

Oxford Revise | Geography | Answers

Chapter 18 The UK's landscapes and geology

All exemplar answers given are worth full marks.

1.

- a)
- i) C
- **ii)** Laid down in layers/formed of sediments deposited by rivers or the sea. *Accept suitable alternative answers.*

b)

- i) Scarp/escarpment
- **ii)** Clay is impermeable and so will not allow surface to infiltrate through it. *Accept suitable alternative answers.*
- c) Lowland areas of the UK generally consist of more easily eroded sedimentary rocks. *Accept suitable alternative answers.*
- d) There have been some glacial periods in the past, so the climate was colder than today. This means that the mountainous areas of the UK were affected by glaciation. Weathering processes also change with the climate with freeze-thaw dominating in the cold glacial periods whereas chemical and biological weathering was more important in the warmer interglacial periods.
- e) Freeze-thaw weathering is the physical breakdown of rock due the alternative freezing and thawing of the moisture in the cracks. When water freezes it expands, breaking up the rock. Chemical weathering is when the rock is attacked by chemical processes. Rainwater is slightly acidic and so gradually dissolves the rocks.

Accept suitable alternative answers.

f) This question is level-marked:

Level	Marks	Description
3	6–8	 Accurate understanding of concepts and the interrelationship of places, environments and processes. Applies understanding to deconstruct information and make logical connections throughout. A balanced, well-developed argument. Judgements are supported with evidence throughout. Uses geographical skills to obtain accurate information that supports arguments.



Level	Marks	Description
2	3–5	 Some understanding of concepts and the interrelationship of places, environments and processes. Applies understanding to deconstruct information and make some logical connections. Imbalanced argument with mostly relevant information. Judgements are occasionally supported with evidence. Uses geographical skills to obtain accurate information that occasionally supports arguments.
1	1–2	 Isolated elements of understanding of concepts and the interrelationship of places, environments and processes. Attempts to apply understanding to deconstruct information but this is flawed. Unbalanced or incomplete argument with limited understanding. Judgements are supported with limited evidence. Uses some geographical skills to obtain information with limited relevance and accuracy.
	0	No acceptable response

Example answer: The Lake District and the Weald in Kent and Sussex both contain some sedimentary rocks. The Lake District, however, is an upland area compared with the lower land of the Weald. This is because most of the rocks of the Lake District are more resistant to erosion, consisting of sedimentary shales some of which have been turned into metamorphic slate which is even more resistant. There are also areas of resistant limestone. This has created a mountainous landscape which includes the highest mountain in England, Scafell Pike.

The Weald is lower because its geology is dominated by less resistant sedimentary chalk, clays, and sandstones. This has resulted in a gently rolling lowland landscape of hills and valleys. The Lake District's landscape was greatly affected by glaciation during the Ice Age. Glaciers created deep U-shaped valleys, which are now filled with ribbon lakes and misfit streams. Freeze–thaw and mass movement has created scree slopes at the bottom of the slopes on the side of the valleys. Different rates of erosion have created a landscape of scarps and vales in the Weald. The more resistant chalk forms the escarpments with the less resistant clay eroded down to vales. The main processes involved in the formation of the landscape was chemical weathering of the chalk and river erosion in the vales.