Year 6 Geography Assessment: Earthquakes and Tectonic Activity

Learning objective: To demonstrate understanding of the causes, effects, and geographical distribution of earthquakes.

Read each question carefully. Use your geographical knowledge to provide clear, detailed answers. Ensure your spelling and punctuation are accurate.

Finn the dolphin has been mapping the ocean floor and has discovered that the Earth's outer shell is broken into giant moving pieces. When these pieces grind past each other, the energy released can cause the ground to shake violently, known as an earthquake.

Word bank: Tectonic plates · Epicentre · Seismograph · Richter scale · Crust · Mantle · Fault line · Aftershock

1. Name the two layers of the Earth that tectonic plates are located on or within. (2 marks)

2. Explain the difference between the 'focus' and the 'epicentre' of an earthquake. (2 marks)

3. What instrument do scientists use to measure the strength of an earthquake, and what is the name of the scale used to record it? (2 marks)

4. Describe two ways that buildings can be designed to be 'earthquake-proof' to keep people safe. (4 marks)

5. Why are earthquakes often more destructive in densely populated cities compared to remote, unpopulated areas? Provide two reasons. (4 marks)

6. Explain the process of how tectonic plate movement leads to an earthquake. In your answer, mention what happens when plates get stuck and then suddenly slip. (6 marks)

7. If a city spends £500,000 on early warning systems and £250,000 on structural reinforcements, what is the total cost of these safety measures? (5 marks)

Draw: Draw a cross-section diagram of the Earth’s crust showing two tectonic plates pushing against each other. Label the 'fault line' and the 'focus'.

Extension challenge: Research a historical earthquake. Write a short paragraph explaining the impact it had on the local community and the environment. Total: /25