



PLANIT
TEACHERS

Exploring Ecosystems: Biodiversity and Environmental Conservation

Student Name: _____

Class: _____

Due Date: _____

Introduction

Welcome to the Exploring Ecosystems: Biodiversity and Environmental Conservation homework sheet. This assignment is designed to help you understand the concept of biodiversity and its significance in maintaining healthy ecosystems.

Objective: To understand the concept of biodiversity and its significance in maintaining healthy ecosystems

Instructions: Complete the following activities to deepen your understanding of ecosystems, biodiversity, and environmental conservation

Activity 1: Create a detailed diagram or drawing representing a specific ecosystem (e.g., coral reef, rainforest, desert). Include at least 10 different species and illustrate how they interact with each other and their environment.



1. What is the name of the ecosystem you have chosen?
2. Describe the interactions between the species in your ecosystem.
3. How do human activities impact your chosen ecosystem?

Activity 2: Choose a real-world example of an ecosystem that has been impacted by human activity (e.g., deforestation, pollution, climate change). Research and write a short case study (approx. 250-300 words) discussing the effects on biodiversity and potential conservation strategies.

1. What is the name of the ecosystem you have chosen?
2. Describe the impact of human activities on the biodiversity of your chosen ecosystem.
3. What conservation strategies can be implemented to protect the ecosystem?

Activity 3: Prepare arguments for or against the statement: "Conservation efforts should prioritize the protection of biodiversity over economic development." Consider ethical, scientific, and economic perspectives.

1. What are the arguments for prioritizing biodiversity over economic development?
2. What are the arguments against prioritizing biodiversity over economic development?
3. What is your stance on the statement and why?

Activity 4: Research and calculate the economic value of ecosystem services provided by a specific ecosystem (e.g., carbon sequestration, water filtration, pollination). Present your findings in a short report or infographic.

1. What ecosystem services does your chosen ecosystem provide?
2. What is the economic value of these ecosystem services?
3. Why are ecosystem services important for human well-being?

Activity 5: Develop a personal plan outlining how you can contribute to environmental conservation and biodiversity protection in your daily life. Include specific actions and goals.

1. What actions can you take to reduce your impact on the environment?
2. What are your goals for reducing your environmental impact?
3. How will you implement your personal conservation plan?

Reflection

Reflection Questions:

1. What did you learn about ecosystems and biodiversity from this assignment?
2. How can you apply what you learned to real-life situations?
3. What challenges do you think humans face in protecting biodiversity and ecosystems?

Key Terms:

1. Biodiversity
2. Ecosystem
3. Conservation
4. Ecosystem services
5. Sustainability

Recommended Resources:

1. National Geographic
2. World Wildlife Fund
3. Environmental Protection Agency
4. Scientific articles and research papers

Conclusion

Conclusion: Summarize what you learned from this assignment and how you can apply it to your daily life.

Final Thoughts: What do you think is the most important aspect of protecting biodiversity and ecosystems? Why?