



GCE AS/A level

1201/01

GEOGRAPHY G1

CHANGING PHYSICAL ENVIRONMENTS

P.M. TUESDAY, 17 May 2011

1½ hours

ADDITIONAL MATERIALS

In addition to this examination paper, you will need one 12 page answer book.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Answer **all** questions.

Write your answers in the separate answer book provided.

Write your name, centre number and candidate number in the spaces at the top of the answer book.

INFORMATION FOR CANDIDATES

Each question carries **25** marks.

The number of marks is given in brackets at the end of each question or part-question.

You are reminded that assessment will take into account the quality of written communication used in your answers.

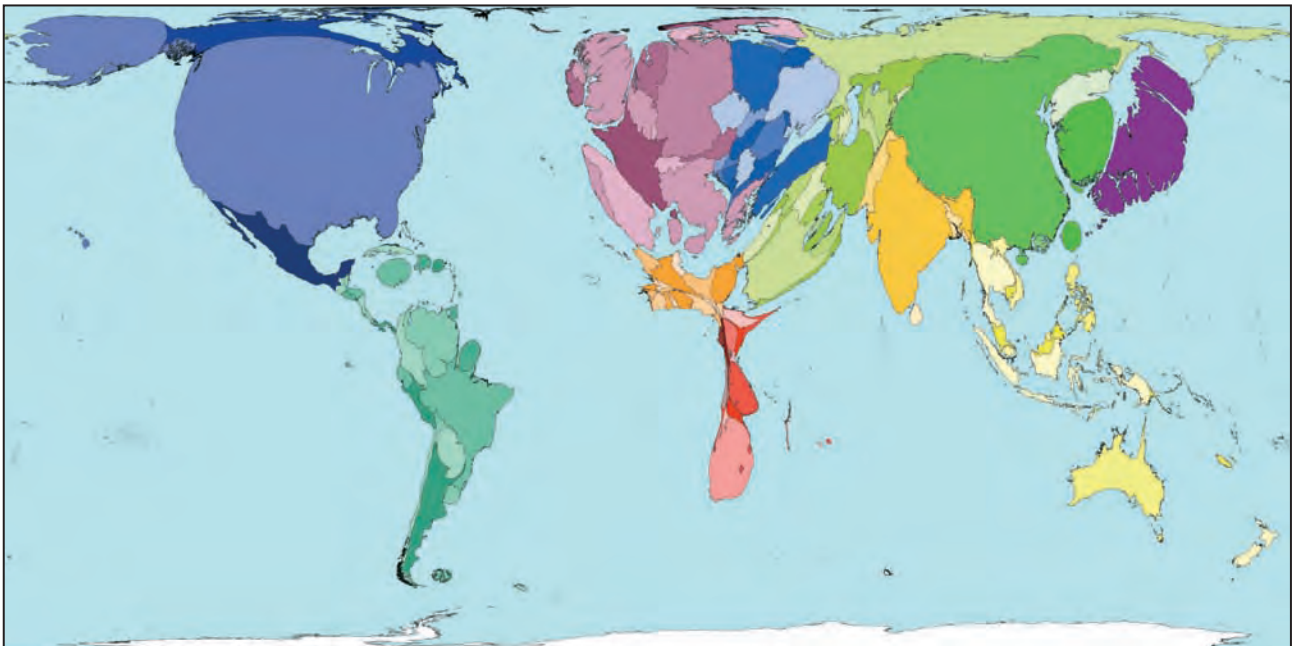
THIS PAPER REQUIRES THAT YOU MAKE THE FULLEST POSSIBLE USE OF APPROPRIATE EXAMPLES IN SUPPORT OF YOUR ANSWERS. SKETCH-MAPS AND DIAGRAMS SHOULD BE INCLUDED WHERE RELEVANT.

Answer **all** questions.

Make the fullest possible use of examples in support of your answers.

Figure 1a: Global pattern of greenhouse gas emissions

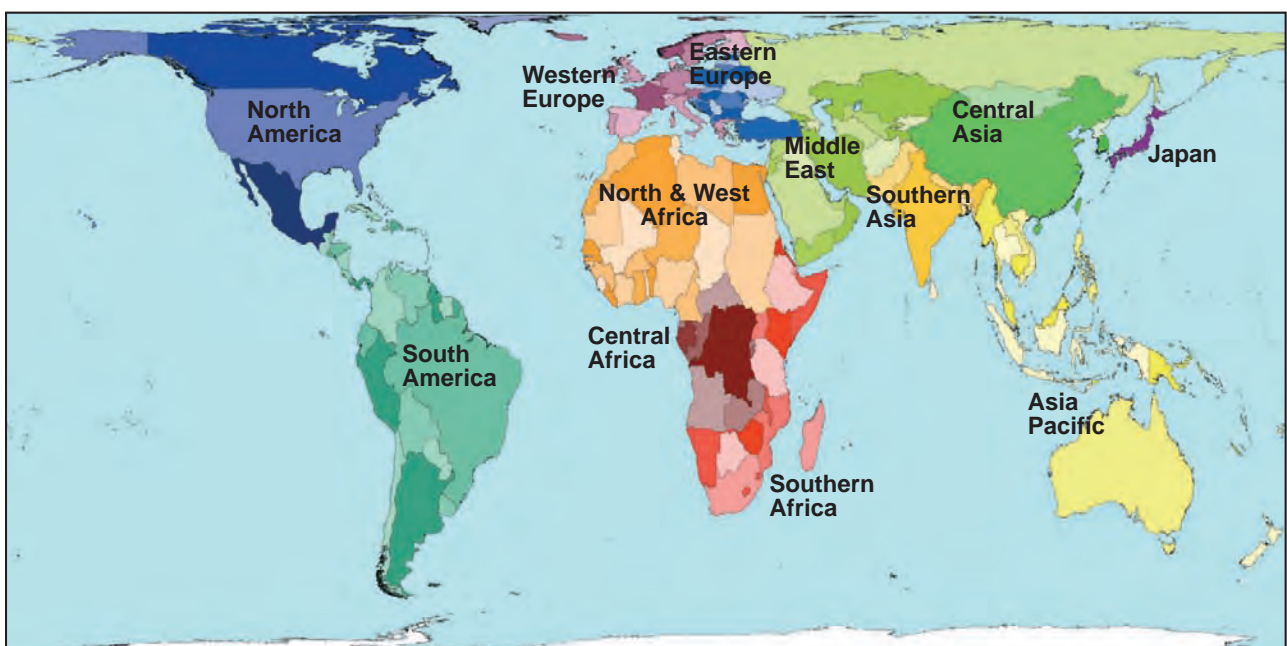
Country size shows the proportion of greenhouse gas emissions from that country.



Source: www.worldmapper.org No.299

Figure 1b: Worldmapper regions

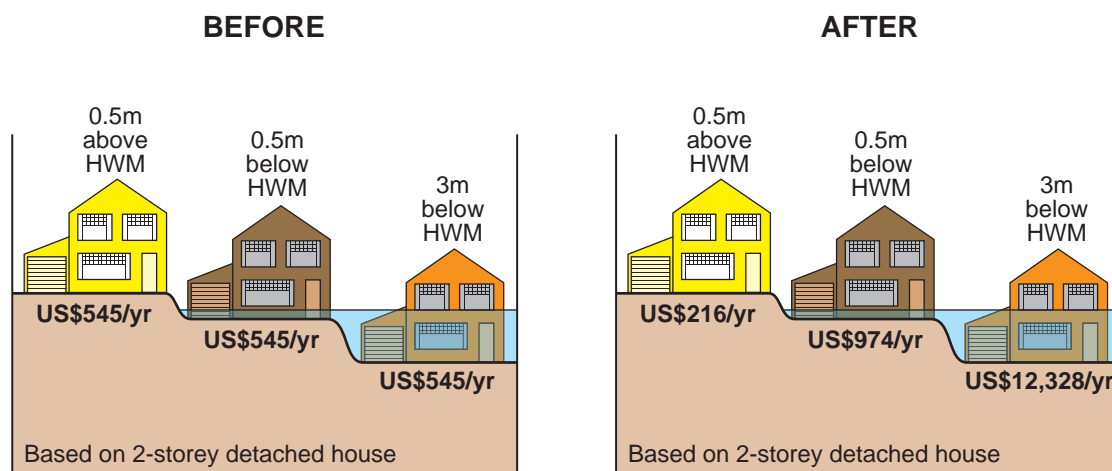
The colours group countries into 12 named world regions.



Source: www.worldmapper/index_map

1. (a) Use **Figures 1a** and **1b** to describe the global pattern of greenhouse gas emissions. [5]
- (b) Examine the role of environmental factors in recent climate change. [10]
- (c) Outline the success of strategies that have been used to tackle climate change. [10]

Figure 2: Cost of building insurance before and after the introduction of ‘flood insurance rate maps’ in Ohio, USA



HWM – High Water Mark is the maximum height for the 100 year flood.

Adapted from www.floodsmart.gov

2. (a) Use **Figure 2** to describe the changes in insurance costs after the introduction of flood insurance rate maps. [5]
- (b) Examine the causes of **one** named river flood. [10]
- (c) Describe and explain how **two** strategies have been used to manage the flood hazard within drainage basins. [10]

Figure 3: Occurrence of hazards in countries of south east Europe (2008)

| Country | Hazards | | | | | | | Annual average number of deaths due to all hazards |
|------------------------|------------|-------|------------|---------|---------------------|-----------|----------|--|
| | Earthquake | Flood | Land-slide | Drought | Extreme temperature | Windstorm | Wildfire | |
| Albania | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | 7.8 |
| Bosnia and Herzegovina | | ✓ | ✓ | ✓ | | ✓ | ✓ | 3.7 |
| Bulgaria | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | 6.6 |
| Croatia | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | 8.6 |
| Republic of Macedonia | | ✓ | | ✓ | ✓ | ✓ | ✓ | 13.4 |
| Moldova | | ✓ | | ✓ | ✓ | ✓ | | 1.8 |
| Romania | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | 82.4 |
| Serbia and Montenegro | ✓ | ✓ | | | ✓ | ✓ | ✓ | 10.0 |
| Slovenia | ✓ | ✓ | | | ✓ | | | 0.04 |
| Turkey | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | 941.4 |
| average for the region | | | | | | | | 107.6 |

✓ – occurrence of hazard

Source: <http://www.preventionweb.net>

3. (a) Describe the patterns shown in **Figure 3**. [7]
- (b) Outline what other information you would need for a fuller understanding of hazards in south east Europe shown in **Figure 3**. [8]
- (c) Describe and explain how you planned your investigation into a changing physical environment. [10]

You should state clearly the question that you have investigated.