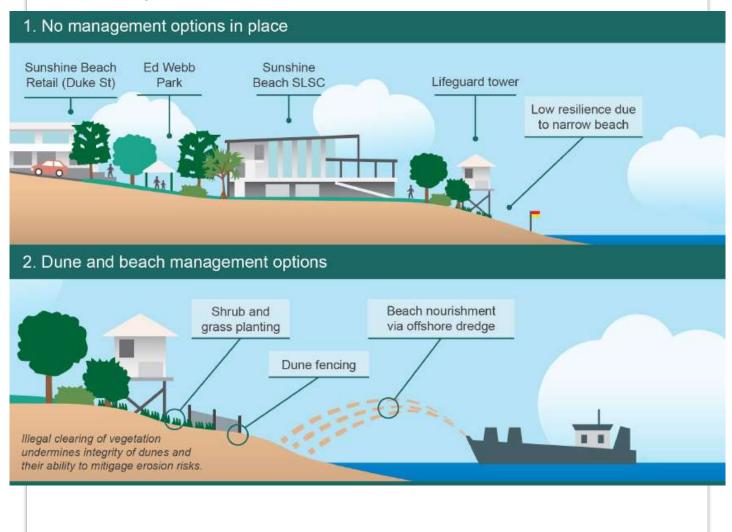
Shrub and grass planting is soft vengineering.

Dune fencing is hard vengineering.

Beach nourishment is soft v engineering.

Dune and beach management measures, Sunshine Beach, Qld

© Noosa Council



Question 33

33. Implementing all the strategies shown in the lower panel of the diagram would result in:

- restoration of dune succession
 - o improved resilience to erosion

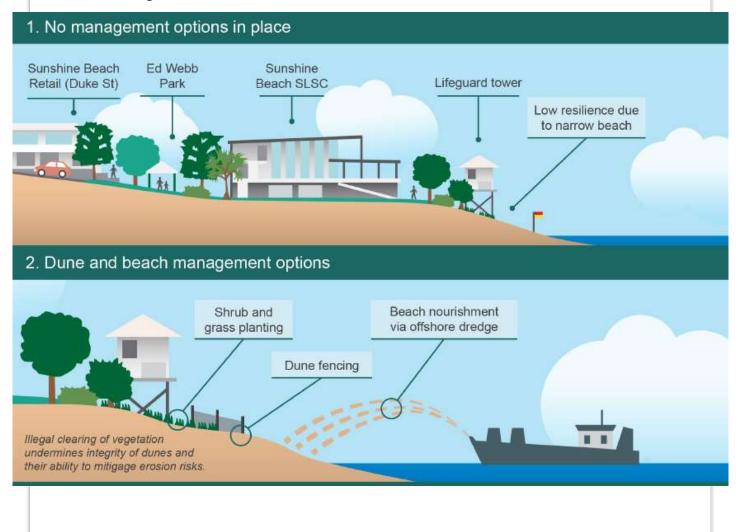
2

○ improved access to the SLSC

erosion at the base of lifeguard tower

Dune and beach management measures, Sunshine Beach, Qld

© Noosa Council



Question 34

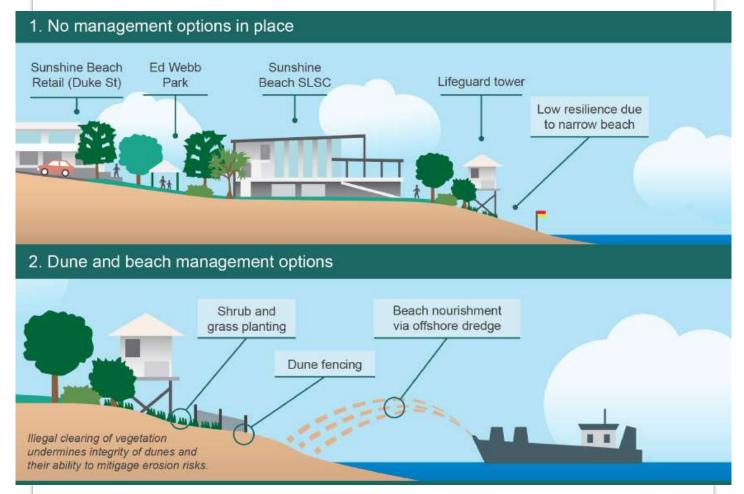
34. In the table, classify the impacts of Sunshine Beach's management to indicate if they are mainly environmental, social or economic.

Choose the answers from the drop-down menus.

Classification	Impact of beach management
Economic	Tourism operators will benefit as more tourists are attracted.
Environmental *	Vegetated dunes provide habitats for native species.
Social v	Local residents can make more use of the beach for recreation.
Environmental >	Offshore dredging will stir up sediment affecting marine life.
Economic *	Damage to infrastructure from sea encroachment will be less likely.

Dune and beach management measures, Sunshine Beach, Qld

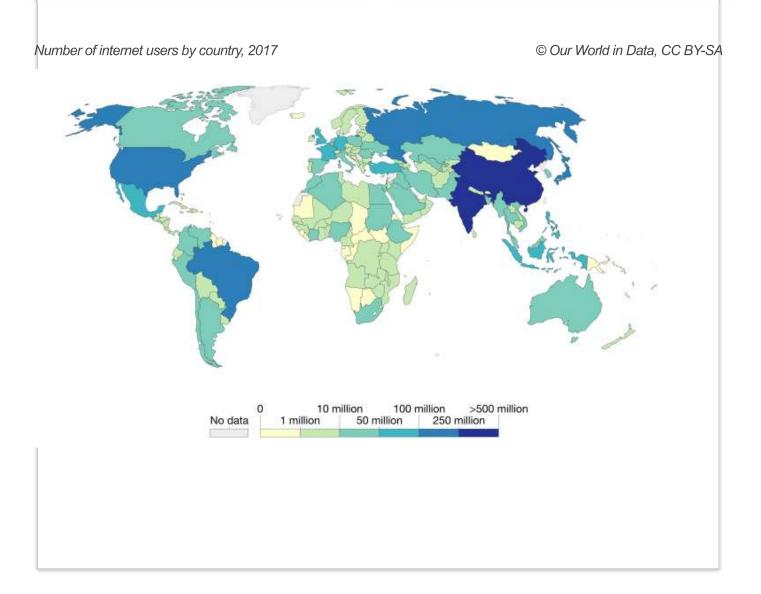
© Noosa Council



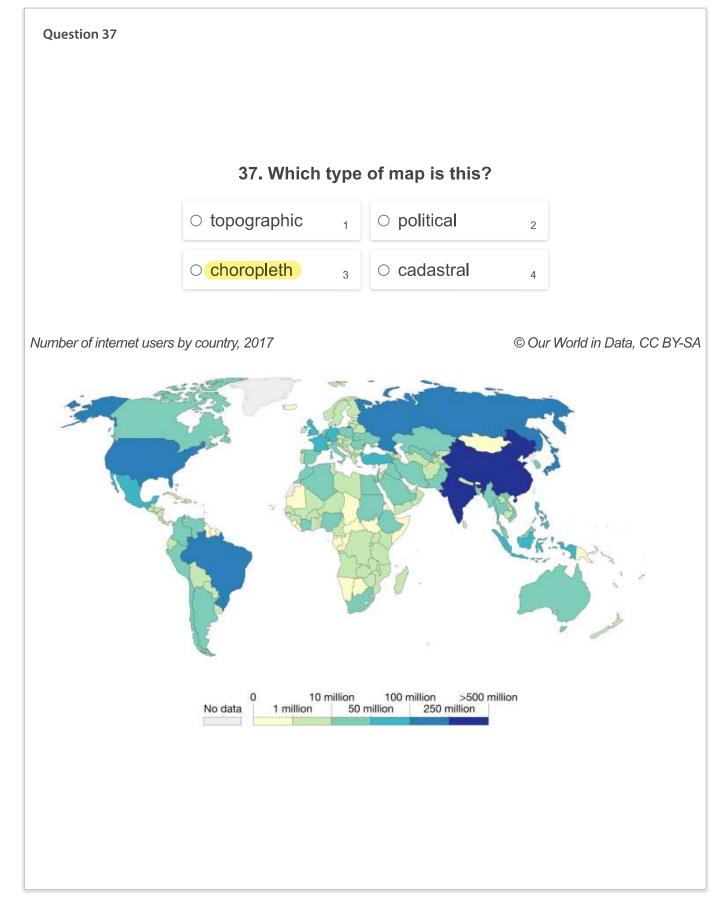
Question 35

35. Using the map, approximately how many internet users did Australia have in 2017?

- between 1 million and 10 million 1 between 10 million and 50 million
- between 50 million and 100 million 3 between 100 million and 250 million



Question 36 36. Which factor explains why USA, Russia, China and India all have high numbers of internet users? population size population density 2 ○ level of development high-speed connections Number of internet users by country, 2017 © Our World in Data, CC BY-SA 100 million >500 million 1 million 50 million 250 million



Question 38

38. Using the table, for which social media platform do income and college education make the most difference in usage?

○ LinkedIn	1	○ YouTube	2
○ TikTok	3	○ Instagram	4

Percentage of U.S. adults who say they ever use selected social media, 2021 © Pew Research Center YouTube Facebook Instagram LinkedIn Snapchat Twitter WhatsApp TikTok Total Men Women White Black Hispanic Ages 18-29 30-49 50-64 65+ <\$30K \$30K-\$49,999 \$50K-\$74,999 \$75K+ HS or less Some college College+ Urban Suburban Rural

Question 39

39. Using the table, across the range of social media, which demographic characteristic makes the greatest difference in usage?

demographic characteristic makes the greatest difference in usage?								
		gende	1	O ag	ge	2		
		income	e 3	o ed	ducation	4		
Percentage of U.S	6. adults wh	o say they e	ever use sel	ected socia	al media, 20	21	© Pew Rese	arch Center
	YouTube	Facebook	Instagram	LinkedIn	Snapchat	Twitter	WhatsApp	TikTok
Total	81	69	40	28	25	23	23	21
Men Women	82 80	61 77	36 44	31 26	22 28	25 22	26 21	17 24
White Black Hispanic	79 84 85	67 74 72	35 49 52	29 27 19	23 26 31	22 29 23	16 23 46	18 30 31
Ages 18-29 30-49 50-64 65+	95 91 83 49	70 77 73 50	71 48 29 13	30 36 33 11	65 24 12 2	42 27 18 7	24 30 23 10	48 22 14 4
<\$30K \$30K-\$49,999 \$50K-\$74,999 \$75K+	75 83 79	70 76 61	35 45 39	12 21 21	25 27 29	12 29 22	23 20 19	22 29 20
HS or less Some college College+	90 70 86 89	70 64 71 73	30 44 49	10 28 51	28 21 32 23	34 14 26 33	29 20 16 33	20 21 24 19
Urban Suburban Rural	84 81 74	70 70 67	45 41 25	30 33 15	28 25 18	27 23 18	28 23 9	24 20 16
			0% 2	0 40	60 8	0 100		

Question 40

40. The pattern of fibre optic cables shown in the map largely reflects:

O population distribution	1	o trade patterns	2
o income levels	3	O different social norms	4

