



**Plate Tectonics**  
**Geography Marking Scheme**  
**Higher Level**

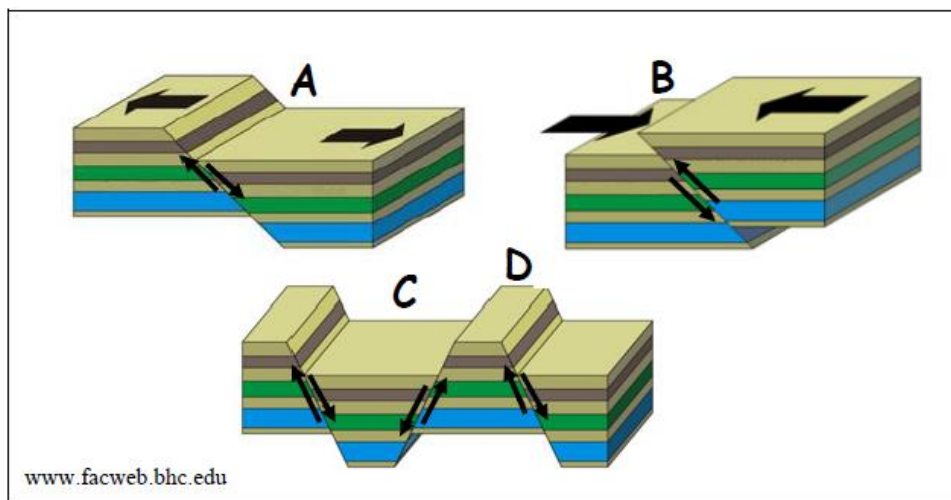
2013

Part 1 – Q1

- Q.1 (i) A = North American B = Eurasian  
(ii) C = Basalt/Extrusive/Volcanic  
(iii) C = 0 - 60 million / 60 million  
D = 120 - 180 million / 60 million  
(iv) Any valid reason explained

Section 1 – Q2 A

A. Faulting and Landforms



Examine the diagrams above and answer the following questions.

- (i) Name the type of fault at **A** and the type of fault at **B**.  
(ii) Explain briefly what causes the type of faulting at **A** or at **B**.  
(iii) Name the landform at **C** and the landform at **D** that result from faulting.

[20m]

Parts (i) & (iii) 8 marks each

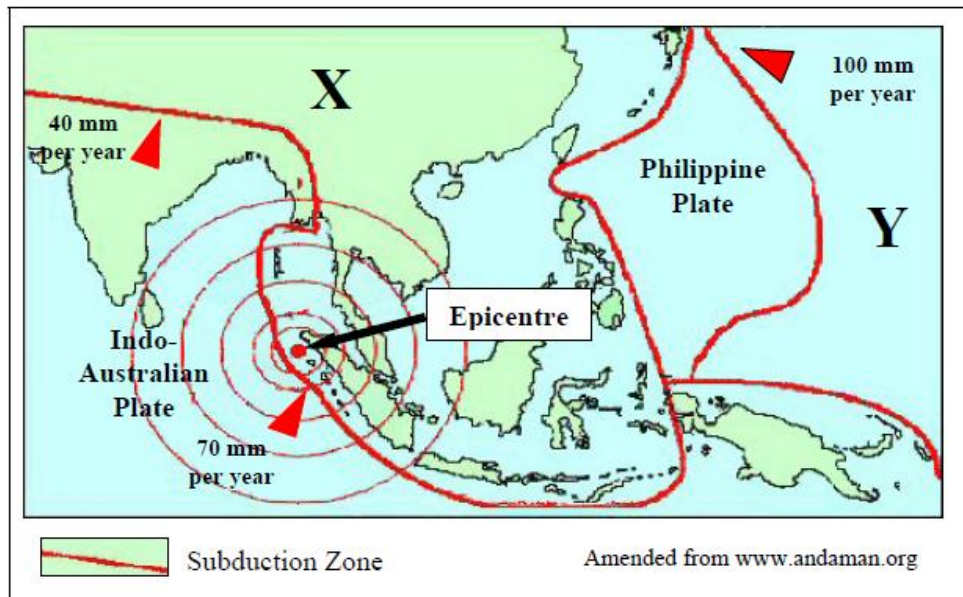
Part (ii) 4 marks

- (i) A = Normal 4 marks  
B = Reverse 4 marks  
(ii) Any valid explanation 2 + 2 marks  
(iii) C = Rift Valley/Graben 4 marks  
D = Block Mountain/Horst 4 marks



Q2 A

A. Plate Tectonics – Earthquakes



Examine the map above and answer the following questions.

- Name the plates marked X and Y.
- What is the average annual movement of the Indo-Australian Plate?
- Explain what is meant by the term 'epicentre'.
- Given that the epicentre of the earthquake shown above is off shore, name and briefly explain the main effect of this earthquake on the sea.
- Name **two** scales that measure the magnitude/intensity of an earthquake.

[20m]

- |       |                       |             |
|-------|-----------------------|-------------|
| (i)   | X = Eurasian          | 2 marks     |
|       | Y = Pacific           | 2 marks     |
| (ii)  | 55 mm                 | 2 marks     |
| (iii) | Any valid explanation | 2 + 2 marks |
| (iv)  | Tsunami               | 4 marks     |
|       | Any valid explanation | 2 marks     |
| (v)   | Any two scales        | 2 + 2 marks |

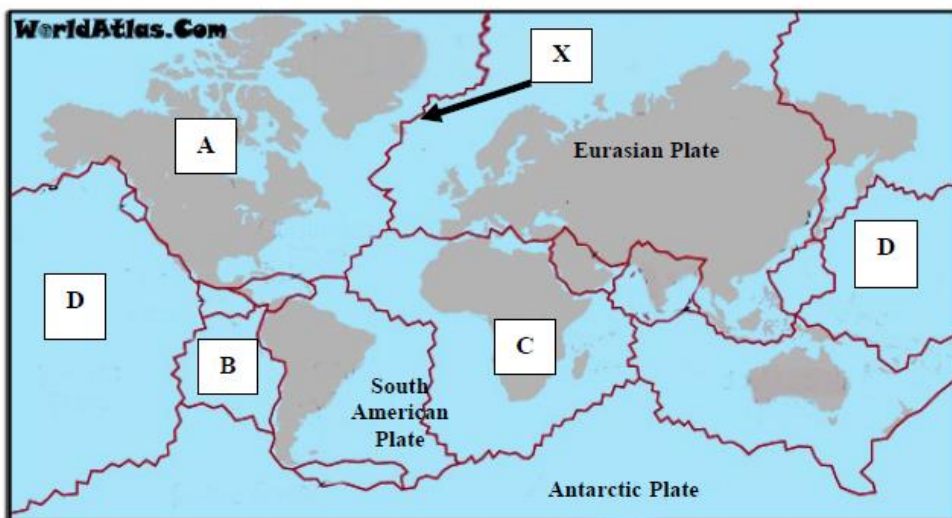
Part 1 – Q8

- Q.8 D
- C
- A
- B

Section 1 – Q2 A

Question 2

A. Plate Tectonics



Examine the map above showing the major crustal plates of the earth and answer the following questions:

- (i) Name the plates A, B, C and D.
- (ii) Name the plate boundary at X.

5 parts @ 4 marks each

- (i) A - North American Plate      4 marks
- B - Nazca Plate                    4 marks
- C - African Plate                    4 marks
- D - Pacific Plate                    4 marks
  
- (ii) X - Mid Atlantic Ridge or      4 marks
- Constructive/divergent

[20m]

**2010**

**Section 1 – Q2 B**

**B. Folding**

Explain how the study of plate tectonics has helped us to understand the global distribution of Fold Mountains.

**[30m]**

Reference to global distribution:	2 marks + 2 marks
2 named Fold Mountains:	2 marks + 2 marks
Plate tectonics examined:	11 × SRPs

- Max 6 SRPs if examination is of plate tectonics with no reference to Fold Mountains
- Give credit to relevant information on diagrams



Q3 A

A. Earthquakes



Examine the map above relating to the earthquake in Haiti in January 2010 and answer the following questions in your answer book:

- (i) Activity along which **two** plates resulted in the earthquake in Haiti?
- (ii) What type of fault caused the earthquake?
- (iii) Describe the fault responsible for the earthquake.
- (iv) What tectonic activity along the subduction zone created the island arc on the map?

[20m]

Four answers @ 5 marks each:

- |       |                   |   |
|-------|-------------------|---|
| (i)   | 3 marks + 2 marks | North American Plate / Caribbean Plate            |
| (ii)  | 5 marks           | Transform / Transverse / Tear / Passive / Neutral |
| (iii) | 3 marks + 2 marks | Any valid description                             |
| (iv)  | 5 marks           | Volcanic Activity / Rock Melting etc.             |

2009

Part 1 – Q1

Q1    A  
         D  
         C  
         B

Section 1 – Q1 B

B. PLATE MARGINS

Explain, with reference to examples you have studied, how plate tectonics helps us understand the forces at work along crustal plate boundaries.

[30m]

Name two forces:	2 marks + 2 marks
Name examples of different boundaries:	2 marks + 2 marks
Discussion:	11 x SRPs

- Credit 1 named example from SRPs.
- Give credit to relevant diagrams for a max of 1 x SRPs and credit extra annotated information on diagrams.

Q2 A

Examine the map above, showing the major crustal plates of the Earth. **In your answer book** answer the following:

- Name the volcanic island at **L**.
- Which term constructive or destructive best describes the plate boundary **M**?
- Name the plate at **N**.
- Which of the following statements is **False**?
  - As the plates move apart (very slowly) magma rises from the mantle.
  - Convection currents inside the Earth cause the earth's plates to move apart.
  - The North American Plate moves eastwards.
  - Volcanoes often form at plate boundaries.

[20m]

Four answers @ 5 marks each

- No grading / scaling of marks

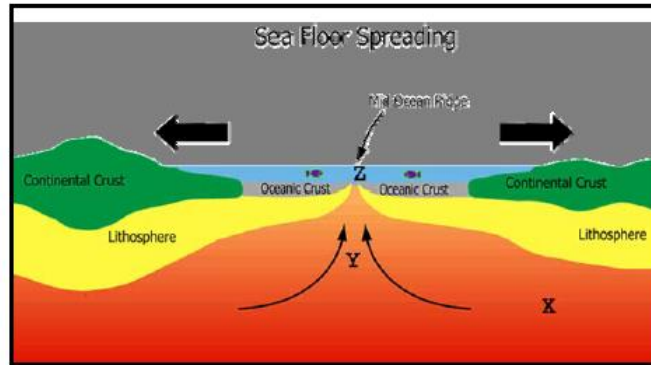
- L = Iceland
- M = Constructive
- N = Eurasian Plate
- Q The North American Plate moves eastwards.



2008

Section 1 – Q2 A

A. SEA FLOOR SPREADING



Examine this diagram. Answer these questions in your answer book:

- (i) Name the Earth's internal layer labelled X.
- (ii) Name the internal process shown by the arrows at Y.
- (iii) Name **one** mid-ocean ridge which you have studied.
- (iv) Name the type of plate boundary shown at Z.

[20m]

Four sections @ 5 marks each

## 2007

### Section 1 – Q1 B

#### B PLATE BOUNDARIES

“Plate boundaries are zones where crust is both created and destroyed”.

Examine the above statement, with reference to examples you have studied.

(30 marks)

Name one example of each boundary: 2 marks + 2 marks  
Discussion re creation/destruction: 7 (6) SRPs or 6 (7) SRPs

### Q2 A

#### A PLATE TECTONICS

Answer the questions in your answer-book.

(20 marks)

Four answers @ 5 marks each

- No grading / scaling of marks

### Q3 B

#### B STRUCTURES OF DEFORMATION

Examine the impact of **folding and faulting** on the landscape.

In your answer refer to **one** landform in **each** case.

(30 marks)

#### **Folding**

Named landform: 2 marks  
Discussion: 7(6) x SRPs

#### **Faulting**

Named landform: 2 marks  
Discussion: 6 (7) x SRPs

- Credit relevant labelled diagrams.
- Give credit for one named example of each landform

## 2006

### Section 1 – Q3 A

#### A STRUCTURES OF DEFORMATION

The following diagrams show structures of deformation.

In your answer-book, match **each** of the structures below with the correct label A to D in the diagrams above. (20 marks)

Four answers @ 5 marks each

- No grading / scaling of marks

### Q3 B

#### B PLATE TECTONICS

Explain how a study of plate tectonics helps us understand the occurrence of earthquakes.

(30 marks)

Plate tectonics examined: 12 SRPs  
Overall coherence: 6 marks graded

- Credit relevant labelled diagrams as new information. (Do not double-mark information)
- Do not give credit for the effects of earthquakes.
- If all plate tectonics but no earthquakes (or vice versa), OC = 0m.
- Give credit for a maximum of 2 examples from the SRPs.