

## Geography A Level Summer Homework

### **The Water and Carbon Cycles**

This unit is described in the syllabus as

*"Systems in physical geography: systems concepts and their application to the water and carbon cycles inputs – outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium. "*

#### **Task:**

1. Print, read and highlight the following article on the carbon cycle.
2. Produce a summary of the top 10 key points from the article
3. Create a diagram that shows the flows or fluxes between these pools.

<http://globecarboncycle.unh.edu/CarbonCycleBackground.pdf>

Use the information from the article, as well as additional research, to answer the following questions. (Remember to record the sources you use as part of your research)

#### **Questions:**

1. **What are the major stores/ pools of carbon? (4)**
2. **Outline the process of photosynthesis in the carbon cycle. (3)**
3. **Combustion releases carbon into the atmosphere. What is the source of this carbon? (1)**
4. **What is carbon sequestration? (1)**
5. **Explain how wildfires cause changes in the carbon cycle over time (4).**
6. **What is the enhanced greenhouse effect? (1)**

### **Changing Places**

This unit is described in the syllabus as

*"This section of our specification focuses on people's engagement with places, their experience of them and the qualities they ascribe to them, all of which are of fundamental importance in their lives."*

#### **Task:**

1. Find out what a clone town is.
2. Using the BBC, the Guardian and the Independent news sites, find out what you can about Totnes and its fight against becoming a clone town. Summarise your research under these headings
  - What is the issue?
  - What were the main arguments?
  - How did the campaign achieve its aim?

Use the information from the articles, as well as additional research, to answer the following questions. (Remember to record the sources you use as part of your research)

#### **Questions:**

1. **What are the 3 key concepts of place?(3)**
2. **How does place help define a person's identity? (3)**
3. **What factors may affect insider and outside perspectives on place? (3)**
4. **Give 2 reasons why a government might adopt strategies to change people's perception of place (2).**
5. **What do the following key terms mean (3):**  
**Rebranding**  
**Reimaging**  
**Regeneration**

### **Coastal Systems and Landscapes**

*This section of our specification focuses on coastal zones, which are dynamic environments in which landscapes develop by the interaction of winds, waves, currents and terrestrial and marine sediments. The operation and outcomes of fundamental geomorphological processes and their association with distinctive landscapes are readily observable. In common with water and carbon cycles, a systems approach to study is specified.*

Use your research skills to find the answers to the following questions:  
(remember to record the sources you use as part of your research)

#### **Questions:**

- 1. Create a flow diagram to show the coast operating as an open system (3)**
- 2. Explain why coasts are classed as open systems (1)**
- 3. Define what is meant by dynamic equilibrium (1)**
- 4. Outline characteristics of constructive waves (3)**
- 5. Explain wave refraction (6)**
- 6. What is a sediment cell? (1)**
- 7. How does vegetation influence the formation of sand dunes? (3)**
- 8. What is a dune slack? (1)**

### **Global Systems and Global Governance**

*This section of our specification focuses on globalisation – the economic, political and social changes associated with technological and other driving forces which have been a key feature of global economy and society in recent decades.*

Read the attached article on globalisation and use this, as well as additional research, to answer the following questions. (Remember to record the sources you use as part of your research)

#### **Questions:**

- 1. Define the term globalisation (1).**
- 2. What is foreign direct investment? (1)**
- 3. Outline how IT systems and transport have contributed to the process of globalisation (4)**
- 4. What are the advantages and disadvantages of trade agreements? (6)**