

Geography - Above satisfactory - Year 9

Portfolio summary

This portfolio of student work shows that the student can analyse the interconnections between people and environments. Through an examination of the relationships between biomes and food scarcity (WS1), and trading patterns (WS2), and between human and physical environments (WS3), the student gives comprehensive explanations for how these interconnections influence people, and change places and environments (WS1, WS2, WS3).

The student work shows an ability to select, interpret and analyse multi-variable geographical data and information to answer inquiry questions (WS1, WS2, WS3), proposing detailed explanations for relationships, distributions, patterns, trends and anomalies over time and across space (WS1, WS2), and records findings on a map which complies with cartographic conventions (WS3). The student analyses alternative strategies to respond to a geographical challenge; proposes and justifies a response using environmental, social and economic criteria (WS1, WS2, WS3); and predicts comprehensive outcomes of the proposal. They synthesise data and information to draw reasoned conclusions (WS1, WS2, WS3), presenting findings and explanations using relevant geographical terminology (WS1, WS2, WS3).

Data analysis: Food scarcity

Sample summary

Over a period of six weeks, students examined the biomes of the world, how humans have altered environments for food production, and the main challenges of providing food security. Various case studies were used from Australia and other parts of the world throughout the unit of study. Students were assessed under supervised conditions in class over three 40-minute lessons. They were required to interpret a range of data and information and provide short responses to demonstrate their skills and understandings. Finally, the concept of food miles was explored to understand how local human activity influences global systems. Students were asked to create a presentation proposing local actions that could reduce the impact of food miles, and evaluated the sustainability of their strategies from economic, environmental and social perspectives.

Achievement standard

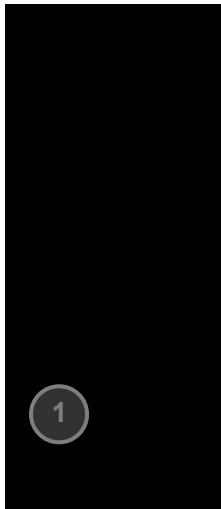
Subject

By the end of Year 9, students explain how geographical processes change the characteristics of places. They analyse interconnections between people, places and environments and explain how these interconnections influence people, and change places and environments. They predict changes in the characteristics of places over time and identify the possible implications of change for the future. Students analyse alternative strategies to a geographical challenge using environmental, social and economic criteria.

Students use initial research to identify geographically significant questions to frame an inquiry. They evaluate a range of primary and secondary sources to select and collect relevant and reliable

geographical information and data. They record and represent multi-variable data in a range of appropriate digital and non-digital forms, including a range of maps that comply with cartographic conventions. They use a range of methods and digital technologies to interpret and analyse maps, data and other information to propose explanations for patterns, trends, relationships and anomalies across time and space, and to predict outcomes. Students synthesise data and information to draw reasoned conclusions. They present findings, arguments and explanations using relevant geographical terminology and digital representations in a range of appropriate communication forms. Students propose action in response to a geographical challenge, taking account of environmental, economic and social factors, and predict the outcomes and consequences of their proposal.

Report



Year 9: Biomes and Food Scarcity

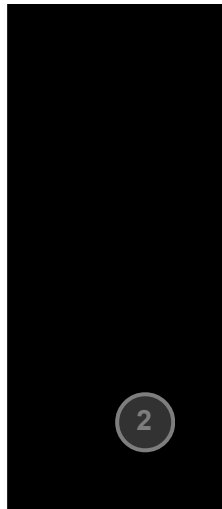
There are many interconnected causes of food insecurity for different people in different places and environments throughout the world.

Figure 1 GRAPH SHOWING THE RELATIONSHIP BETWEEN INCOME AND FOOD SUPPLY FOR COUNTRIES OF THE WORLD IN 2007

Source: data generated using AnkiMap

1. Using evidence from the graph in Figure 1, explain how a person's daily food supply can be influenced by their income.

Shown in Figure 1 the income per person affects how much food supply a person can have. As you can see in Northern and Southern America have an abundance of money between \$10 000 to 40 000 thousand dollars. Countries like Africa which is only making around \$200 to 4000 dollars this is showing that they only consume around 2000 kilocalories per person per day. This is a big difference to America as they are making around 10000 and are able to get 2000 kilocalories to receive around 3000 and over kilocalories per day. This shows them to have a higher life. This shows that the income that a person is earning has an effect of their food consumption.



Annotations

- 1 Annotation 1**
Uses detailed examples to explain how food supply is influenced by place and income
- 2 Annotation 2**
Develops a complex synthesis of place, income and kilocalorie data from the source
- 3 Annotation 3**
Offers a concise conclusion from synthesised data

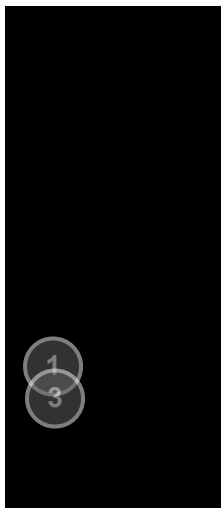
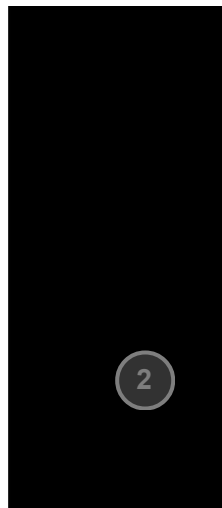


Figure 2 GRAPH SHOWING THE RELATIONSHIP BETWEEN URBAN POPULATION AND FOOD SUPPLY FOR COUNTRIES OF THE WORLD IN 2007

Source: data generated using AnkiMap

2. Using evidence from the graph in Figure 2, explain how which country/region a person lives in and/or whether they live in a rural or urban area can affect how much food they eat.

In Figure 2 it shows the urban population of countries in the world in 2007. In Africa countries it shows the urban population at 10%. This means more people live in a rural area than an urban area. Living in a rural area such as Africa can affect how much food a person eats. This is because the country does not have all of the supplies like a country like North America. People that live in countries with a low urban population are not able to just go down to a local supermarket, instead they would probably have to grow their own crops and live off them. This means that they have to work for the crops to fully finish growing, and they have to rely on rain water to water the crops. These countries are not able to just water their crops with drinking water, as growing water is very limited. This can affect the plantation of crops because there is not as much land for the crops. This means that living in a rural area can affect how much food a person eats. In Figure 2 it shows Australia as an urban population of 80%. This means that only 20% of people in Australia live in rural areas. Not many people live in rural areas, and we do not need to rely on crops to grow as we can just go to a local supermarket which has food from everywhere. This shows that people who live in rural places have less access to food.



Annotations

- 1 Annotation 1**
Interprets the data source, using examples and statistics
- 2 Annotation 2**
Explains the interconnection between food supply and rural and urban places across the world using examples and statistics
- 3 Annotation 3**
Explains how food supply and geographic

location affect people, using a range of examples and statistics

4 Annotation 4
Draws reasoned conclusion about place, food supply and consumption

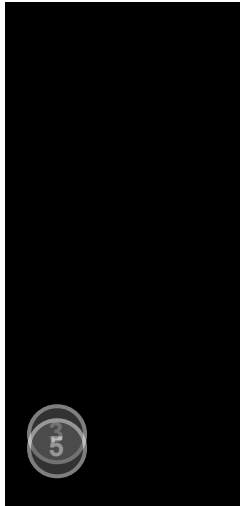


Figure 1 Image showing large scale clearing of woodland forests



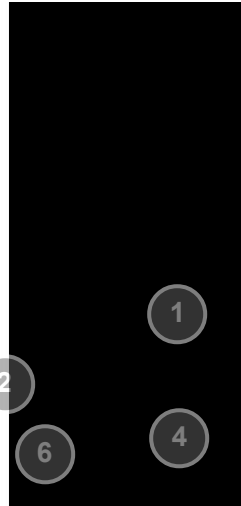
3. Explain how large scale deforestation of tropical rainforests has impacts on:

a) the local natural environments in those places.

Large scale deforestation or otherwise known as clear felling decreases the biodiversity of animals and plants. This means when the trees are cut down the soil is left unprotected and suffers greatly from erosion and is also dried by the hot sun. This clear felling affects the atmosphere. When the trees are cut down and burned, the atmosphere has more carbon dioxide, because there are less trees to absorb the carbon dioxide and to produce oxygen. Large scale deforestation takes away natural habitats for local animals and their food sources. An example of some animals that suffer from clear felling are elephants and orangutans. Elephants suffer because they eat plants and are big so they need to eat a lot. We are taking away large amounts of their food which means they are left wandering through dangerous places such as farms and other areas in search of food. The orangutan population suffers greatly from clear felling because of habitat destruction, exposing them to the wild. These are just some consequences of large scale deforestation.

b) the global natural environment.

Large scale deforestation affects the global natural environment in a positive way and in a negative way. Some positive ways are that if a country has a large amount of a food resource, other places don't have to clear environments to grow the same type of food and can get it imported, while they can grow foods that suit their climate. A negative consequence of this is that instead of using the areas of land to grow different foods, large areas are used for just 1 or 2 types of food. This means that biodiversity is destroyed because clear felling is encouraged. The damage caused by clear felling is explained in the paragraph below.



Annotations

1 Annotation 1
Uses a range of relevant specific geographical terminology throughout the explanation

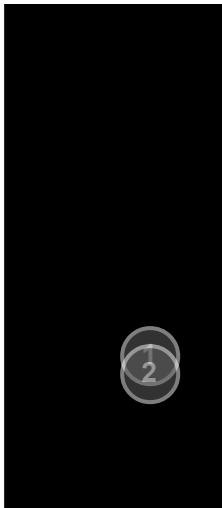
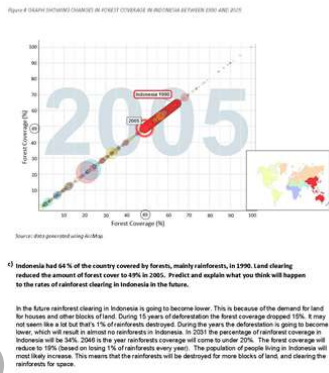
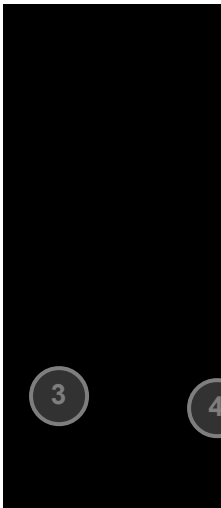
2 Annotation 2
Develops a coherent, accurate explanation, with examples, about a range of natural processes and how they are affected by deforestation

3 Annotation 3
Uses specific examples to give a coherent and accurate explanation about how the deforestation causes global change

4 Annotation 4
Uses relevant geographical terminology

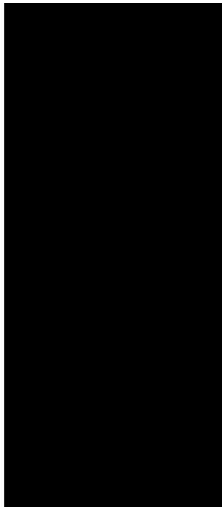
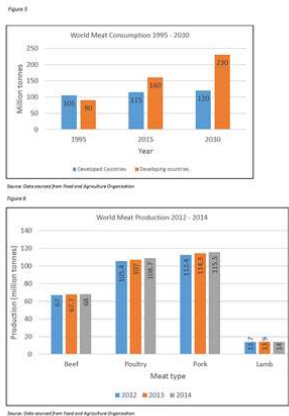
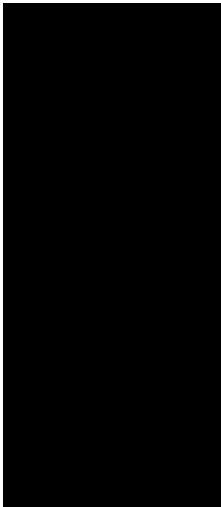
5 Annotation 5
Explains the interconnection between local and global natural environments

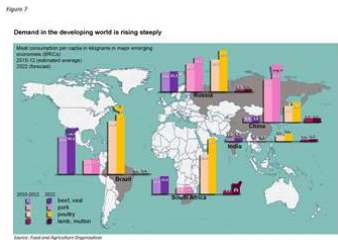
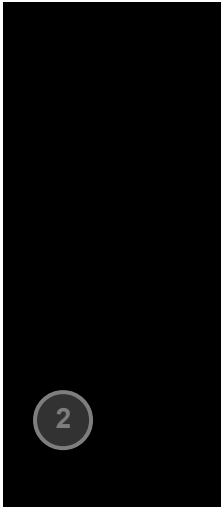
6 Annotation 6
Draws a reasoned conclusion about the positive and negative effects of deforestation on global natural environments



Annotations

- 1 **Annotation 1**
Interprets graphical data
- 2 **Annotation 2**
Uses relevant specific geographical terminology throughout the explanation
- 3 **Annotation 3**
Provides a coherent prediction, using conceptual arguments, about a geographical outcome
- 4 **Annotation 4**
Synthesises specific data and information about forest coverage, time and place to inform a prediction

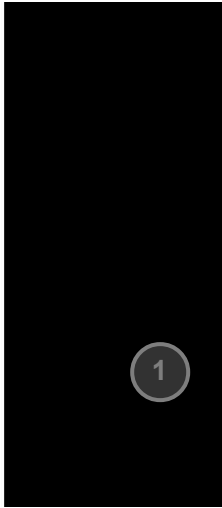




Study Figures 5, 6 and 7

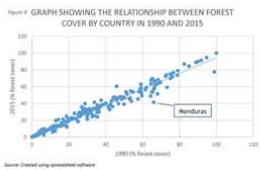
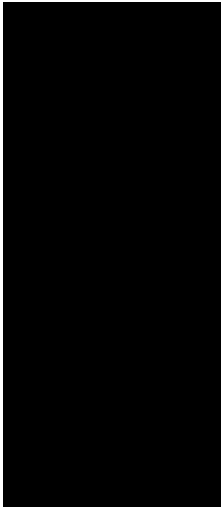
4. From the data sources, what reasoned conclusion can you draw about the future impacts of meat production on rangeland biomes in Brazil?

The data sources show that in Brazil the beef and chicken industry are quite high. In Figure 5 it shows that in the year 2030 the meat consumption would increase to 120 million tons. In the year 2015 the figure shows that the meat consumption was at 11.9 million tons. This means that developed countries meat consumption will always start to increase over the years. In Figure 6 the data shows that in 2012 the lamb industry was quite low and stayed this way in 2013 and 2014. The pork industry shows that the percentage of pork throughout 2012, 2013 and 2014 stayed quite high. 2012 the pork industry was at 112.4. In 2013, the industry increase to 114.5, and in 2014 increase to 115.5. This means that the industry will increase over time. In poultry the industry has gone from 105.4 to 107 in 2012 and 108.7 in 2014. There is quite a large demand for pork and chicken which means that both industries will increase over the years. In the beef industry there has only been a slight increase between years. 67 in 2012, 67.7 in 2013 and 68 in 2014. The data shows that beef will increase, but it will only increase by a little bit. In Brazil it shows that the poultry industry is the largest between the 5 countries. The chicken industry is shown to increase to 47.6 in the future. There is a large demand for chickens and once the population increases there is going to be an even higher demand. Beef is also shown to increase in the upcoming years (2022) at 30.4. In 2010-2012 the beef industry was at 25.5. This means that the rangeland biomes in Brazil will start to decrease due to deforestation for these industries.



Annotations

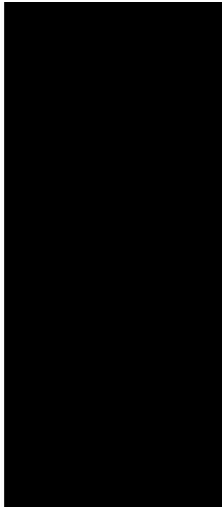
- 1 **Annotation 1**
Uses data in a clear, detailed and specific way to draw a reasoned conclusion
- 2 **Annotation 2**
Describes future impacts in biomes using examples
- 3 **Annotation 3**
Justifies reasoned conclusion using variables of time, quantity and place across a range of contexts



Study Figures 8 and 9

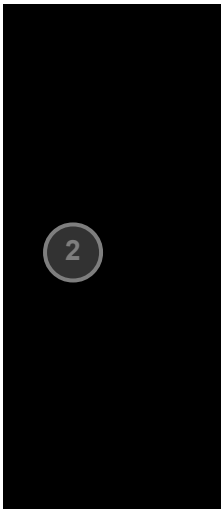
5. Describe the general trend of changes in forest coverage between 1990 and 2015 and suggest reasons why.

Figure 8 shows that the general trend of forest coverage is decreasing and is reducing at the same rate in the countries between the years of 1990 and 2015.



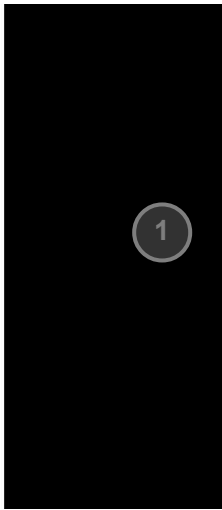
Annotations

- 1 **Annotation 1**
Describes the anomaly in a graph, citing data
- 2 **Annotation 2**
Proposes several appropriate reasons for the trend using information from an inquiry



6. Explain how Honduras is an anomaly in the trend (in Figure 10) and suggest possible reasons why.

Honduras has only decreased by 20% of its land coverage this means that some of its land has been cleared in this time frame but the also must have preserved some of the land through protective national parks and planting trees. This means that they are possibly trying to keep Honduras from not decreasing their forest coverage too much.



Presentation



Research inquiry: Interconnections

Sample summary

Students were required to select one product that is purchased by their household and investigate how the production and demand for this product creates networks of trade and economic interdependence at and across different scales. The inquiry took place over four weeks during class time and students were asked to present their findings in a written report. Students were given the following questions to help them with their inquiry:

- Where is the product produced and/or manufactured?
- What is the supply chain for the product?
- What is the spatial distribution of production and consumption?
- How does the product connect places?

They were asked to design and investigate a further research question based on what they had learned.

Achievement standard

Subject

By the end of Year 9, students explain how geographical processes change the characteristics of places.

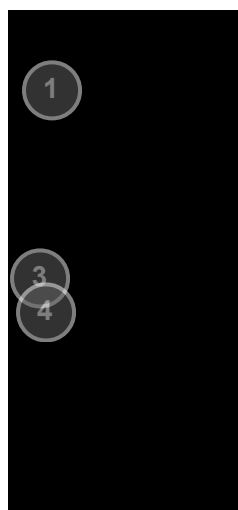
They analyse interconnections between people, places and environments and explain how these interconnections influence people, and change places and environments. They predict changes in the characteristics of places over time and identify the possible implications of change for the future. Students analyse alternative strategies to a geographical challenge using environmental, social and economic criteria.

Students use initial research to identify geographically significant questions to frame an inquiry. They evaluate a range of primary and secondary sources to select and collect relevant and reliable geographical information and data. They record and represent multi-variable data in a range of appropriate digital and non-digital forms, including a range of maps that comply with cartographic conventions. They use a range of methods and digital technologies to interpret and analyse maps, data and other information to propose explanations for patterns, trends, relationships and anomalies across time and space, and to predict outcomes. Students synthesise data and information to draw reasoned conclusions. They present findings, arguments and explanations using relevant geographical terminology and digital representations in a range of appropriate communication forms. Students propose action in response to a geographical challenge, taking account of environmental, economic and social factors, and predict the outcomes and consequences of their proposal.

Report

Annotations overview

In this sample, the student has developed geographically significant questions to frame an inquiry and presented answers in the form of a cohesive report. The student presents findings and explanations using a range of appropriate geographical terminology. The student demonstrates understanding of spatial patterns and networks of trade and appreciates the impact of global economic processes on people, places and environments at a range of scales. The student proposes valid strategies to address these issues and predicts the long-term consequences of their proposals.



Year 9 – Interconnections
 Inquiry: Exploring interconnections through the coffee trade
 Where is coffee produced and why there?
 Most coffee in the world is produced in what National Geographic calls the “bean belt” which is between the Tropic of Cancer and the Tropic of Capricorn. Figure 1 shows the regions in the world where coffee is grown. These regions are Central and South America, Africa and the East and Southeast Asia.

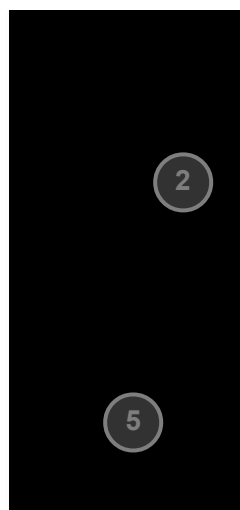
Figure 1: Coffee producing regions of the world

Coffee grows in these regions because the climate conditions, and the soils, are ideal. The best beans are produced at high altitudes, in a humid, tropical climate with rich soils and temperatures around 20°C (68°F). The region between the Tropic of Cancer and the Tropic of Capricorn has these characteristics.

There are more than 50 countries in the world that produce coffee. As can be seen in the graph below, the biggest coffee producing region in the world is Central and South America with 6 countries in that region being among the biggest coffee producers in the world. South East Asia has three countries in the top 10 and Africa has one. The largest producing coffee country in the world is Brazil followed by Vietnam.

Figure 2: Top 10 Coffee Producing Countries by Region (2011)

Region	Production (Million metric tons)
Brazil	~45,000
Central and South America	~15,000
South East Asia	~10,000
Africa	~5,000
Europe	~2,000
Other	~1,000



Annotations

- 1 Annotation 1**
Identifies the location of coffee-growing regions in the world
- 2 Annotation 2**
Constructs a thematic map to illustrate the spatial distribution of coffee-growing countries and regions
- 3 Annotation 3**
Explains the relationship between the natural characteristics of places and coffee production
- 4 Annotation 4**
Sources and analyses

data to identify coffee-producing regions in the world

- 5 **Annotation 5**
Sorts data and constructs a column graph to show the top coffee-producing countries by country region

What is the coffee supply chain?

Small farmers sell green coffee beans directly to middlemen who export from the country of origin to importers in developed countries. The large coffee estate owners process and sell their harvests and sell them to importers from developed countries at a price set by the New York Coffee Exchange.

Importers of green coffee roast and package the coffee. They then sell the packaged coffee to both wholesalers and retailers for domestic consumption. There are two large markets around the world, the main ones being the UK, Canada and the USA.

Importers also sell coffee to retailers who stock their own coffee such as cafes and specialty stores that sell coffee. About 40% of coffee produced in the world is sold to these stores. Supermarkets and coffee shops are the primary channels for coffee in developed nations. 50% of market for basic coffee sales.

Figure 3: Coffee supply chain

Who imports coffee?

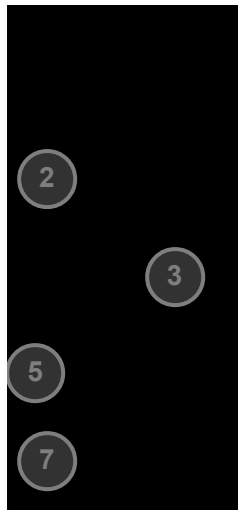
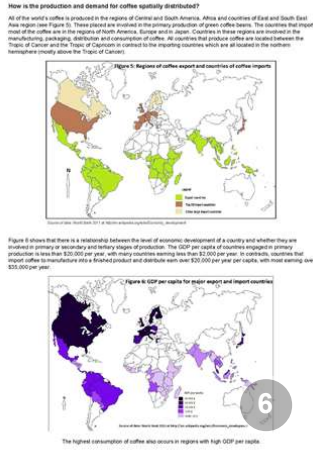
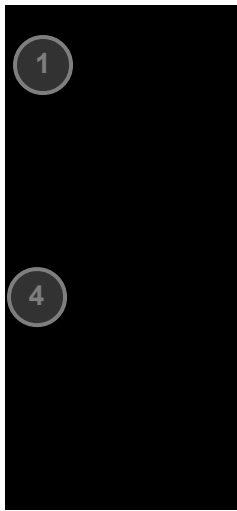
Figure 4 shows the top ten importing countries of coffee beans in the world. The United States is the largest importer of coffee beans. There are also several European countries that import coffee, including Germany which is one of the top 10 coffee importing countries of the world in 2016. In fact, Japan is the only other country in the world that ranks in the top ten coffee importing countries.

Figure 4: Coffee importers by country

Country	Percentage
USA	29%
Germany	12%
UK	10%
Japan	8%
France	7%
Belgium	5%
Spain	4%

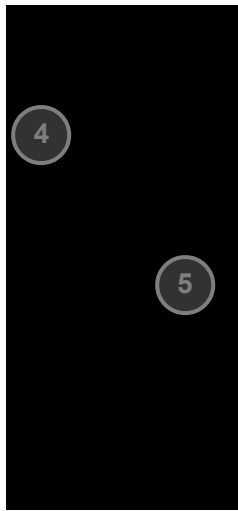
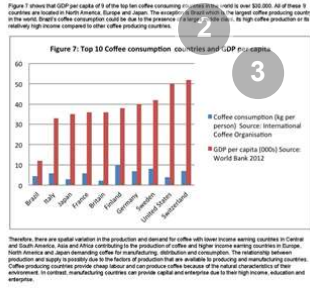
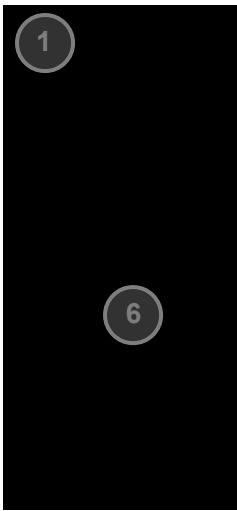
Annotations

- 1 **Annotation 1**
Explains in detail the network of people and activities at each stage of the coffee supply chain
- 2 **Annotation 2**
Draws a comprehensive supply chain to show how people and activities are interconnected in the cultivation, production, distribution and consumption of coffee
- 3 **Annotation 3**
Synthesises data to identify patterns of coffee distribution
- 4 **Annotation 4**
Constructs a pie chart to illustrate the distribution of coffee by country



Annotations

- 1 Annotation 1**
Explains spatial variations between the production of and demand for coffee
- 2 Annotation 2**
Represents the spatial distribution of coffee production and demand on a thematic map that complies with cartographic conventions
- 3 Annotation 3**
Identifies and explains the relationship between income and the cultivation and demand for coffee
- 4 Annotation 4**
Gives an explanation for variations in the spatial distribution of coffee production and demand
- 5 Annotation 5**
Constructs a thematic map to represent the spatial distribution of different levels of economic development
- 6 Annotation 6**
Uses appropriate shading and a legend to represent average values
- 7 Annotation 7**
Cites a source of data



Annotations

1 Annotation 1
Identifies patterns and anomalies in the spatial distribution of coffee consumption

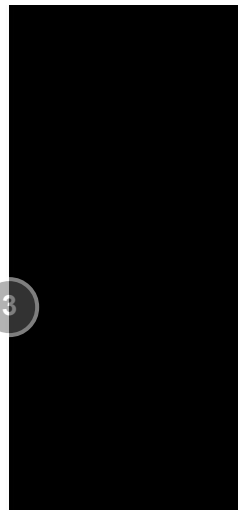
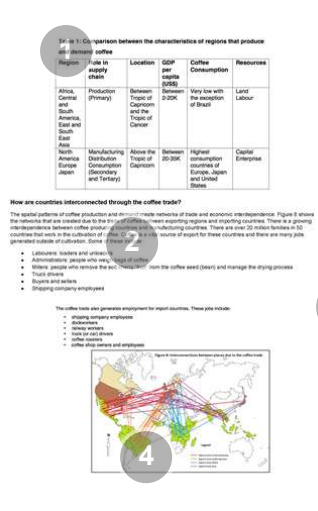
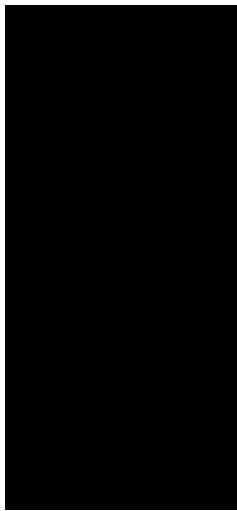
2 Annotation 2
Proposes an explanation for the spatial anomaly of Brazil as a coffee-consuming nation

3 Annotation 3
Constructs a column graph to illustrate the relationship between GDP per capita and coffee consumption

4 Annotation 4
Interprets and synthesises data from different sources to represent the relationship between different variables

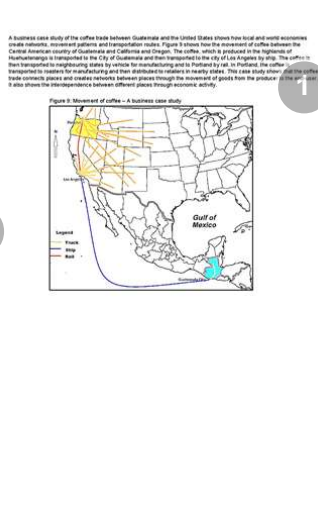
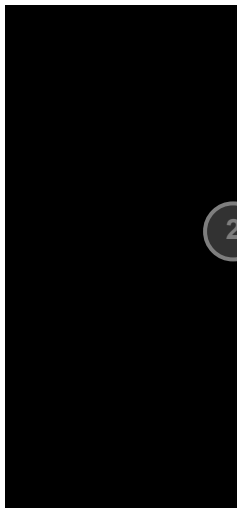
5 Annotation 5
Gives a valid explanation for spatial variations in the production and consumption of coffee

6 Annotation 6
Synthesises information to draw reasoned conclusions



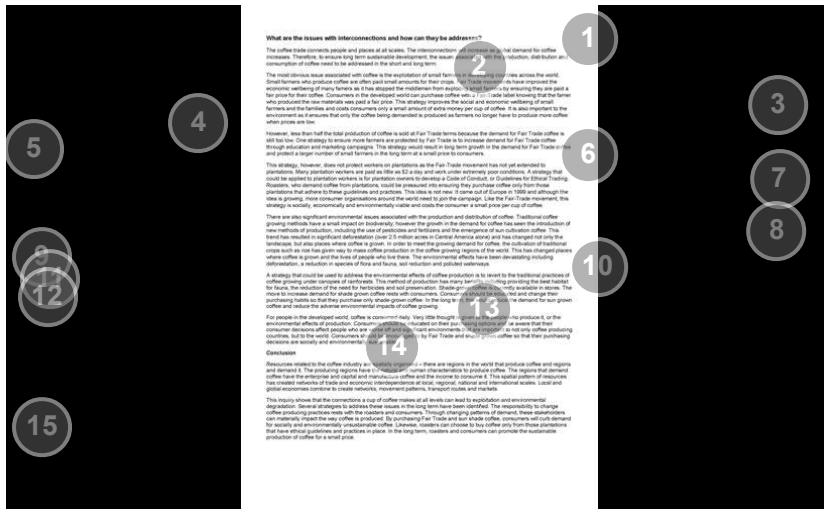
Annotations

- 1 **Annotation 1**
Sorts information to show relationships between location and characteristics of places, and their role in the supply chain
- 2 **Annotation 2**
Analyses the economic interdependence created by the coffee trade
- 3 **Annotation 3**
Explains how the coffee trade creates employment for people in different places at all stages of the supply chain
- 4 **Annotation 4**
Represents the complex networks created by the coffee trade at national, regional and international scales



Annotations

- 1 **Annotation 1**
Explains how local and national economies combine to create networks, movement patterns, transport routes and markets
- 2 **Annotation 2**
Represents the interconnections between places across different scales due to the flow of coffee



Annotations

- 1 Annotation 1**
 Uses initial research to frame a geographical question to investigate
- 2 Annotation 2**
 Identifies trends in the consumption of coffee and predicts the need to address issues arising from these trends
- 3 Annotation 3**
 Identifies Fair Trade as a possible strategy to address the exploitation of small coffee producers
- 4 Annotation 4**
 Applies environmental, social and economic criteria to assess the merits of Fair Trade
- 5 Annotation 5**
 Identifies weaknesses in the Fair Trade strategy and suggests ways to make it more effective
- 6 Annotation 6**
 Predicts the long-term effects of proposed strategy to improve the reach of Fair Trade
- 7 Annotation 7**
 Identifies the need for extra strategies to address the exploitation of plantation labourers and proposes a strategy
- 8 Annotation 8**
 Explains changes to the way coffee is grown

9 Annotation 9
Gives an example of the ways that interconnections change places

10 Annotation 10
Identifies the environmental effects of sun-grown coffee

11 Annotation 11
Proposes a strategy to address the environmental effects of sun-grown coffee

12 Annotation 12
Identifies individual and collective action to promote sustainable coffee production

13 Annotation 13
Predicts the long term consequences of proposed strategy

14 Annotation 14
Synthesises information from a range of sources to form reasoned conclusions

15 Annotation 15
Draws reasoned and evidence-based conclusions

Interconnections: Magnetic Island

Sample summary

Over a two-week period, students completed a staged investigative inquiry into how people connect with Magnetic Island and the impacts of these interconnections.

The scaffolded stages of the inquiry were:

- Identify and list the main questions that need to be answered to complete this inquiry.
- Analyse the main reasons why people go to Magnetic Island and the effects of these

interconnections on the natural environment.

- Create an original map/s, using BOLTSS, to show the location of the main human settlements on the island today and changes over time.
- Describe the spatial distribution of settlements on the island today and suggest reasons for these locations and why there have been changes over time.
- Propose a strategy to improve accessibility to Magnetic Island (e.g. build a bridge or lower ferry prices).
- Predict the possible social, economic and environmental outcomes and consequences of this proposal.

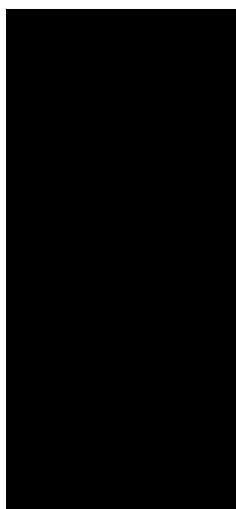
Achievement standard

Subject

By the end of Year 9, students explain how geographical processes change the characteristics of places. They analyse interconnections between people, places and environments and explain how these interconnections influence people, and change places and environments. They predict changes in the characteristics of places over time and identify the possible implications of change for the future. Students analyse alternative strategies to a geographical challenge using environmental, social and economic criteria.

Students use initial research to identify geographically significant questions to frame an inquiry. They evaluate a range of primary and secondary sources to select and collect relevant and reliable geographical information and data. They record and represent multi-variable data in a range of appropriate digital and non-digital forms, including a range of maps that comply with cartographic conventions. They use a range of methods and digital technologies to interpret and analyse maps, data and other information to propose explanations for patterns, trends, relationships and anomalies across time and space, and to predict outcomes. Students synthesise data and information to draw reasoned conclusions. They present findings, arguments and explanations using relevant geographical terminology and digital representations in a range of appropriate communication forms. Students propose action in response to a geographical challenge, taking account of environmental, economic and social factors, and predict the outcomes and consequences of their proposal.

Report



Year 9 – Magnetic Island Inquiry

Inquiry topic
Investigate how people connect with Magnetic Island and the impacts of these interconnections.

Stages of inquiry

1. Identify and list the main questions that need to be answered to complete this project.
2. Analyse the main reasons why people go to Magnetic Island and the effects of these interconnections on the natural environment.
3. Create an original map/s, using BOLTSS, to show the location of the main human settlements on the island today and changes over time.
4. Describe the spatial distribution of settlements on the island today and suggest reasons for these locations and why there have been changes over time.
5. Propose a strategy to improve accessibility to Magnetic Island (e.g. build a bridge or lower ferry prices).
6. Predict the possible social, economic and environmental outcomes and consequences of this proposal.

How do people connect with Magnetic Island?

Inquiry questions

Where is Magnetic Island?
How many people live on Magnetic Island?
Where are the main settlements on Magnetic Island?
Who goes to Magnetic Island?
Why do people go to Magnetic Island?
How do people get to the island?
How do people get to the island?
Should a bridge be built to improve accessibility to the island?
What would be the impacts of more people on the island?

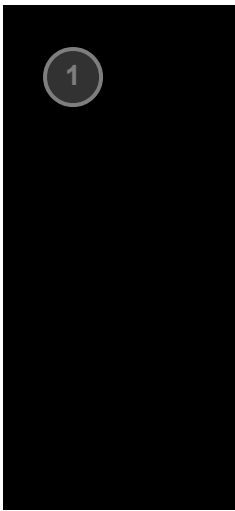
1

The groups of people going to Magnetic Island include: Magnetic Island residents, backpackers, Townsville locals and visitors to Townsville. In 2008 there were 2374 people living on the island. Most days they would travel to and from the island either to go to school, or to get necessities from the main land that aren't available on the island. The backpackers go to the island for the parties and bars there. To accommodate for these backpackers there have been backpacker hostels strip around the island. Based on a survey conducted by our class, Townsville locals, most of the time, go for either a day trip or for a long weekend. When they do this they will spend most of their time at the bars, beaches.



Annotations

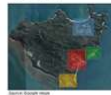
- 1 **Annotation 1**
Identifies significant geographical questions to frame an inquiry



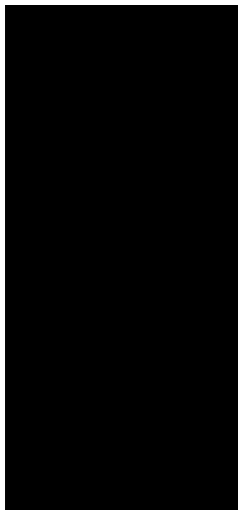
coming to Townsville go to Magnetic Island for a day trip and spend most of their time at the beaches. The effects on the natural environment from all these people travelling to and from the island come from the pollution from the ferries boats going from Townsville to Nelly Bay. Also the Magnetic Island residents clearing trees for houses affect the natural environment of Magnetic Island. Overall, these interconnections have a limited impact on the environment of Magnetic Island, though most of it is a national park, there are strict guidelines as well as specific roads and walking paths, which can satisfy most, if not all, visitors.



2

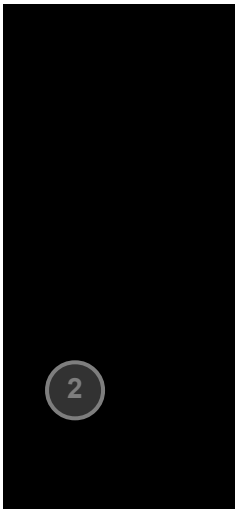


Blue was agricultural land, now residential land.
Green has developed than what it is now (more housing).
Red has developed than what it is now (more housing).
Yellow has developed than what it is now (more housing).



Annotations

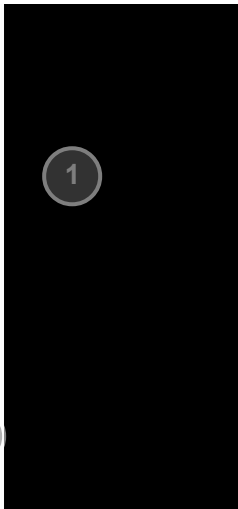
- 1 **Annotation 1**
Analyses the interconnections between people and places and within environments
- 2 **Annotation 2**
Represents information to indicate the characteristics of places over time



The major settlements on Magnetic Island are on the south-eastern side of the island. These settlements are Plover Bay on the southernmost tip, Nelly Bay is 2.77 kilometres north-east of Plover Bay, 1.83 kilometres north-east of Plover Bay is Geoffrey Bay. On the top of the island is the biggest of all the bays, located 3.70 kilometres from Geoffrey Bay is Horseshoe Bay.

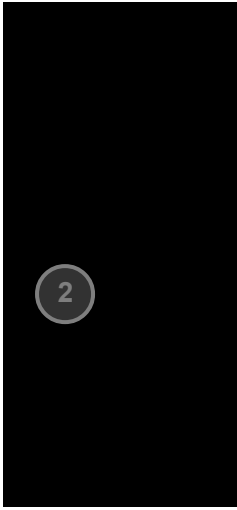
There are more houses in Plover Bay in 2016 than there were in 1952. This is because, up until recently, the ferry docked in that bay. So the population rapidly increased. But because it was dangerous to dock there if there was high wind the ferry terminus was moved. Because of that most of the shops had closed down so that is one of the quieter bays on the island. The houses have expanded back from the beach and now gone all the way across the bay itself. Nelly Bay's population has increased considerably. It has always been located on the island and now is one of the most populated bays on the island. This is because the ferry now docks in that bay and there are more shops and resorts to accommodate for this. From 1952 to 2016 Geoffrey Bay has expanded back away from the beaches and around the outcrop of land. Horseshoe Bay is the most populated Bay of the four. The number of houses there have expanded back away from the beaches, but stayed narrow. Not expanding all the way across. Along the beach is shops and restaurants, behind them is residential area.

To improve accessibility to the island, I propose that we build a bridge from Pallamallara to the eastern side of the island between Plover Bay and West Point. This bridge would boost the economy in Magnetic Island as it would be readily accessible for residents of Townsville, which would open the economy to a much wider and larger



Annotations

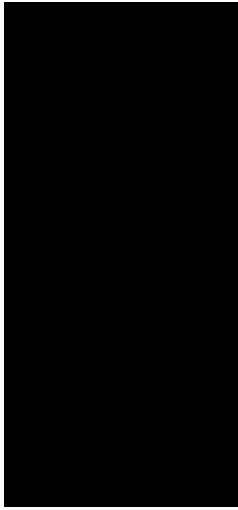
- 1 **Annotation 1**
Represents information to indicate the characteristics of places over time using photographs and a map which conforms to cartographic conventions
- 2 **Annotation 2**
Describes and explains the location and characteristics of places using geographical terminology
- 3 **Annotation 3**
Proposes an action in response to a geographical challenge



group of people. It would also provide the island a means of creating more goods and services, such as hotels, shops and rental properties to service the increased population of both tourists and of residents. This would cause an increase in the number of available employment opportunities. The building of the bridge would cause the fences to go bankrupt as their service would no longer be required. The Townsville City Council would see an increase in sales revenue as more residents move to live on Magnetic Island. This would boost the economy of Townsville as well as boosting the number of services the council can provide. Prices of houses on the island would rise because of the increase in easier accessibility to the island from the mainland every day.

There would be a higher demand for housing on the island, which may cause some trees to be cleared. This, if it occurred, would destroy the habitats of the unique animal species on the island. Due to the number of motor vehicles which would come present on the island, the freshwater, saltwater and air pollution would increase, endangering flora and fauna present on the island and increasing the enjoyment as those flora and fauna are no longer available to view. If there are more people driving over to the island there is a much higher chance that koalas and other wildlife could be hit and killed. There would also be more litter left around the island, so there is a higher risk of animals eating it or the rubbish being washed into the ocean and polluting the water around the island.

There would also be positive and negative social impacts associated with this bridge. A bridge would improve access to Magnetic Island, causing the island to have more visitors and allowing residents to visit the mainland more easily, as it would be easy to simply drive, or even take a bus or car there. This bridge may also cause some residents of the island to become upset as the influx of new residents, tourists and people on holiday may ruin the isolation of the island. The bridge would also cause the population of residents on Magnetic Island to skyrocket as those who want to live there but don't want the hassle of the ferries could buy a house and stay there. This bridge would cause increased traffic in quiet suburbs such as Nalanda due to the proximity to the bridge.



Annotations

1 Annotation 1
Predicts the outcomes and consequences of the proposed action using specific examples as evidence

2 Annotation 2
Presents a detailed reasoned conclusion