

# Paper 1: Our Natural World

Y11 February 2020 Exam feedback

1. Identify the coastal feature

A Arch

B Headland

C Stack

D Stump



2 (a) Explain the stages in the formation of an arch. (3)

**Keywords:**

Headland

Weathering – Freeze Thaw/Biological/Chemical

Erosion – Hydraulic Action and Abrasion

Crack

Cave

Arch

Put these into 4 sentences to form an answer.

## 2 (b) CASE STUDY – a river basin in the UK. (6)

Name of river basin in the UK:

iSeer eRvrvn

Explain how **human activity** has influenced the **geomorphic processes** in this landscape.



1. Identify the human activity in each picture and state which geomorphic process it will change.
2. Now explain how.

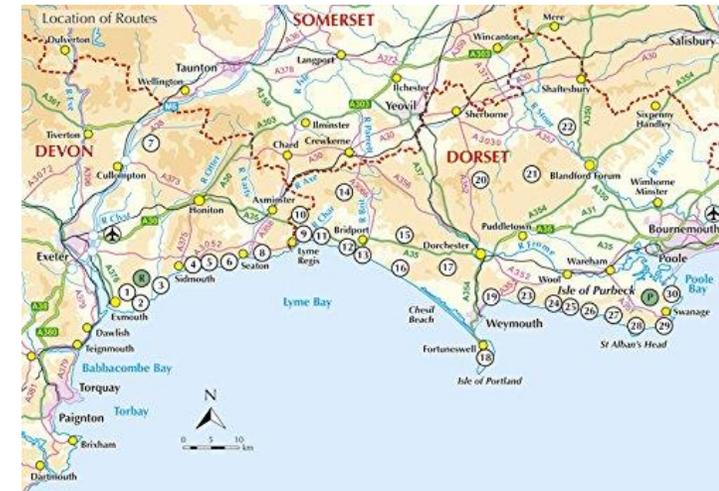
*River Severn:*

*Upland areas used for grazing ensures that natural processes of E & T are not affected; Building reservoirs alters the course of the river/stream flow as well as the level of water in the channel. If the level of water increases ..... THINK friction, think velocity, think erosion & deposition*

*In the middle course, humans have built on the flood plains of Shrewsbury & Ironbridge which reduces i\_\_\_\_\_, increases r\_\_\_\_ o\_\_\_\_ and e\_\_\_\_\_ rates and increases the \_\_\_\_\_ risk. Hard and soft engineering has been used at S\_\_\_\_\_. This l\_\_\_\_\_ and str\_\_\_\_\_ of the channel causes increased \_\_\_\_\_, moving the water quickly downstream where it might \_\_\_\_\_ more than it might have done as well as allowing it to carry \_\_\_\_\_/b\_\_\_\_\_ load. Land use zoning close to the flood plain allows infiltration to continue and holds water in times of flood, reducing the risk of e\_\_\_\_\_ and \_\_\_\_\_ downstream*

### 3. CASE STUDY – UK coastal landscape (6)

Explain how geomorphic processes have shaped your chosen coastal landscape.



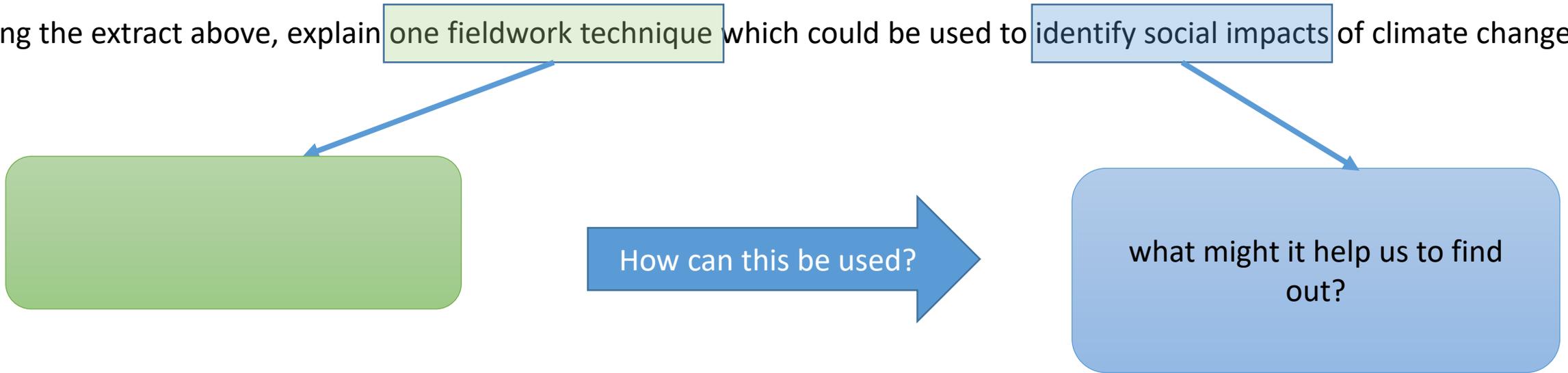
1. Name the stretch of coastline
2. Name the features shown here.
3. Which geomorphic process/es is/are responsible for their formation?

4. A group of students are planning some fieldwork to investigate the social impacts of climate change. (3) 3 x 1

Study the extract below.

**Climate change in the UK is causing rising temperatures, with the summer months becoming hotter. The summer months could see drought conditions, however the winter months will be wetter with an increased frequency of flooding.**

Using the extract above, explain **one fieldwork technique** which could be used to **identify social impacts** of climate change.



A questionnaire could be used to explore people's changing behaviours and lifestyle choices (✓).  
Questions could ask people about where they go on holiday and outdoor leisure activities (✓). Peoples behaviours could be linked to questions about sun strength awareness and their use of sunscreen and hats (✓)

5. You will have carried out some physical geography fieldwork as part of your GCSE Geography course. (8+3)  
Name the fieldwork

To what extent was your primary data collection successful?

What did we do?

Successful (good)

Not Successful (bad)

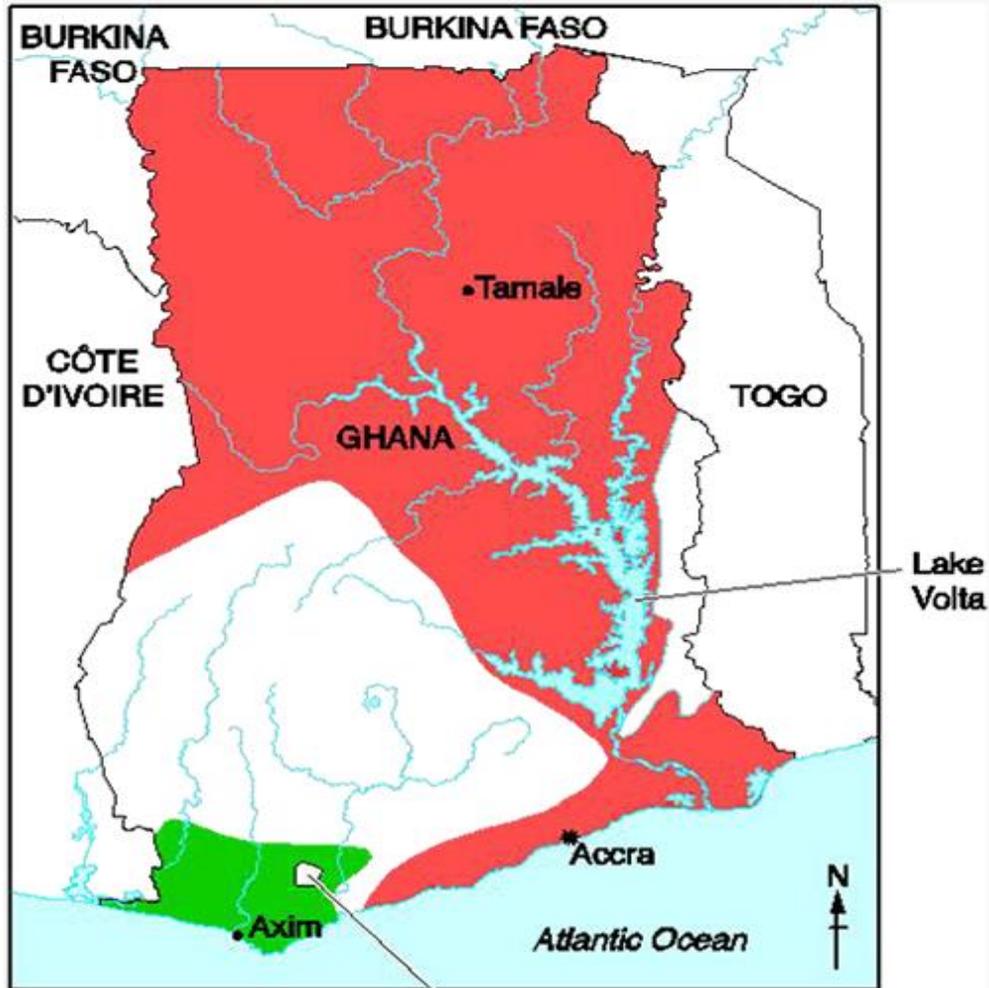
6. Name a primary data collection technique suitable for carrying out a human geography fieldwork investigation looking at the issue of shop closures within an economic hub. (1)

<u>Primary Data</u>	<u>Secondary Data</u>
What is it?	What is it?
Examples?	Examples?

Answer: Could include: a land use map (✓), a transect (✓), photographs (✓)

i. Using **Fig. 5b**, describe the location of Kakum National Park (3)

ii. **Fig. 5b – Ecosystem map of Ghana**



**Key**  
■ Rainforest  
\* Capital city  
■ Tropical grasslands (Savannah)

Kakum National Park

C L O C C K

choose wisely – you are trying to pinpoint its location ... so ‘on the Atlantic coast’ isn’t so helpful!!!!

3 x 1 mark

Answer: i) South Ghana (✓)  
In the rainforest area (✓)  
West of Accra (✓)  
North-east of Axim (✓)  
South-west of Lake Volta (✓)

ii) Using **Fig. 7** and your own understanding, identify and explain **two** ways in which the rainforest in Kakum National Park could be a source of income for local people. (4)

**Fig. 7 – Kakum National Park**

Way 1 (1)



Explain (1)

Way 2 (1)



Explain (1)

Figure 7 – identifies 2 x ways

Your explanation is your UNDERSTANDING



Log trees (✓) so the trees can be sold for timber (DEV)

Grow cocoa (✓) to sell to companies to make chocolate (DEV)

Tourism in the NP (✓) work in the gift shops / cafes / hotels (DEV)

## 8. CASE STUDY – a global example of sustainable management in the Antarctic or the Arctic

Evaluate the success of your chosen global example of sustainable management in the Antarctic or the Arctic.  
(8)

One Global management strategy we have studied is Arctic Whaling. A sanctuary was set up by WWF Canada in the Clyde river to protect whales.

This was a very successful management strategy because not only did it protect whales but other species like geese as well. In addition, this is good because whales migrate here every year because of the deep waters and large amounts of phytoplankton (food) making it a great place to give birth.

However this is not very good because it is only small scale and does not protect all the whales around the world. Also 1 whale is killed every year but the Inuit's showing not all whales are protected.

In conclusion I think this was a successful management strategy.

Thoughts?

Marks?

Any Issues?

9. 'Climate Change will lead to negative environmental impacts.' Discuss. (6)

Ice caps will melt leading to flooding. Some areas will grow more as it becomes warmer.

Ice caps will melt leading to coastal areas flooding and land being destroyed. Some higher latitude areas could be more productive as they become warmer.

Ice caps will melt leading to rising global sea levels which will flood some low-lying coastal areas and may destroy low-lying islands completely for example Tuvalu. The flooding in these areas can destroy coastal ecosystems such as coral reefs. Some higher latitude areas, such as the UK, could become a more productive environment as the temperature warms as this will extend the growing season.

Identify the similarities and differences between these 3 answers

10. Assess whether the social impacts of climate change experienced in the UK in the 21<sup>st</sup> century are greater than the environmental impacts. (8)

1. Identify 3 social impacts and 3 environmental impacts.
2. Rank these from most to least impactful.  
(best to worse)
3. Make links between these.

The social impacts of climate change experienced in the UK in the 21st century have mainly been a consequence of environmental impacts and so could be considered greater. More precipitation in the winter and more chance of extreme storm conditions at all times bring an increased risk of flooding. This would mean people may become isolated from amenities and unable to get food supplies or to their place of work or even have to leave their homes or be rescued. As social impacts exacerbate to the environmental ones, they increase the impact felt and so can be considered greater.