

25 Human Impact

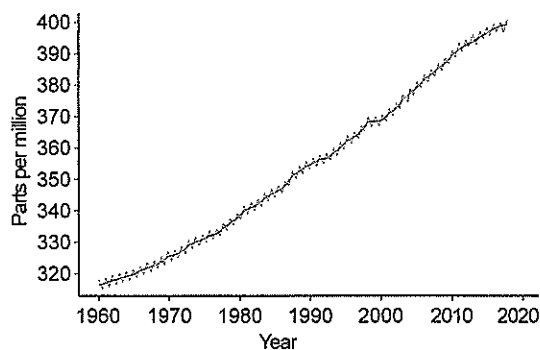
Subject Outline terms and phrases

biodiversity, ethical

1. Complete the table below which shows how human activities have led to climate change, environmental change, or both.

Human activity	Climate change, environmental change, or both	How the change was (changes were) caused
clearing tropical land		
lighting fires		
introducing rabbits to Australia		
altering water courses		
polluting the atmosphere		
burning fossil fuels		

2. (a) By referring to the graph below, state the likely trend of carbon dioxide levels in the atmosphere beyond the year 2020.



- (b) State the factor that is the most likely cause of this trend.

- (c) Explain how this trend could lead to changes in communities on a global scale.

3. (a) State what is meant by the extinction of a species.

(b) Explain what could cause the extinction of a species.

(c) State three human activities that have caused animals to become extinct and for each one give an example of a species that was affected.

4. The three main arguments for the importance of biodiversity are the human-centred view, the interconnection of life on Earth, and human respect for all living things.

(a) State the main point of each of these three arguments, and give an example of each.

human-centred view: _____

interconnection of life on Earth: _____

respect for all living things: _____

(b) Which one of the three arguments in part (a) suggests that biodiversity is essential for the perpetuation of communities?

(c) State two examples in which the loss of one population from a community has had a severe effect on other populations of the community.

5. Define the following terms.

habitat: _____

biosphere: _____

6. Although there are several hundred species of eucalypt in Australia, the koala can only feed on the leaves of a few of these species. The koala's distribution is limited to regions where these species of eucalypt are found. Use this information to explain why the best way to preserve a species is to preserve its habitat.

7. State the size of the habitat that is now generally accepted to be the minimum to ensure that the survival of a species is secure.

8. (a) What is meant by the term **resources**?

(b) List two resources from each of the following categories.

soil: _____

air: _____

other organisms: _____

9. Why do biological communities need to recycle resources?

10. (a) What observation made during the Hubbard Brook experiment provides evidence that disturbed communities lose their chemical resources?

(b) What conclusion was made about the fate of resources in undisturbed communities?

11. Explain why crops need to be provided with fertiliser, whereas natural communities can flourish without the addition of fertiliser.

12. (a) List two types of decomposer.

(b) Explain why decomposers are essential to a natural community.

13. State three advantages that have resulted from the introduction of African dung beetles into Australia.

(1) _____

(2) _____

(3) _____