

Geography AQA

Paper 1. Section B – The Living World

Tectonic Hazards

Exam Booklet

3.1.1.1 Natural hazards

Key idea	Specification content
Natural hazards pose major risks to people and property.	Definition of a natural hazard. Types of natural hazard. Factors affecting hazard risk.

3.1.1.2 Tectonic hazards

Key idea	Specification content
Earthquakes and volcanic eruptions are the result of physical processes.	Plate tectonics theory. Global distribution of earthquakes and volcanic eruptions and their relationship to plate margins. Physical processes taking place at different types of plate margin (constructive, destructive and conservative) that lead to earthquakes and volcanic activity.
The effects of, and responses to, a tectonic hazard vary between areas of contrasting levels of wealth.	Primary and secondary effects of a tectonic hazard. Immediate and long-term responses to a tectonic hazard. Use named examples to show how the effects and responses to a tectonic hazard vary between two areas of contrasting levels of wealth.
Management can reduce the effects of a tectonic hazard.	Reasons why people continue to live in areas at risk from a tectonic hazard. How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard.

EXAM PRACTISE QUESTIONS

1. Define the term natural hazard (1 mark) pg. 2 in revision guide

Description

2. Define the term geological hazard (1 mark) pg. 2 in revision guide

Description

3. Define the term meteorological hazard (1 mark) pg. 2 in revision guide

Description

4. Decide if the following hazards are meteorological or geological (4 marks) pg. 2 in revision guide

Hazard	Meteorological or Geological?
Earthquake	
Heatwave	
Volcanic eruption	
Tropical Storms	

5. Explain how vulnerability can affect the hazard risk (2 marks) pg. 2 in revision guide

(K)nowledge	(U)nderstanding
Some places are more vulnerable because they have a higher population density.	

6. Explain **two** ways that the nature of a hazard can affect hazard risk. (4 marks) pg. 2 in revision guide

(K)nowledge	(U)nderstanding
(K)nowledge	(U)nderstanding

7. Explain how capacity to cope affects the hazard risk (2 marks) pg. 2 in revision guide

(K)nowledge	(U)nderstanding

8. Using the figure below state two primary effects of a natural hazard (2 marks) pg. 3 in revision guide

Figure 6 – a photograph showing the effects of a recent earthquake in the Philippines



(D)escribe	(D)escribe

9. State two secondary effects of a natural hazard (2 marks) pg. 3 in revision guide

(D)escribe	(D)escribe

10. Decide for each the responses below if they are immediate or long term responses. (4 marks) pg. 3 in revision guide

Response	Immediate or long-term response
Evacuate people out of danger areas	
Provide food, drink and emergency shelter	
Repair buildings, roads and railways	
Improve forecasting, monitoring and evacuation plans for future events	

11. What is the name given to the slabs of crust which float on the mantle? (1 mark) pg. 4 in revision guide

Description

12. State one difference between the continental crust and oceanic crust (1 mark) pg. 4 in revision guide

Description

13. What causes tectonic plates to move? (1 mark) pg. 4 in revision guide

Description

14. What is the place called where tectonic plates meet? (1 mark) pg. 4 in revision guide

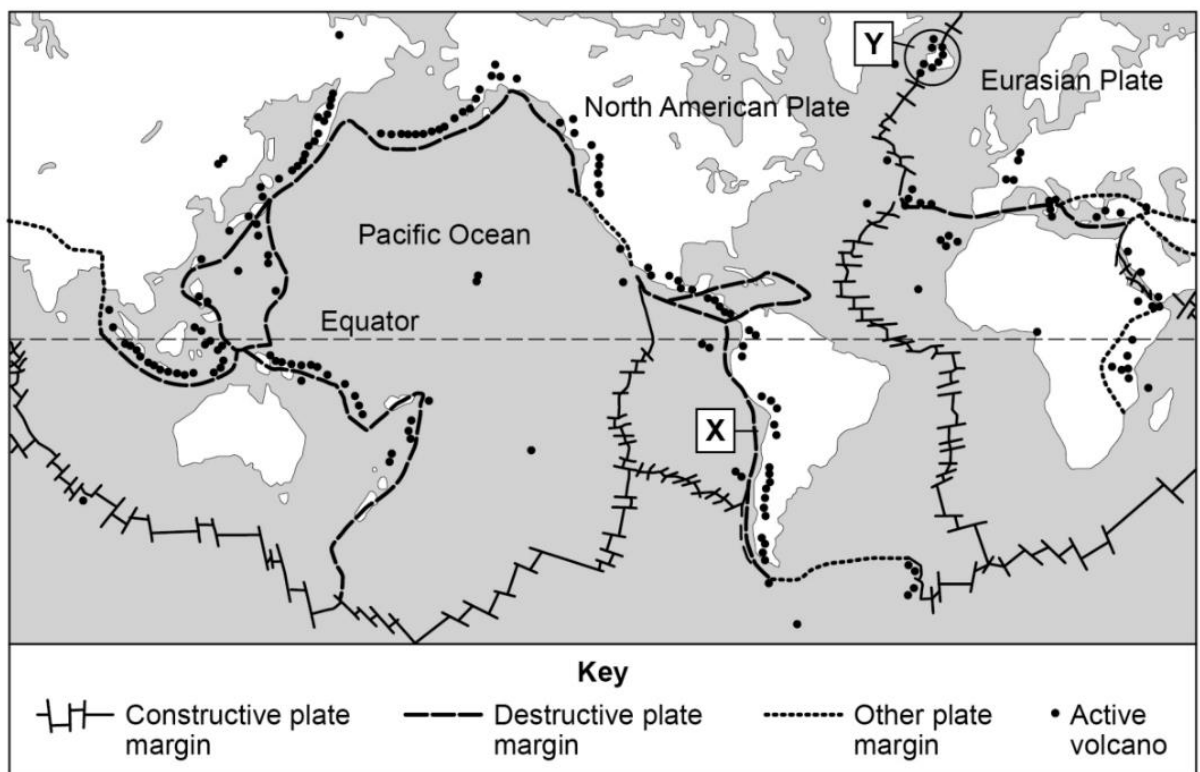
Description

15. Describe the movement of plates at each plate margin. (3 marks) pg. 4 in revision guide

Plate Margin	Description
Destructive	
Constructive	
Conservative	

16. Using the figure below describe the movement of plates at X (1 mark) pg. 4 in revision guide

Figure 1



Description

17. Explain the formation of volcanoes at a destructive plate margin. (4 marks) pg. 4 & 5 in revision guide

Step 1	
Step 2	
Step 3	
Step 4	

18. Explain the formation of volcanoes at a constructive plate margin. (2 marks) pg. 4 & 5 in revision guide

Step 1	
Step 2	
Step 3	

19. State the plate margin that does not have any volcanoes (1 mark) pg. 5 in revision guide

Description

20. List the plate margins where earthquakes occur (3 marks) pg. 5 in revision guide

(D)escribe	(D)escribe	(D)escribe

21. Explain how earthquakes occur at a conservative plate margin (4 marks) pg. 5 in revision guide

Step 1	
Step 2	
Step 3	
Step 4	

22. Explain how we measure the power released by an earthquake. (2 marks) pg. 5 in revision guide

(K)nowledge	(U)nderstanding

23. Complete the fact file for the New Zealand earthquake. (4 marks) pg. 6 in revision guide

Date	
GDP per capita	
Plate margin(s)	
Magnitude	

24. Explain the primary effects of the New Zealand earthquake. (6 marks) pg. 6 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

25. Explain the secondary effects of the New Zealand earthquake (6 marks) pg. 6 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

26. Complete the fact file for the Nepal earthquake (4 marks) pg. 6 in revision guide

Date	
GDP per Capita	
Plate margin	
Magnitude	

27. Explain the primary effects of the Nepal earthquake (6 marks) pg. 6 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

28. Explain the secondary effects of the Nepal earthquake pg. 6 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

29. Explain the immediate responses to the New Zealand earthquake (6 marks) pg. 7 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

30. Explain the long term- responses to the New Zealand earthquake (6 marks) pg. 7 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

31. Explain the immediate responses to the Nepal earthquake (6 marks) pg. 7 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

32. Explain the long-term responses to the Nepal earthquake (6 marks) pg. 7 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

33. Explain why people continue to live in areas that are at risk from a tectonic hazard. (6 marks) pg. 8 in revision guide

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

34. Explain how each management strategy reduces the effects of tectonic hazards (6 marks) pg. 8 in revision guide

Management Strategy	(K)nowledge	(U)nderstanding	(U)nderstanding
Monitoring	Use of seismometers to monitor earth movements.		
Protection	Building earthquake resistant housing such as deeper foundations.		
Planning	The government using land use zoning and doesn't give permission to build key buildings in high-risk areas.		

Question	“Primary effects of tectonic hazards are more significant than secondary effects.” Do you agree? Use one or more examples to explain your answer (9 marks)			
	A (application)	K (knowledge)	U (understanding)	U (understanding)
Paragraph 1				
Paragraph 2 (Challenge – grade 6 +)				
Conclusion (Challenge – grade 8+)				

Question	Long-term responses to an earthquake hazard are more important than immediate responses.” Do you agree? Use one or more examples to explain your answer. (9 marks)			
	A (application)	K (knowledge)	U (understanding)	U (understanding)
Paragraph 1				
Paragraph 2 (Challenge – grade 6 +)				
Conclusion (Challenge – grade 8+)				