



Canarygeog Worksheet

Tropical Rainforest - Answers

1. Why does the rainforest ecosystem receive a lot of rainfall ?

Constant high temperatures in the rainforest are due to the constant heat from the sun. The energy is focused on this small area of the Earth's surface making the heat concentrate creating convection currents which make the rainfall heavy on a daily basis. The intense heat from the sun causes air to rise as it becomes less dense, as it does the moisture begins to cool, condense and form very thick cumulonimbus clouds which produce torrential rain and thunderstorms.

2. Explain the connections between the adaptations of vegetation and the soils and climate of the rainforest.

These are called interrelationships:

- Decomposition of dead vegetation in hot temperatures puts nutrients into the soil.
- Drip tips help the vegetation to shed the excess weight of torrential rainfall.
- Buttress roots help to stabilize the tallest trees in the tropical rainforest thin and shallow soil keeping them upright.
- Branchless trees will develop so that growth is directed towards the sunlight for photosynthesis.

3. What is slash and burn farming ?

This is a type of small-scale farming where trees are burnt to clear land for farming and to produce ash as a source of nutrients. Crops can be grown but only for a limited period of time as the nutrients soon become exhausted and then the farmers have to move to another area where they must repeat the process. This proves unsustainable as the nutrient cycle is constantly broken.

4. What problems might be caused by sustainable management strategies ?
- The difficulty of enforcing the laws because of illegal loggers, or peasant farmers searching for larger plots of land.
 - The time taken for the sustainable strategies to have an impact on the ecosystem as it takes hard wood trees decades to grow and mature ready to be harvested.
 - The success of programmes such as education or ecotourism can never be guaranteed.