

## The Living World

- 1) Why is the equator hot? What is convectional rainfall?
- 2) Draw the global atmospheric circulation. Label the Hadley, Ferrel and Polar cells. Explain how the convection currents work. What is a trade wind?
- 3) Why do rainforests occur on the equator and deserts occur 30° north or south? Refer to named rainforests and deserts and high and low pressure belts.
- 4) Describe a food chain or web works in the Mortimer Forest. Refer to producers, consumers and decomposers. Explain how the numbers of organisms may change over time.
- 5) Draw and label a diagram to show how nutrients are recycled in an ecosystem. Refer to biomass, litter and soil.
- 6) Describe the differences in the nutrient cycles in a rainforest and a desert.
- 7) Describe the differences in the climate in the rainforest and a desert.
- 8) Outline how plants and animals have adapted to living in rainforests and deserts.
- 9) What resources do we obtain from rainforests? What is biodiversity?
- 10) Describe the rates of deforestation around the world. Use facts and figures.
- 11) Outline the causes of deforestation in the Amazon. Refer to commercial and subsistence farming, logging, road building, mining, dam building and settlement. Use facts and figures.
- 12) Explain the impacts of deforestation in the Amazon. Refer to global warming, climate change, soil erosion, biodiversity, indigenous tribes and jobs. Use facts and figures.
- 13) What strategies can manage a rainforest sustainably? Explain how selective logging, agroforestry, ecotourism and debt swaps reduce deforestation
- 14) What are the development opportunities in the Sahara Desert? Explain how mining, solar power, farming and tourism create jobs. Use facts and figures.
- 15) What are the challenges of developing the Sahara Desert? Explain how high temperature, low rainfall and inaccessibility create problems. Use facts and figures.
- 16) What is desertification? Explain the causes of desertification in the Sahel. Refer to climate change, population growth, over-grazing and deforestation.
- 17) Describe the strategies used to reduce the risk of desertification. Refer to bunds (stone walls), tree planting and appropriate technology.