

Oxford Revise | Geography | Answers

Chapter 1

All exemplar answers given are worth full marks.

- **1.1** Heat
- **1.2** The data is in categories and a pie chart can display the categories and the proportion of deaths in each category very clearly.
- **1.3** The data is in categories and a pie chart can display the categories and the proportion of deaths in each category very clearly.
- **1.4** Volcanoes, earthquakes, tsunamis. Accept suitable alternative examples/answers.
- **2.1** D
- 2.2 Constructive
- **2.3** Tectonic hazards are found at plate boundaries. For example, there is a band on the west coast of North and South America and all around the Pacific Plate 'Ring of Fire' with a large cluster near Japan.
- **2.4** This question is level-marked:

Level	Marks	Description
3 (detailed)	5–6	 Thorough, detailed, organised, and relevant throughout with supporting evidence and examples Communicates detailed, clear knowledge and understanding Communicates using developed statements and ideas (e.g. uses connectives to fully explore ideas) Good use of geographical terms and vocabulary
2 (clear)	3–4	 Sound throughout with some supporting evidence and examples Communicates some knowledge and understanding Communicates using linked statements and ideas (e.g. uses connectives, but needs further development) Some use of geographical terms and vocabulary
1 (basic)	1–2	 Basic throughout with limited supporting evidence and/or examples Communicates limited knowledge and understanding Communicates using simple statements that are not developed Little or no use of geographical terms and vocabulary
	0	No relevant content

Example answer: Countries on the west coast of South America are at risk from earthquakes and volcanoes because the Nazca plate is moving towards the South American plate. This is a destructive plate boundary. The denser oceanic crust of the Nazca plate is being subducted beneath the less dense continental crust of the South American plate. As they move, the two plates get caught on each other and pressure builds up. When the plates finally jolt free, there are strong earthquakes. The Nazca plate also melts in the mantle and



mixes with seawater. This creates less dense magma which rises through cracks in the Earth's crust and escapes as a volcanic eruption.

- **3.1** B
- **3.2** Tropical storms, heatwaves.

Accept suitable alternative answers.

- 3.3 Constructive
- 3.4 Destructive
- 3.5 Conservative
- **3.6** This question is level-marked:

Level	Marks	Description
2 (clear)	3–4	 Sound, organised and relevant throughout, using supporting evidence and examples Communicates good knowledge and understanding
		 Communicates using developed statements and ideas (e.g. uses connectives) Uses geographical terms and vocabulary
1 (basic)	1–2	 Basic throughout with limited supporting evidence and/or examples Communicates limited knowledge and understanding Explanations are partial Little or no use of geographical terms and vocabulary
	0	No relevant content

Example answer: Some places might be wealthier than other places. This potentially makes them less at risk because they can afford to put protection in place such as earthquake-proof buildings and they are also more likely to have good emergency services. Some places are located in areas that are more hazard prone. For example, living near a plate boundary or on a river's flood plain will make a place more at risk from natural hazards.

3.7 This question is level-marked:

Level	Marks	Description
2 (clear)	3–4	 Sound, organised and relevant throughout, using supporting evidence and examples Communicates good knowledge and understanding Communicates using developed statements and ideas (e.g. uses connectives) Uses geographical terms and vocabulary
1 (basic)	1–2	 Basic throughout with limited supporting evidence and/or examples Communicates limited knowledge and understanding Explanations are partial Little or no use of geographical terms and vocabulary
	0	No relevant content



Example answer: A conservative plate boundary is made up of two tectonic plates sliding past each other, either in different directions or in the same direction, but at different speeds. As the plates move past each other, they get caught on each other. Pressure then builds up because the plates are still trying to move. Eventually they jolt free, and this releases energy and causes an earthquake.

3.8 There are convection currents in the mantle. The plates are sitting on top of a moving mantle which makes the plates move.

Accept answers that refer to slab pull theory.

- **3.9** At constructive plate boundaries, two tectonic plates are moving apart from each other. As they move apart, a gap appears between the two plates. Partially mantled magma in the mantle rises to fill this gap creating new land and volcanic eruptions.
- **3.10** This question is level-marked:

Level	Marks	Description
2 (clear)	3–4	 Sound, organised and relevant throughout, using supporting evidence and examples Communicates good knowledge and understanding Communicates using developed statements and ideas (e.g. uses connectives) Uses geographical terms and vocabulary
1 (basic)	1–2	 Basic throughout with limited supporting evidence and/or examples Communicates limited knowledge and understanding Explanations are partial Little or no use of geographical terms and vocabulary
	0	No relevant content

Example answer: At destructive boundaries, a plate of dense oceanic crust is moving towards a less dense plate of continental crust. Because it is heavier, the oceanic crust is subducted beneath the continental crust. The oceanic crust is melted through heat resulting from friction but also when it enters the hot mantle. This melted crust also mixes with seawater, which makes it less dense and lighter than the mantle, so it rises to the surface through cracks in the Earth's surface as a volcanic eruption.

- **4.1** 20 208
- **4.2** 220 000
- **4.3** 4
- **4.4** 1
- **4.5** 17

Working:

Number of deaths in ascending order: 0, 1, 1, 2, 3, 4, 5, 6, 18, 2248, 220 000

Median: 4 Median of the bottom half: 1

Median of the top half: 18 Inter-quartile range: 18-1=17



- 4.6 The mean number of deaths is 20 208, which is a very high figure compared to the median and interquartile range. The mean is high because one earthquake has an exceptionally high number of deaths (220 000) compared to the others. This makes the mean high and gives a misleading picture of the risk of death from earthquakes.
- 4.7 Scattergraph