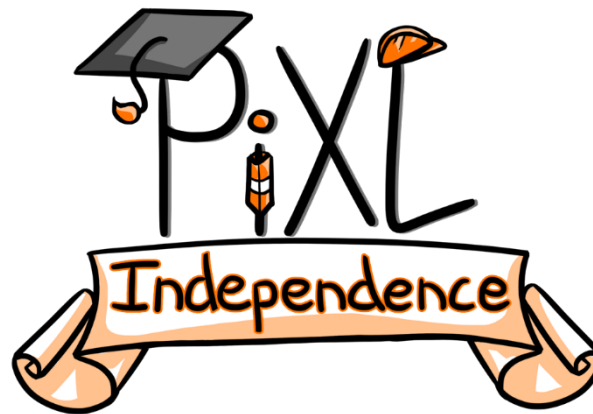




PiXL Independence:

Geography – Student Booklet

KS4

AQA Style, UK Physical Landscapes

Contents:

- I. Multiple Choice Questions – 10 credits
- II. Short Answer Questions – 10 credits each
- III. Annotation – 30 credits each
- IV. Suggested Reading/Watching – 50 credits each
- V. Long Answer Questions – 100 credits and 20 for marking your own
- VI. Synoptic Thinking – 30 credits each

I. Multiple Choice Questions

Coastal landscapes of the UK

- 1 Where in the UK would you describe as “having large areas of uplands”?
 - a. The south east
 - b. The east
 - c. The south west
 - d. The north

- 2 Destructive waves characteristics are –
 - a. High, plunging waves that have a long wave length, strong swash, strong backwash, and they erode the coastline
 - b. Low gentle waves that have a short wave length, weak swash, strong backwash, and they deposit on to the coastline.
 - c. High, plunging waves that have a short-wave length, weak swash, strong backwash, and they erode the coastline

- 3 Mechanical weathering is –
 - a. The breakdown of rock without any chemical changes taking place (e.g. Freeze thaw).
 - b. The breakdown of rock by organic activity (e.g. plant roots breaking up rock).
 - c. The breakdown of rock involving a chemical reaction (e.g. Solution).

- 4 Biological weathering is –
 - a. The breakdown of rock without any chemical changes taking place (e.g. Freeze thaw).
 - b. The breakdown of rock by organic activity (e.g. plant roots breaking up rock).
 - c. The breakdown of rock involving a chemical reaction (e.g. Solution).

5 Chemical weathering is –

- a. The breakdown of rock without any chemical changes taking place (e.g. Freeze thaw).
- b. The breakdown of rock by organic activity (e.g. plant roots breaking up rock).
- c. The breakdown of rock involving a chemical reaction (e.g. Solution).

6 Mass movement is –

- a. The downhill movement of material under the influence of erosion
- b. The downhill movement of material under the influence of gravity
- c. The downhill movement of material under the influence of destructive waves

7 Coastal erosion is –

- a. Where people walk on the cliff edge and the footpaths erodes away.
- b. The wearing away of land and the removal of beach or dune sediments by wave action, tidal currents, wave currents, drainage or high winds
- c. When rocks gradually wear away. There are three types physical, chemical, biological erosion.

8 Hydraulic action is –

- a. When the headlands with vertical cliffs concentrate erosive energy by wave refraction.
- b. When rocks and boulders that have already been eroded from the cliffs are broken down into smaller rounder particles.
- c. When air may become trapped in joints and cracks on a cliff face. When a wave breaks, the trapped air is compressed which weakens the cliff and causes erosion.



9 What type of land form is this?

- a. Erosional
- b. Depositional
- c. Mass movement
- d. Fluvial

10 What is the name given to this land form?

- a. Spit
- b. Bar
- c. Arch
- d. Stack

Glacial landscapes of the UK

- 1 Plucking is ...
 - a. When bits of rock stuck in the ice grind against the bed rock and wear away the rock like sand paper.
 - b. When bits of rock fall on top of the glacier and are transported along as the glacier moves. These are deposited when the glacier melts.
 - c. A large mound of material that was deposited where the sides of the glacier were.
 - d. When melt water at the base, back or sides of the glacier freeze on to the rock and as the glacier moves it will pull out the rock from the ground.

- 2 What type of land forms are aretes?
 - a. Erosional
 - b. Transformational
 - c. Position
 - d. Depositional

- 3 When was the last Ice age?
 - a. 50 000 years ago
 - b. 20 000 years ago
 - c. 2000 years ago
 - d. 100 000 years ago

- 4 During the last ice age how far south did Ice cover the UK?
 - a. To Manchester
 - b. To Dover
 - c. The Bristol Channel
 - d. Edinburgh

- 5 Why do tourists want to visit glacial environments in the UK?
 - a. Because access is easy
 - b. Because they are spectacular places to visit.
 - c. To look at the glaciers
 - d. To visit the museums

- 6 What conflicts does farming cause?
- a. Damage to stone walls, scaring of sheep and damage to crops
 - b. Damage to the local environment due to sheep grazing and the refusal to let tourists walk across the land.
 - c. The destruction of local habitats. Making the local environment less attractive and annoying locals with large trucks.
 - d. The cutting down of trees causes damage to the local environment and the use of one type of tree means diversity is lost.
- 7 What economic impacts do tourists have in the glacial landscape?
- a. Increased traffic which boosts the level of congestion in the villages.
 - b. Foot path erosion.
 - c. Tourists can increase the number of people employed in the area.
 - d. Increased number of water sports can increase erosion of lake banks.
- 8 Which of the following strategies will help cope with footpath erosion?
- a. Stopping people using the footpaths
 - b. Resurfacing the footpaths with hard surfaces.
 - c. Increasing public transport.
 - d. Telling people to take their litter home.
- 9 What type of land forms are Drumlins?
- a. Erosional
 - b. Transformational
 - c. Position
 - d. Depositional
- 10 What type of land forms are Moraines?
- a. Erosional
 - b. Transformational
 - c. Position
 - d. Depositional

River Landscapes of the UK

- 1 At the source of a river you would expect the river valley shape to be:
 - a. U shaped
 - b. Wide and flat
 - c. V shaped
 - d. Wide and steep

- 2 Which of the following is a process of erosion?
 - a. Traction
 - b. Abrasion
 - c. Saltation
 - d. Suspension

- 3 What is Traction?
 - a. It is when material is transported on top of the river.
 - b. It is the erosion of the river bank by destructive currents.
 - c. It is the distance sediment has to travel down a river.
 - d. Large particles like boulders are pushed down the river along the bed by the force of the water.

- 4 What is hydraulic action?
 - a. It is the force of the water breaking up rock from the river channel.
 - b. Eroded rocks picked up by the river scrape and rub against the channel wearing it away.
 - c. It is the distance sediment has to travel down a river.
 - d. Large particles like boulders are pushed down the river along the bed by the force of the water.

- 5 Why does a river deposit material?
- a. When a river runs up hill.
 - b. When the river can't erode the hard rock.
 - c. When the rock is easily eroded by the river.
 - d. It happens when a river slows down (loses velocity).
- 6 A waterfall is a land form created by:
- a. Deposition
 - b. Erosion
 - c. Deposition and erosion
 - d. Transportation
- 7 A meander is a landform created by:
- a. Deposition
 - b. Erosion
 - c. Deposition and erosion
 - d. Transportation
- 8 Peak discharge is:
- a. The delay between peak rainfall and lag time
 - b. The highest discharge of the river during a storm event
 - c. The increase in the discharge of the river
 - d. The time after peak rainfall has happened.
- 9 Hard engineering is:
- a. The use of knowledge of the river to reduce flooding
 - b. The use of manmade structures to control the river and reduce flooding
 - c. The use of a combination of manmade natural structures to stop a river flooding
 - d. The straightening of a river to make it go faster and so not flood

10 Which of the following are human reasons for flooding to occur?

- a. Prolonged rainfall
- b. Relief of the land
- c. Land use change
- d. Rock type

II. Short Answer Questions

Answers should be written in full sentences and use geographical terminology and good SpAG.

1. Describe the Physical landscape of the UK.

Coastal landscapes in the UK

2. Describe the process of weathering.
3. Explain how mass movement works.
4. Outline how the waves erode the coastline.
5. Describe constructive waves.
6. Explain the process of longshore drift.
7. Outline the reasons why deposition takes place on the coast.
8. Describe the landforms created by the process of erosion.
9. Explain why headlands and bays are formed.
10. Describe the landforms created by the process of deposition.
11. Explain the difference between hard and soft engineering.

River landscapes in the UK

12. Describe how the river valley changes shape as you move from the upper to lower course of a river.
13. Explain how a river erodes the river channel.
14. Describe the difference between lateral and vertical erosion.
15. Outline the different processes of transportation.
16. Explain why a river drops eroded material.
17. Describe the characteristics of a flood plain.
18. Outline how a hydrograph is used to show the discharge of a river.
19. Explain the formation of a meander.
20. Describe the key features of hard engineering.
21. Explain how hard engineering can also cause problems.

Glacial landscapes in the UK

22. Describe the extent to which the UK was covered in ice during the last ice age.
23. Explain how a glacier erodes the mountain through the process of plucking.
24. Outline the different erosional landforms found in a glacial landscape.
25. Explain the formation of an arete.
26. Explain how a glacier can transport material.
27. Describe the difference between a Lateral moraine and a Terminal moraine.
28. Outline the impacts tourism can have on the glacial environment.
29. Explain how glacial landscapes can be used for economic activity.
30. Describe the economic impacts of tourism.
31. Outline how strategies can be used to reduce the impact of tourism.

III. Annotation

Annotate is more than just label. You need to identify and then develop this further with an explanation as to why what you have pointed to is relevant to the question asked.

1. Study the image of North bay beach, Bridlington, Yorkshire, England. Annotate the image to show the coastal management being used and explain how it protects the coastline.



2. Study the image of a river in Yorkshire, United Kingdom. Annotate the image to identify the different land forms and explain their formation.



3. Study the image of the York Floods in September 2012. Annotate the image to identify the different impacts flooding can have.



IV. Suggested Reading/Watching

1. What is coastal erosion?

https://www.youtube.com/watch?v=zUh3WeilFN4&list=PLnZ7BK9X_VPtccIxCxwoUR_5iwWRxuGHA

2. Coastal revision site

<http://www.bbc.co.uk/schools/gcsebitesize/geography/coasts/>

3. Series of clips from the environment agency on the UK coastline

<https://www.youtube.com/user/EnvironmentAgencyTV/search?query=coasts>

4. Series of clips from the environment agency on the UK Rivers

<https://www.youtube.com/user/EnvironmentAgencyTV/search?query=Rivers>

5. Rivers revision site

http://www.bbc.co.uk/schools/gcsebitesize/geography/water_rivers/

6. Series of documents downloadable for free as PDF (Glaciers)

<https://www.teachitgeography.co.uk/Ks4physical/glaciers/tags/2444>

7. Glaciers Revision site

http://www.bbc.co.uk/schools/gcsebitesize/geography/glacial_landscapes/

8. Lake District (glacial landscape) information page for students

<http://www.lakedistrict.gov.uk/learning>

9. Series of videos on all topics <http://imstuck.wixsite.com/imstuckgcserevision/geography>

V. Long Answer Questions

All answers should be written in full sentences and use geographical terminology.

Your answer should be approx. 150 words long and have a clear structure. Make sure for each point you make you have thought of P.E.E.L. (**P**oint, **E**vidence, **E**xplanation and **L**ink). Make sure you have used real life examples which in turn have good detail as evidence to back up your points.

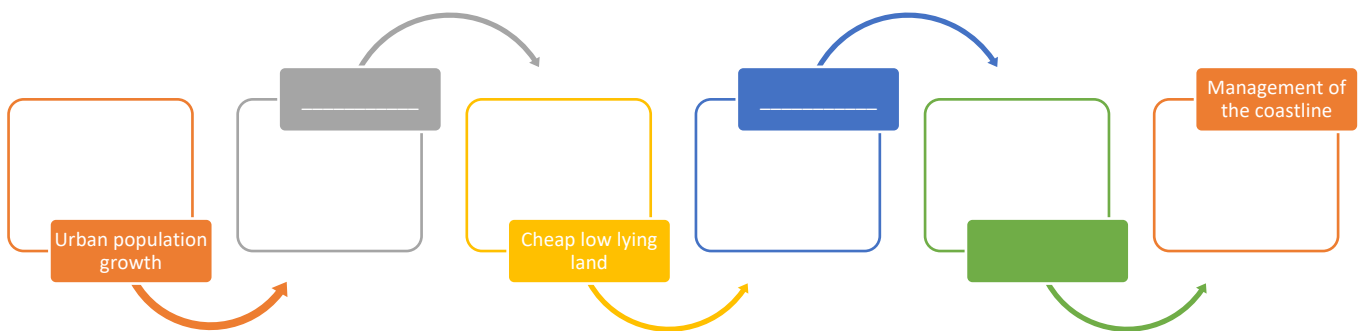
1. Using examples, suggest why some coastal areas choose to defend the coastline.
2. Analyse the reasons why some coastal landscapes are more susceptible to coastal erosion than others.
3. Using example/s you have studied, evaluate how engineering has been used to manage the coastline.
4. To what extent is hard engineering better at protecting the coastline than soft engineering?
5. "Using our glacial landscape will bring in jobs but will also damage the environment." Use evidence to support this statement.
6. Assess the strategies used to manage the impact of tourism on a location you have studied.
7. "Encouraging tourists to visit glacial landscapes in the UK will lead to more issues than positives." to what extent do you agree with this statement?

8. Using an example you have studied, discuss the impacts of using the glacial landscape for economic gain.
9. Assess the use of hard engineering and soft engineering in protecting people from river flooding.
10. Using an example of a flood management scheme you have studied, discuss the success of this scheme.
11. "The use of river engineering be it hard or soft only brings benefits to those people living on the river." Use evidence to support this statement.
12. To what extent is soft engineering more sustainable than hard engineering on a river?

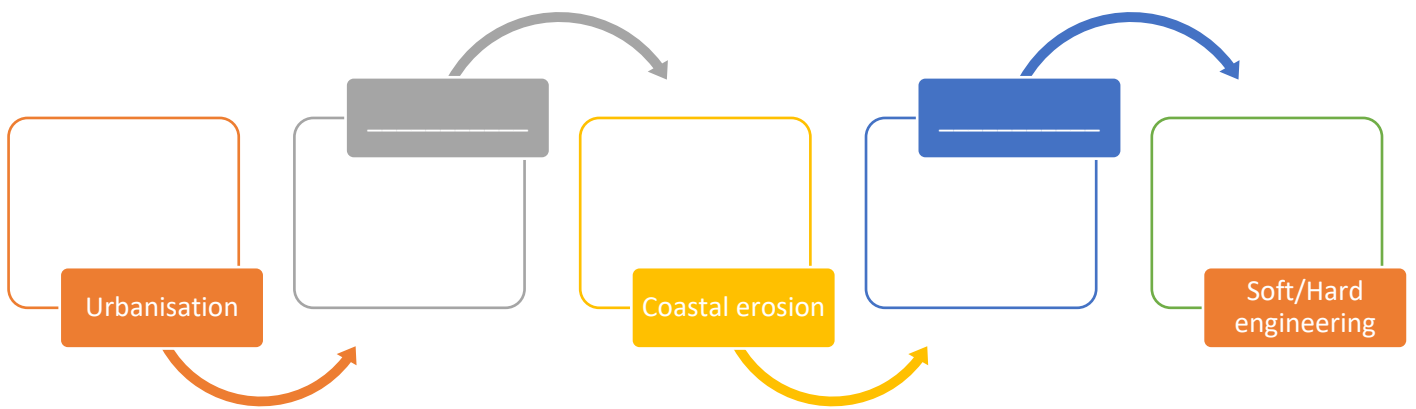
VI. Synoptic Thinking

Can you find the processes, interactions, links that connect the top and the bottom of the chain?

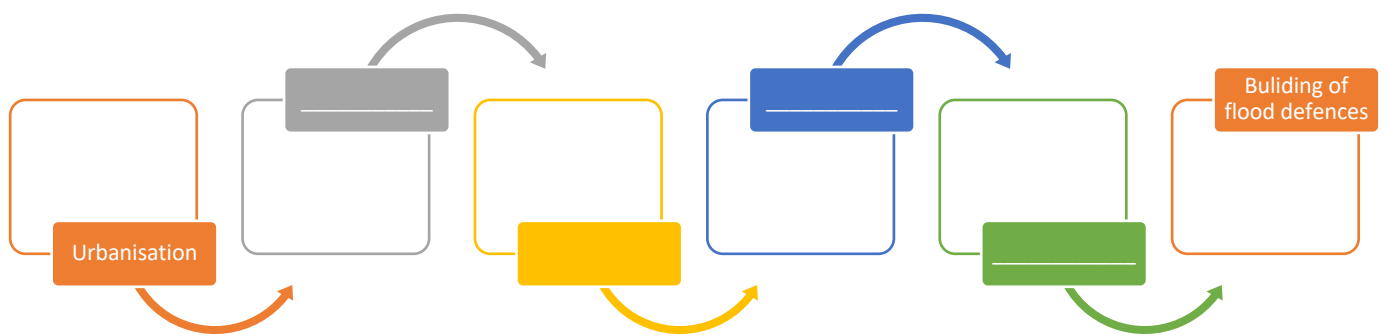
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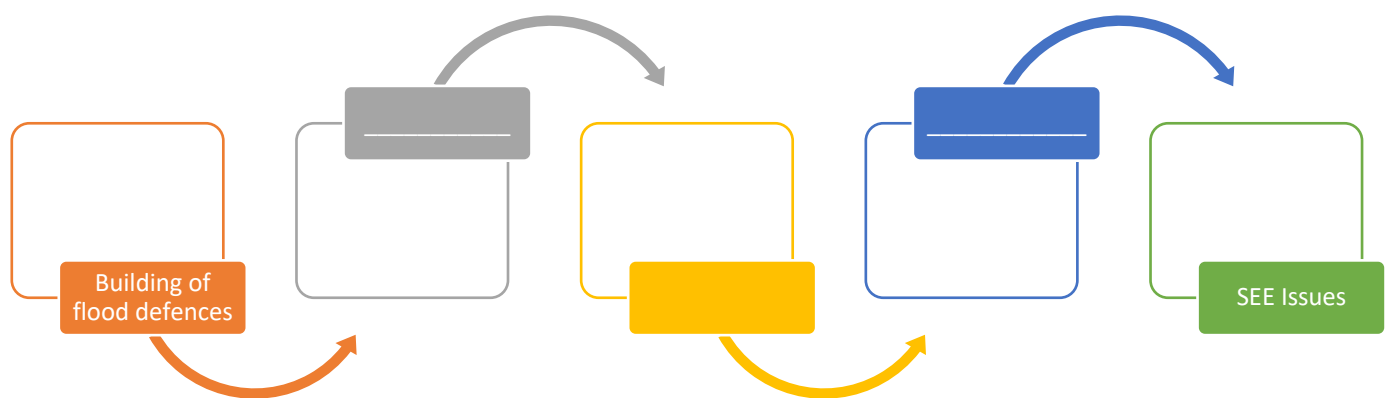
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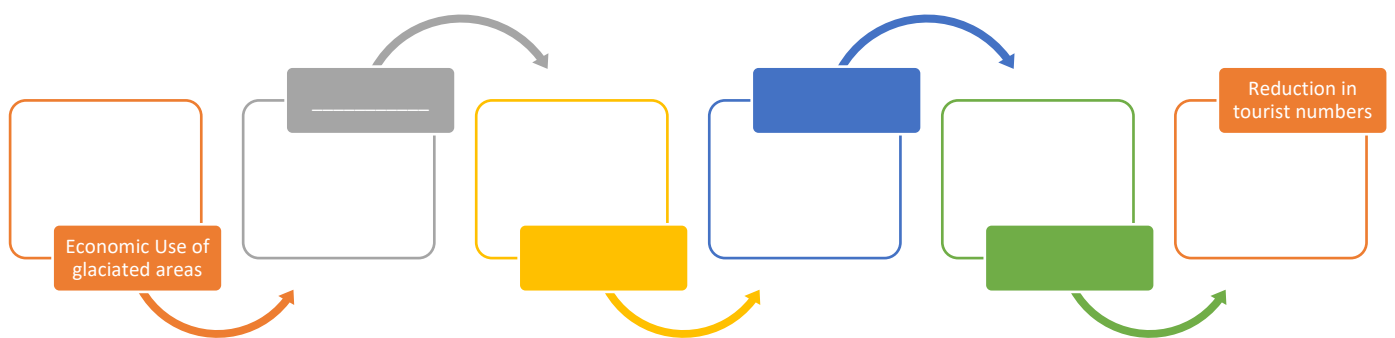
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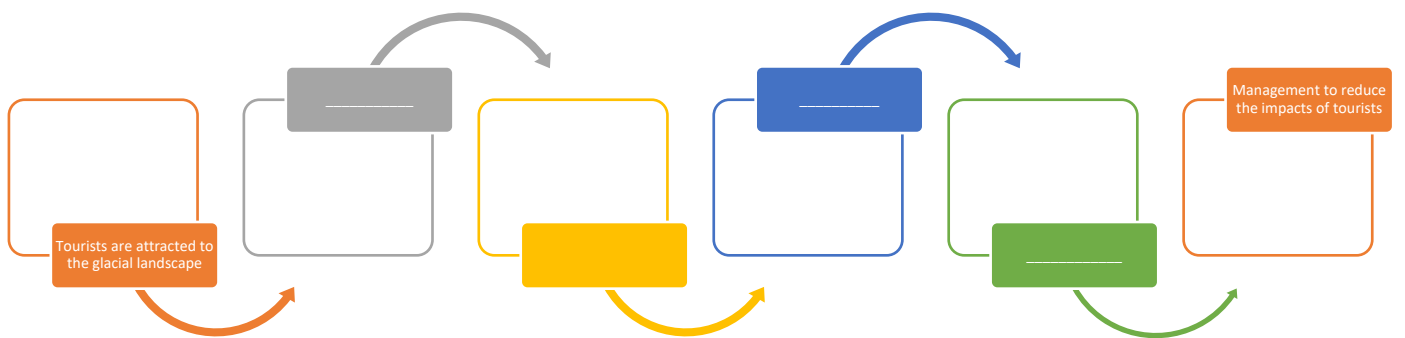
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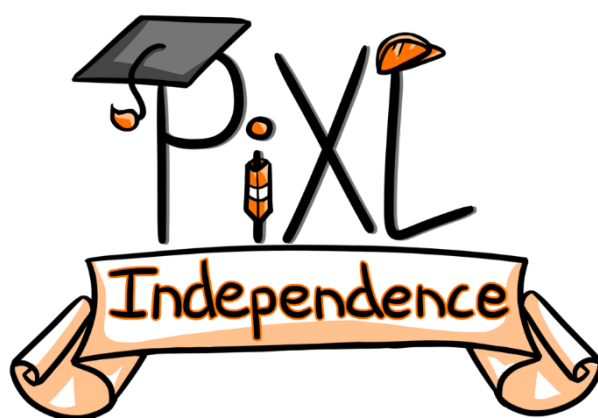


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