



Introduction

Welcome to this worksheet on understanding the interconnectedness of species and their environments. This worksheet is designed for students aged 11-14 and is aligned with the UK Primary School Curriculum.

The activities and questions in this worksheet are designed to cater to different abilities and learning styles, with foundation, core, and extension levels.

What is an Ecosystem?

An ecosystem is a community of living and non-living things that interact with each other in a specific environment. Examples of ecosystems include forests, oceans, and deserts.

Foundation:

Match the following words to their definitions:

- Ecosystem: _____
- Habitat: _____
- Species: _____

Core:

Describe an ecosystem that you are familiar with, including the different species that live there and how they interact with each other.

Extension:

Research and write about a specific ecosystem, including its unique characteristics and the challenges it faces.



Food Chains and Food Webs

A food chain is a series of organisms that eat other organisms, with each level representing a different trophic level. A food web is a network of food chains that intersect and overlap.

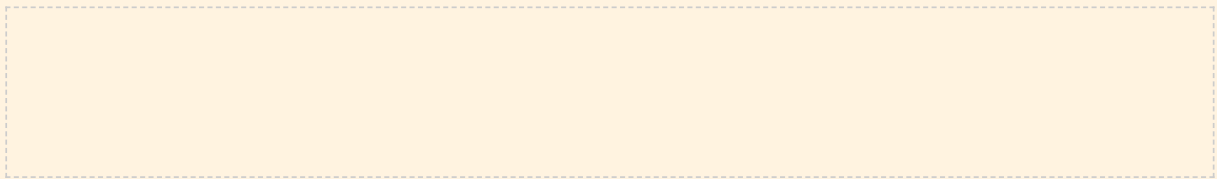
Foundation:

Complete the following food chain:

Grass → _____ → _____

Core:

Create a simple food web diagram, including at least three species and their relationships.



Extension:

Research and create a complex food web diagram, including multiple species and their relationships.



Human Impact on the Environment

Human activities can have a significant impact on the environment, including pollution, deforestation, and climate change.

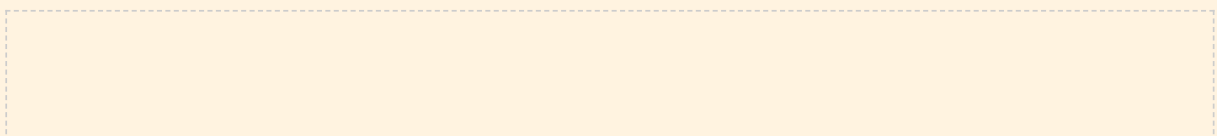
Foundation:

Match the following human activities to their environmental impacts:

- Pollution: _____
- Deforestation: _____
- Climate change: _____

Core:

Describe the impact of human activities on a specific ecosystem, including the effects on different species and their habitats.



Extension:

Research and write about a specific environmental issue, including its causes, effects, and potential solutions.

Conservation and Sustainability

Conservation and sustainability are essential for maintaining the balance of ecosystems and preserving biodiversity.

Foundation:

Complete the following sentence:

Conservation is important because _____

Core:

Describe a conservation effort that you are familiar with, including its goals and methods.

Extension:

Research and write about a specific conservation issue, including its challenges and potential solutions.

Ecosystem Services

Ecosystems provide a range of essential services, including air and water purification, soil formation, and climate regulation.

Foundation:

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Match the following ecosystem services to their definitions:

- Air purification: _____
- Water purification: _____
- Soil formation: _____

Core:

Describe an ecosystem service that you are familiar with, including its importance and benefits.

Extension:

Research and write about a specific ecosystem service, including its challenges and potential solutions.

Biodiversity and Adaptation

Biodiversity is essential for maintaining the health and resilience of ecosystems, and adaptation is the process by which species adjust to their environments.

Foundation:

Complete the following sentence:

Biodiversity is important because _____

Core:

Describe an example of adaptation in a specific species, including its characteristics and benefits.

Extension:

Research and write about a specific adaptation, including its evolution and significance.

Environmental Case Studies

Case studies can provide valuable insights into environmental issues and conservation efforts.

Foundation:

Read the following case study and answer the questions:

Case study: _____

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Questions:

- What is the environmental issue?
- What are the causes and effects?
- What are the potential solutions?

Core:

Research and write about a specific environmental case study, including its challenges and potential solutions.

Extension:

Create a case study of your own, including its environmental issue, causes and effects, and potential solutions.

Sustainable Living

Sustainable living is essential for reducing our environmental footprint and promoting conservation and sustainability.

Foundation:

Complete the following sentence:

Sustainable living is important because _____

Core:

Describe a sustainable living practice that you are familiar with, including its benefits and challenges.

Extension:

Research and write about a specific sustainable living practice, including its significance and potential applications.

Reflection and Evaluation

Reflection and evaluation are essential for assessing our understanding and promoting further learning.

Foundation:

Reflect on what you have learned about the interconnectedness of species and their environments. What did you find most interesting or surprising?

Core:

Evaluate the importance of conservation and sustainability in maintaining the balance of ecosystems and preserving biodiversity.

Extension:

Research and write about a specific topic related to the interconnectedness of species and their environments, including its significance and potential applications.

Conclusion

In conclusion, understanding the interconnectedness of species and their environments is essential for promoting conservation and sustainability.

Foundation:

Complete the following sentence:

I have learned that _____

Core:

Describe what you have learned about the interconnectedness of species and their environments, including its significance and potential applications.

Extension:

Research and write about a specific topic related to the interconnectedness of species and their environments, including its significance and potential applications.

