

Oxford Revise | Geography | Answers

Chapter 8

All exemplar answers given are worth full marks.

- 1.1 B
- 1.2 D and E
- 1.3 Algae
- 1.4 Species that feed on the algae such as mayflies or pond snails would decrease in number. This would then have an effect further up the food chain with frogs, eels and kingfishers all suffering a decrease in numbers.
- 1.5 This question is level-marked:

Level	Marks	Description
2 (clear)	3–4	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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: *Energy from the sun is converted into biomass by producers such as algae in Figure 1. Energy then moves up through different trophic levels as consumers eat insects through the food chain. In Figure 1, mayflies eat algae, which is a transfer of energy. Mayflies are then eaten by frogs, moving energy further up the food chain and then finally kingfishers consume frogs.*

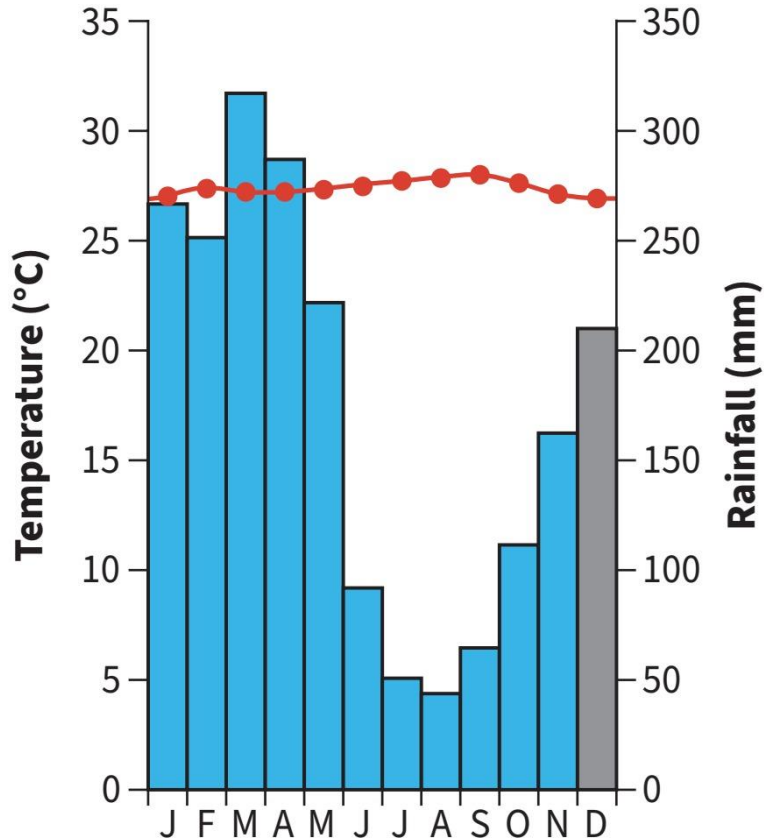
- 1.6 Decomposers feed on dead plants and animals breaking down organic matter and making nutrients available to primary producers.
- 1.7 Producers are plants that make their own food by converting energy from the sun into biomass. The rest of the food chain then feed on the producers.
- 2.1 A
- 2.2 Coniferous forests are found mostly in a band stretching east to west in the northern hemisphere in Canada, northern Europe and central and southern Russia.
- 2.3 Cool summers

Accept other suitable answers.

2.4 They have broadleaf trees that lose their leaves in winter.

Accept other suitable answers.

3.1 The climate graph should be completed as below:



3.2 D

3.3 This question is level-marked:

Level	Marks	Description
2 (clear)	3–4	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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: *Tropical rainforests are mostly located on the equator, where there is convectional rainfall. The concentrated energy from the sun warms the ground which in turn heats the air above it. The warm air rises, then cools and condenses into clouds causing rain. Rainforests then also generate their own*

rainfall where quick evaporation of water and transpiration adds more rising moist air to the atmosphere, which cools and condenses into clouds.

3.4 Decomposition

3.5 Runoff

3.6 The biomass is larger because there are more nutrient stored in the biomass than in the soil or the litter. This is because plants take up the nutrients quickly and nutrients in the soil can be lost through leaching.

3.7 If the trees were cut down, the soil would be more exposed to rainfall and would not have plants binding it together. This means nutrients would be washed out more quickly or soil may be washed away.

4.1 This question is level-marked:

Level	Marks	Description
2 (clear)	3–4	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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: Tropical rainforest ecosystems are characterised by a hot and humid climate all year round. Temperatures average in the mid 20°Cs and there is heavy convectional rainfall. The vegetation is lush with many different plant and animal species giving tropical rainforests more biodiversity than any other ecosystem. The soils do not contain many nutrients because most of the nutrients are stored in the biomass.

4.2 E.g. leaf-tailed gecko

Accept other suitable answers.

4.3 This question is level-marked:

Level	Marks	Description
3 (detailed)	5–6	<ul style="list-style-type: none"> • 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

Level	Marks	Description
2 (clear)	3–4	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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: *Figure 5 shows how some plants have adapted to the tropical rainforests by developing drip tip leaves. The rainforest climate is very wet so water can sit on the leaves of plants and make them rot. Plants have adapted to this by using drip tips, which help water run off them quickly. Animals like the spider monkey have adapted by having prehensile tails. These tails allow them to grip onto branches and move through the trees. Most of the food in a rainforest is in the canopy layer so monkeys can access this with their prehensile tails. Other animals like the leaf-tailed gecko have adapted through camouflage. The leaf-tailed gecko is able to blend into the vegetation and stay safe from predators through its camouflage.*