

NATIONAL 6 GEOGRAPHY



HOMEWORK QUESTIONS

Aim to write answers worth 8-10 marks for each of the questions issued.

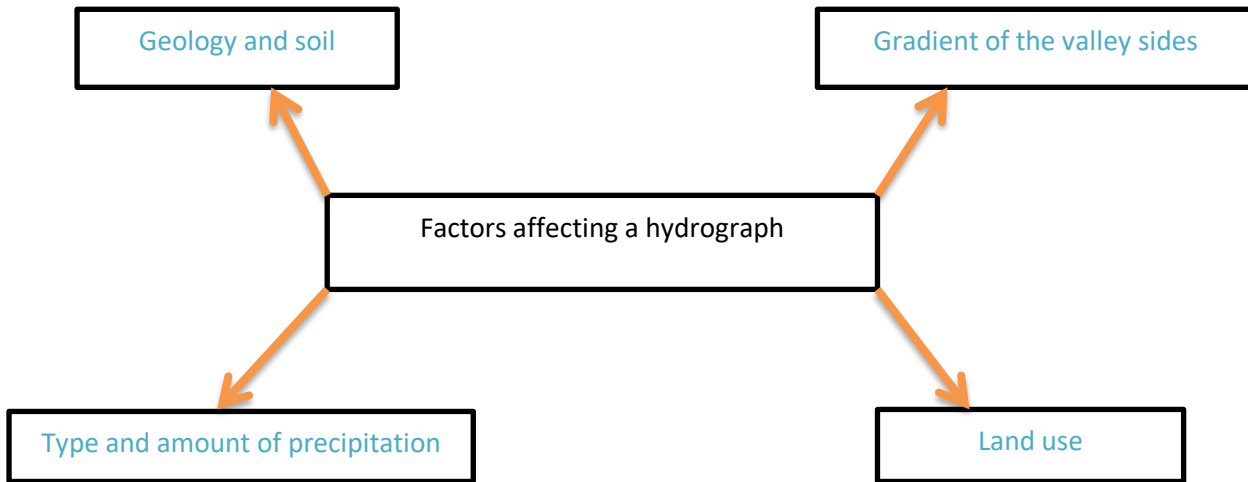
Atmosphere

1. Account for the fact that up to 45% of the sun's heat is lost to the Earth.
2. Explain, in detail, the variation in the amount of solar energy received between the tropics and the poles.
3. Explain why air moves between high and low pressure.
4. Describe and explain a Ferrell, Polar and Hadley cell.
5. Explain how the three cells together transfer energy around the world.
6. Explain, in detail, how the pattern of ocean currents in the North Atlantic Ocean helps to maintain the global energy balance.
7. Discuss the origin, nature and characteristics of the maritime tropical and continental tropical air masses.
8. Account for the variation in rainfall within West Africa.

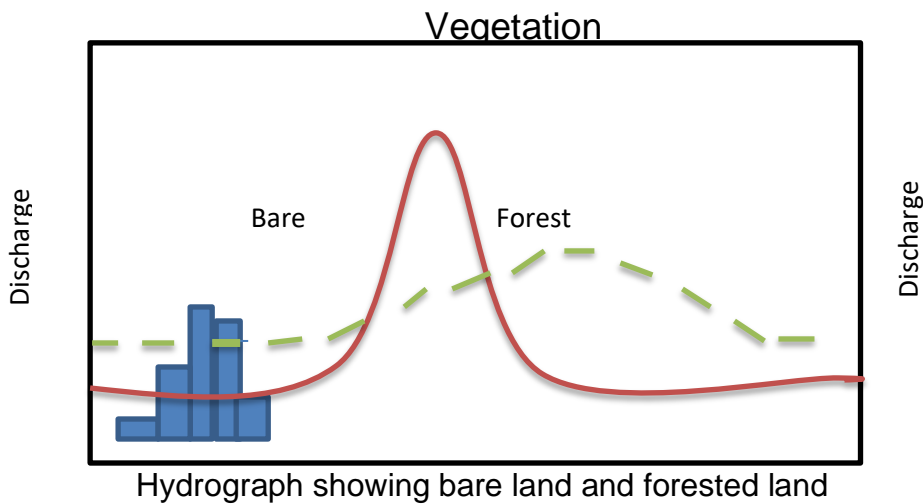
Hydrosphere

1. Explain the four processes of river erosion.
2. Explain the four processes of river transportation.
3. Explain helicoidal flow.
4. Explain, with the aid of diagrams, the formation of one feature of river erosion/deposition. Choose from the list below:
 - V-Shaped Valley
 - Waterfall
 - Meander
 - Oxbow Lake
5. Explain why the transfer of water between land, air and sea can be described as a cycle.
6. Explain the distribution of water in the global hydrological cycle.
7. To what extent can human activity affect the global hydrological cycle?
8. Analyse the factors which affect the amount of water in a drainage basin.

9. With the aid of a diagram, explain the main features of a hydrograph. You should mention rising limb, receding limb, lag time and falling limb.
10. Look at the diagram below. Discuss how the features shown in the diagram affect a hydrograph.



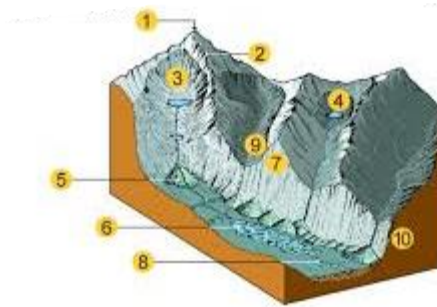
11. Look at the graph below. Compare these two hydrographs showing bare land and forested land. Which one has the largest lag time? Explain your answer.



Lithosphere

Glaciation

1. Explain the processes of freeze-thaw, plucking and abrasion.
2. Identify the glacial features shown on the diagram below.



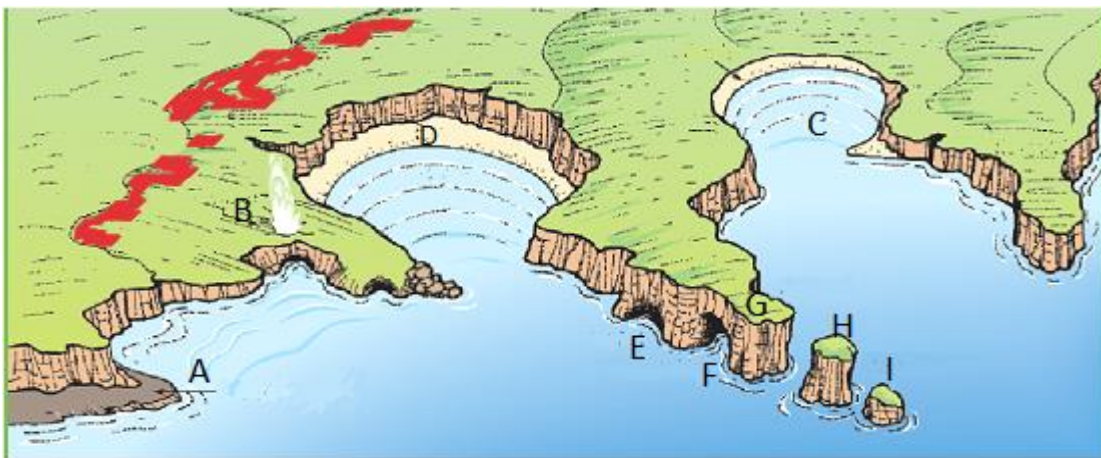
3. Identify and describe the features which show that the area in the photo below has been glaciated.



4. Explain, with the aid of diagrams, the formation of one feature of glacial erosion and one feature of glacial deposition. Choose from the list below:
 - Corrie
 - Arête
 - Pyramidal Peak
 - U-Shaped Valley
 - Hanging Valley
 - Ribbon Lake
 - Drumlin
 - Esker
 - Terminal Moraine

Coasts

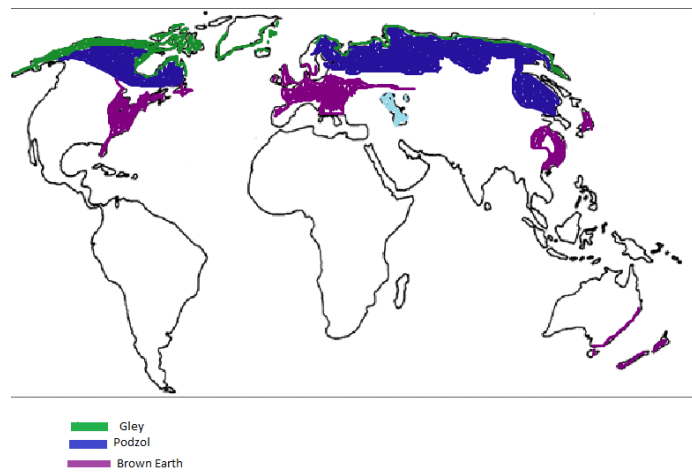
1. Describe and explain the movement of waves.
2. Explain longshore drift.
3. Explain the four processes of coastal erosion.
4. Identify the coastal features shown on the diagram below.



5. Explain, with the aid of diagrams, the formation of one feature of coastal erosion and one feature of coastal deposition. Choose from the list below:
 - Wave cut platform
 - Headland and bay
 - Cave
 - Arch
 - Stack
 - Spit
 - Bar
 - Tombolo

Biosphere

1. Explain the main factors which affect soil formation.



2. Using the diagram above, discuss the location of podzols, brown earth and gley soils.
3. Explain the reasons why brown earths and gley soils have developed in these areas.
4. For a podzols soil, explain the main conditions and soil-forming processes which have led to its formation.
5. Explain how the relief in this photograph can affect soil formation.
6. Look at the photo below. What kind of soil is likely to form in this environment? Give reasons to support your answer.



Population

1. Look at the information below. Discuss the reasons why population data taken from census records could be unreliable.



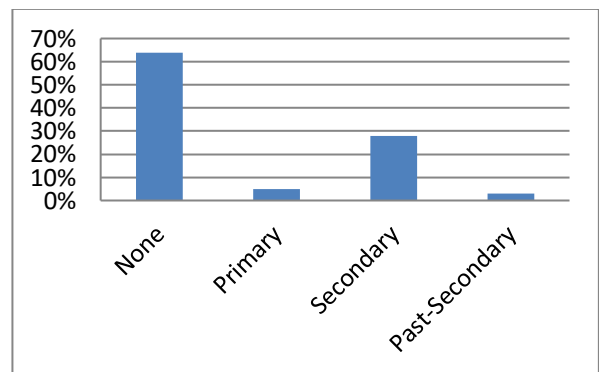
a. Bomb damage, Syria



c. Rain forest tribe dwelling, Amazon



b. Mountain village, Nepal

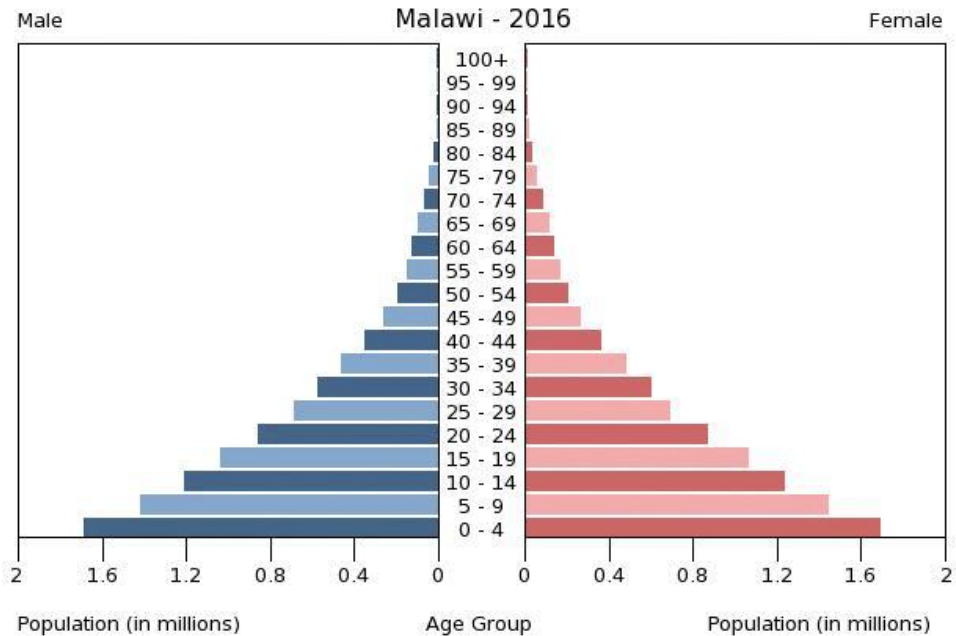


d. Chad: education breakdown

2. 'I don't see why the UK needs a census.'

Explain the ways in which the UK government benefits from having census data.

3. Conducting a census in a developing country like Sierra Leone is more difficult than a developed country like the UK. Discuss.



4. Look at the diagram above. Discuss the consequences of this population structure for Malawi in the future for its economy and welfare of its people.
5. Explain the problems faced by countries with an aging population, and the measures taken to deal with these problems. Comment on the effectiveness of these measures.
6. 'I was OK at the beginning, but as I started living here life got difficult. This is not the life I dreamed of.'
Look at the quote above from a Polish migrant. Explain the problems facing Polish immigrants coming to the UK.
7. Explain the differences between forced and voluntary migration.
8. Evaluate the push and pull factors that cause migration.
9. Discuss/evaluate the natural and human factors that produce refugees.

Rural

1. For a named area you have studied, discuss the consequences of rural land degradation on the people and the environment.
2. Referring to a named area you have studied, explain some of the measures which have been taken to conserve soil and reduce the spread of rural land degradation.
3. Evaluate the effectiveness of these measures.
4. Look at the table below. For either a semi-arid or the Amazon basin explain measures used to prevent rural land degradation.

Soil conservation strategies	
<u>Semi-arid area</u>	<u>The Amazon Basin</u>
Animal fence	Agroforestry
Dams built in gullies	Crop rotation
Stabilisation of dunes	Return to traditional farming
'Magic stones' (diguettes)	Purchase by conservation groups

5. Which reference to the Cairngorms National Park or any other glaciated area you have studied, explain the land use conflicts which may occur.
6. Explain, in detail, the methods used to manage these conflicts.
7. Analyse how successful these strategies have been.
8. With reference to the Dorset area or any other coastal area you have studied, explain the land use conflicts which may occur.
9. Explain, in detail, the methods used to manage these conflicts.
10. Explain, in detail, how successful these strategies have been.

Urban

A Developed World City eg Glasgow or any other developed world city you have studied

1. Explain why Glasgow faced major housing problems after the Second World War.
2. Evaluate the ways in which the city tackled these problems.
3. Analyse the main problems of living in the renovated Gorbals housing area at the beginning of the 1960's.
4. Explain how these problems were solved.
5. Discuss the advantages and disadvantages of the Glasgow Harbour Scheme.
6. Explain why there was a need for traffic management in Glasgow.
7. Discuss the methods used to manage traffic in Glasgow.
8. Evaluate the success of the M74 extension.

A Developing World City eg Rio de Janeiro or any other developing world city you have studied

9. Explain why there is a need for housing management in Rio de Janeiro.
10. Explain the main problems of favelas.
11. Discuss the methods used by the city authorities to manage the problems.
12. Evaluate the success of these methods.
13. Discuss why there is a need for traffic management in Rio de Janeiro.
14. Explain the improvements made to public transport.
15. Evaluate the success of these improvements.

River Basin Management

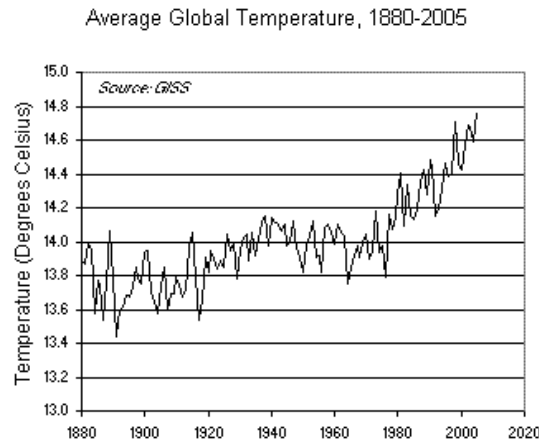
1. Discuss the physical features of the Colorado basin.
2. Explain the physical and human factors which need to be considered when selecting and developing sites for dams.
3. For your chosen river basin management scheme explain the benefits of the scheme. You should refer to social, economic and environment consequences.
4. For your chosen river basin management scheme explain the problems of the scheme. You should refer to social, economic and environmental consequences.
5. Discuss why extracting water from the Colorado River could cause problems for the basin states and Mexico in the future.

Development and Health

1. Name one social indicator and one economic indicator of development and discuss how they show a country's level of development.
2. Explain the advantages of using a composite indicator of development such as the HDI rather than a single indicator.
3. Referring to named developing countries that you have studied, account for the wide range in levels of development between developing countries.
4. Explain, in detail, the physical and human causes of malaria.
5. Analyse the benefits to a developing country of controlling the disease.
6. Discuss methods used to try to control the spread of malaria.
7. Evaluate the effectiveness of these methods.
8. Evaluate the effectiveness of some specific primary health care strategies employed in developing countries you have studied.

Global Climate Change

1. Explain the 'greenhouse effect'.
2. Evaluate how the greenhouse effect contributes to an increase in global temperatures.
3. Study the graph below. Discuss the variation in global average temperatures from 1880-2005.



4. Evaluate the main causes of global warming.
5. Explain why some countries in the world contribute more to global warming than others.
6. Discuss the effects climate change could have in Scotland.
7. Explain the impact of these effects.
8. Will climate change bring benefits to some areas? Give reasons for your answer.
9. The effects of climate change are not limited to Scotland. Explain the ways in which climate change can affect the world as a whole.
10. Explain ways in which people can try to reduce global warming.
11. 'Climate change is global problem. If we're to fix it we need a global solution and we need it soon' – quote from World Wildlife Fund (WWF).
What role can a) businesses and b) governments play in reducing climate change? How successful are these methods likely to be?