

Tropical Rainforests Homework 2 Answers

1) Using figure 1, describe the physical conditions in the layers labelled A and B(2)

1.1 A: There is lots of light but it is exposed to wind and heavy rainfall [1 mark].
B: It is sheltered and quite dark because of the trees above [1 mark].

2) Using figure 1, outline 2 ways that trees in the layer labelled A are adapted to their environment (2)

1.2 Any two from: e.g. the trees are very tall so that they can break through the canopy layer to reach the sunlight [1 mark]. / The trees have big buttress roots to support their trunks [1 mark]. / They only have leaves at their crown, where there's most light [1 mark].

3) Describe one other way in which plants in rainforests are adapted to their environment (1)

Any one from: e.g. plants have thick, waxy leaves so that water easily runs off [1 mark]. / The leaves often have pointed tips to channel the water off [1 mark]. / Many trees have smooth, thin bark to allow water to run off easily [1 mark]. / Plants drop their leaves gradually throughout the year, meaning they can go on growing all year round [1 mark]. / Climbing plants, such as lianas, use the tree trunks to climb up to the sunlight [1 mark].

4) Using figure 1, suggest how animals that spend most of their lives in the layers labelled B and C may be adapted to the conditions found there (2)

B: Any one from: e.g. some animals have a sharp sense of smell and hearing, so they can detect predators on the dark forest floor [1 mark]. / Some animals have striped or spotted coats to camouflage them in the dappled light [1 mark].
C: Any one from: e.g. they may have strong limbs so that they can spend all day climbing and leaping from tree to tree [1 mark]. / Some animals have flaps of skin that enable them to glide between trees, e.g. flying squirrels [1 mark]. They may have suction cups for climbing, e.g. red-eyed tree frogs [1 mark]. / Some birds have short, pointy wings so that they can easily manoeuvre between the dense tangle of branches in the trees [1 mark].

5) Explain how human development of rainforests might reduce biodiversity (3)

E.g. development tends to destroy habitats, which can reduce biodiversity *[1 mark]*. This is because many species only live in a particular habitat, so if that habitat is destroyed, the species can be made extinct *[1 mark]*. Many organisms are dependent on other species in the ecosystem, so if one species is made extinct it will affect other species *[1 mark]*.