

Answers

The challenge of natural hazards: Tectonic hazards		
Question	Marking guidance	Total marks
1	Two points made: <ul style="list-style-type: none"> earthquakes are found along plate boundaries for example, close to the western edge of the South American plate. 	2
2	One mark for a reason and the second mark for an extension. <ul style="list-style-type: none"> Earthquakes happen where tectonic plates meet. For example, a destructive plate boundary, where an oceanic plate is subducted underneath a continental plate. 	2
3	<p>Indicative content</p> <ul style="list-style-type: none"> The focus of the question must be on volcanoes at destructive plate margins. A destructive plate margin is where two plates are moving towards each other. The denser oceanic plate is subducted beneath the lighter continental plate. As the oceanic plate moves downwards it melts due to friction and heat from the mantle. Less dense magma is created which breaks through to the surface to form steep-sided composite volcanoes. The volcanic eruptions are often very violent and explosive. <p>Level 2 (Clear) 3–4 marks:</p> <ul style="list-style-type: none"> A02 Shows clear geographical understanding of why volcanoes occur at destructive plate boundaries. A03 Demonstrates application of knowledge and understanding to make full interpretation of the processes which cause volcanoes to occur at destructive plate boundaries. <p>Level 1 (Basic) 1–2 marks:</p> <ul style="list-style-type: none"> A02 Shows limited geographical understanding of why volcanoes occur at destructive plate boundaries. A03 Demonstrates application of knowledge and understanding to make limited interpretations of the processes which cause volcanoes to occur at destructive plate boundaries. 0 marks: No relevant content. 	4
3	<p>Indicative content</p> <ul style="list-style-type: none"> Buildings and bridges can be constructed to resist the ground shaking associated with an earthquake. Walls can be reinforced with steel and concrete to reduce movement. Shock absorbers can absorb ground shaking. There are open areas where people go for easy evacuation. Automatic shutters can come down over windows to prevent broken glass falling. Rolling weights on a roof can counteract seismic/shock waves. <p>Level 2 (Clear) 3–4 marks:</p> <ul style="list-style-type: none"> A01 Demonstrates detailed knowledge of how people can be protected from earthquakes. A02 Shows clear geographical understanding of why people need to be protected from earthquakes. <p>Level 1 (Basic) 1–2 marks:</p> <ul style="list-style-type: none"> A01 Demonstrates knowledge of how people can be protected from earthquakes. A02 Shows some geographical understanding of why people need to be protected from earthquakes. 0 marks: No relevant content. 	4
4	<p>Indicative content</p> <ul style="list-style-type: none"> Primary effects: number of people killed/injured; buildings destroyed, e.g. schools and hospitals; homelessness; electricity, water supplies, sanitation and communications affected; need for food and shelter. Secondary effects: landslides; flooding; spread of disease, e.g. cholera; tsunamis; fires. Named example: should be both place and date specific, e.g. the L'Aquila earthquake in central Italy on 6 April 2009. <p>Level 3 (Detailed) 5–6 marks:</p> <ul style="list-style-type: none"> A03 Demonstrates thorough application of knowledge and understanding to give detailed description of earthquakes. Includes detailed place-specific information. A03 Shows full understanding of the interrelationships between primary and secondary effects, using evidence to support response. <p>Level 2 (Clear) 3–4 marks:</p> <ul style="list-style-type: none"> A01 Demonstrates specific and accurate knowledge of the effects of an earthquake. Includes place-specific information. A02 Shows clear geographical understanding of primary and secondary effects. <p>Level 1 (Basic) 1–2 marks:</p> <ul style="list-style-type: none"> A01 Demonstrates some knowledge of the effects of earthquakes. May include some place-specific information. A02 Shows limited geographical understanding of difference between primary and secondary effects. 0 marks: No relevant content. 	6

The challenge of natural hazards: Weather hazards		
Question	Marking guidance	Total marks
1	One mark for each correct answer: B Tropical storms form above warm oceans (27°C or above). D The conditions in the eye of the storm are calm. No credit if three or more statements are shaded.	2
2	One mark for a reason and the second mark for an extension: <ul style="list-style-type: none"> a large number of people die by drowning in a storm surge people are made homeless due to strong winds damaging homes. 	2
3	<p>Indicative content</p> <ul style="list-style-type: none"> Windows, doors and roofs reinforced to strengthen buildings to withstand strong winds. Houses constructed on stilts so that a storm surge will pass beneath. Storm shelters built. Educating people to be prepared for tropical storms. <p>Level 2 (Clear) 3–4 marks:</p> <ul style="list-style-type: none"> A01 Demonstrates detailed knowledge of how people can prepare for tropical storms. A02 Shows clear geographical understanding of why people need to prepare for tropical storms. <p>Level 1 (Basic) 1–2 marks:</p> <ul style="list-style-type: none"> A01 Demonstrates knowledge of how people can prepare for tropical storms. A02 Shows some geographical understanding of why people need to prepare for tropical storms. 0 marks: No relevant content. 	4