

Oxford Revise | Geography | Answers

Chapter 5

All exemplar answers given are worth full marks.

- **1.1** Weather that is significantly hotter, colder, wetter, or windier than normal.
- **1.2** Accept any from: thunderstorms; prolonged rainfall; drought; heatwaves; heavy snow; extreme cold; strong wind and gales.
- **1.3** 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: The UK's temperature is becoming hotter. Ten of the hottest years since records began have occurred since 2002 and the highest ever recorded temperature was in 2022. It is also predicted that the UK will experience more rainfall and flash flooding in the future. The Met Office predicts an extra two days of extreme rainfall a year if temperatures increase by 2°C.

1.4 B

- 1.5 January
- 1.6 888 mm
- **1.7** 120 mm
- 1.8 73.5 mm
- 1.9 58 mm

Working:

Rainfall values in ascending order: 19, 24, 41, 47, 59, 73, 74, 87, 98, 106, 121, 139

Median: 73.5

Median of bottom half: $(41 + 47) \div 2 = 44$

Median of top half: (106 + 98) ÷ 2 = 102

Inter-quartile range: 102 – 44 = 58

2.1 C



2.2 B

2.3 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: I think the environmental effects of extreme weather events are worse than the economic effects. This is because the environmental effects are normally longer lasting and in some cases irreversible. In Figure 3, the economic effects include disruption to businesses caused by road closures and damaged electricity supplies. Although this is inconvenient and costly, it can be repaired and restored relatively quickly compared to the time it would take to regrow all the trees brought down.

When the Somerset Levels flooded, the damage cost over £100m and £200m was lost in the tourism industry. This is clearly a significant cost and the need to spend money on repairs means there is less money available for environmental spending. However, the polluted water caused health issues, the polluted soils led to more economic losses in agriculture, and the damage to ecosystems took years to recover, meaning the environmental effects are worse.

2.4 A physical cause of the Somerset Levels floods from December 2013 to February 2014 was prolonged heavy rainfall, with January 2014 being the wettest month since records began.

Accept other answers that refer to saturated soils increasing surface run off, or high tides preventing the river water escaping out to sea.

Answers will vary depending on weather events studied.



2.5 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 physical cause of the Somerset Level flood in in winter 2013—14 was prolonged heavy rainfall, meaning the soils were saturated. This meant that additional rainfall could not infiltrate the soil and ran off quickly into rivers, causing flooding. A human cause was that the River Tone had not been dredged for twenty years. This meant that the river channel capacity was reduced so the river was unable to hold the excess water caused by increased precipitation.

Answers will vary depending on weather events studied.

2.6 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	1–2	Basic throughout with limited supporting evidence and/or examples
(basic)		 Communicates limited knowledge and understanding
		Explanations are partial
		Little or no use of geographical terms and vocabulary
	0	No relevant content

Example answer: The flooding in the Somerset Levels during the winter of 2013–14 had many economic effects. Firstly, the rising flood waters caused £100m worth of damage with 80% of businesses affected by the flood. Businesses were affected because their premises or stock was damaged. This meant they were unable to open. They were not able to earn any income and many closed permanently. The Bristol to Taunton railway was damaged. As well as the repair costs, a consequence of this was that travel was disrupted, preventing people getting to work.

Answers will vary depending on weather events studied.

2.7 One immediate response to flooding in the Somerset Levels was residents using sandbags to protect their property. This involved using bags of sand to build walls outside their houses to prevent the water entering.



2.8 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: One management strategy used after flooding in the Somerset Levels was that the River Tine and Parrett were dredged at a cost of £6m. This strategy was needed because the rivers had many years of sediment deposits that had reduced the channel capacity. This was a cause of the floods because the rivers could not hold enough water. Dredging the rivers meant that in future extreme weather events, the rivers could hold more water, thus preventing flooding.

Answers will vary depending on weather events studied.

2.9 This question is level-marked:

Level	Marks	Description
3 (detailed)	7–9	 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)	4–6	 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)	1–3	 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



3-marks: SPaG (spelling, punctuation, grammar, and specialist terminology)

Marks	Description	
3	Accurate spelling and punctuation	
	Rules of grammar followed	
	Effective control of meaning	
	Uses wide range of specialist terms	
2	Generally accurate spelling and punctuation	
	Most rules of grammar followed	
	General control of meaning	
	Uses good range of specialist terms	
1	Reasonably accurate spelling and punctuation	
	 Some rules of grammar followed – errors do not hinder meaning 	
	Some control of meaning	
	Limited use of specialist terms	
0	Writes nothing	
	Does not relate to question	
	Basic grasp of spelling, punctuation, and grammar prevents clear meaning	

Example answer: Management strategies for flooding in the Somerset Levels have been very effective at reducing risk. This is because they put in place a long term 20-year strategy covering many causes of flooding at a cost of £100m.

One part involved dredging the River Tine and River Parrett. This means that the rivers will be able to hold more water in the future and reduce the chance of flooding. However, this strategy is not totally effective because over time the rivers will fill with silt and the channel will need dredging again.

Another strategy was raising the levels of some roads. Although this does not prevent flooding, it is effective because it means that flooding will cause less disruption as roads will be above the levels of flood water. This means businesses will be able to stay open and people can still travel to work. It will also help emergency services distribute aid and reach people in need during any flood event.

The management strategies are therefore effective because some reduce the risk of flood, while others reduce the disruption that flooding brings.

3.1 Volcanic hazards can be reduced by setting up an exclusion zone so that people are kept away from a potential eruption and are not placed in danger.

Accept other suitable answers.

3.2 Monitoring means that the path of the storm can be predicted. This means that evacuation orders can be targeted at particular places, reducing the effect on human life.

Accept other suitable answers.