

Introduction

This worksheet is designed to assess students' understanding of biodiversity, ecosystem concepts, and conservation strategies. It is aimed at 14-15 year old students and aligns with the learning objectives of understanding biodiversity, explaining the impact of human activities, and identifying conservation strategies.

Section 1: Multiple Choice Questions

Choose the correct answer for each question.

1. What is the term used to describe the variety of different species of plants, animals, and microorganisms in an ecosystem?
A) Ecosystem
B) Biodiversity
C) Conservation
D) Sustainability

2. Which of the following human activities has the greatest impact on biodiversity?
A) Deforestation
B) Pollution
C) Climate change
D) Overfishing

3. What is the main purpose of protected areas in conservation?
A) To provide habitat for endangered species
B) To promote sustainable resource management
C) To restore degraded ecosystems
D) To educate the public about conservation

Page 1 of 4

4. What is the process by which plants convert sunlight into energy?
A) Respiration
B) Photosynthesis
C) Decomposition
D) Fermentation

5. Which of the following is an example of a conservation strategy?

- A) Deforestation
- B) Pollution
- C) Sustainable resource management
- D) Overfishing

Section 2: Short Answer Questions

Answer each question in 1-2 paragraphs.

1. Describe the impact of deforestation on biodiversity and ecosystem health.

2. Explain the concept of sustainable resource management and provide an example of how it can be applied in a real-world scenario.

3. What are some strategies that can be used to reduce pollution in ecosystems?

4. Describe the role of decomposers in an ecosystem.

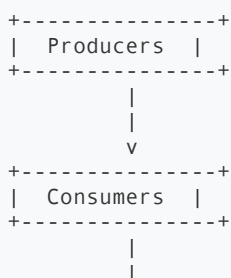
5. Explain the importance of conservation efforts in protecting endangered species.

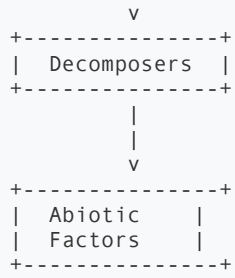
Section 3: Diagram Labeling

Label the following components of the ecosystem diagram:

Page 1 of 4

- Producers
- Consumers
- Decomposers
- Abiotic factors





Section 4: Case Study

Read the following case study and answer the questions that follow:

A local community is planning to develop a new housing estate on a site that is currently a natural habitat for several endangered species. The community is aware of the potential impact on biodiversity and is considering conservation strategies to mitigate the effects.

1. What are some potential conservation strategies that the community could implement to protect the endangered species?

2. How could the community balance the need for housing development with the need to protect biodiversity?

Section 5: Reflection

Reflect on what you have learned about ecosystems and conservation. Answer the following questions:

1. What is the importance of biodiversity in an ecosystem?

2. How can human activities impact ecosystems and biodiversity?

3. What are some ways that individuals can contribute to conservation efforts?

Assessment Rubric

The following rubric will be used to assess your work:

- Multiple Choice Questions: 1 mark per question
- Short Answer Questions: 5 marks per question, based on clarity, accuracy, and completeness of response
- Diagram Labeling: 10 marks, based on accuracy and completeness of labeling and description
- Case Study: 10 marks, based on clarity, accuracy, and completeness of response
- Reflection: 10 marks, based on clarity, accuracy, and completeness of response

Note to Teachers

The following notes are for teachers:

- This worksheet is designed to be completed in 45 minutes.
- Please provide clear instructions and examples to students before the assessment.
- Ensure that students have access to all necessary materials and resources.
- Consider providing differentiation options for students with visual impairments, learning difficulties, or English language learners.

