

Environmental Education and Sustainability Activity Sheet

Part 1: Understanding Our Ecosystem (30 minutes) Let's explore and understand the living world around us! 1. Ecosystem Observation Look at the school garden or nearby park and record your findings: List 5 living organisms you can observe: 1. _____ 3. Food Web Creation Using the organisms you listed above, create a simple food web: Draw your food web here. Remember to: · Use arrows to show energy flow Connect producers to consumers Include at least one decomposer

Part 2: Field Research (45 minutes)

2. Mini Field Study

Working in groups of 3-4, collect the following data:

Observation Type	Location 1	Location 2	Location 3
Number of Different Plants			
Types of Insects			
Soil Temperature (°C)			
Soil Moisture (Dry/Moist/Wet)			

Part 3: Environmental Action Planning (30 minutes) Based on your observations, let's identify and solve environmental problems! 3. Problem Identification and Solution **Environmental Problem in Our School:** Problem Description: Causes: Effects: **Proposed Solutions:** Solution **Timeline Resources Needed** Part 4: Personal Reflection (15 minutes) Think about what you've learned today and answer these questions: 1. What was the most interesting thing you discovered about our environment today? 2. How do you think you can help protect the environment in your daily life? 3. What would you like to learn more about regarding environmental protection?

Part 5: Climate Change Investigation (45 minutes)

Let's explore how climate change affects our local environment!

1. Local Weather Pattern Analysis

Season	Average Temperature (°C)	Rainfall (mm)	Notable Changes
Spring			
Summer			
Autumn			
Winter			

2. Impact Assessment

How do these changes affect:
Local Wildlife:
Plant Life:
Human Activities:

Part 6: Renewable Energy Project (60 minutes)

Design and plan a renewable energy solution for our school!

1. Energy Audit

Area	Current Energy Usage	Potential Savings
Lighting		
Heating/Cooling		
Electronics		

2. Renewable Energy Design

Design your renewable energy solution here:

- Include solar panels, wind turbines, or other renewable sources
- Show energy flow and storage
- Label key components
- Include measurements and calculations

Part 7: Waste Management Challenge (45 minutes)

Track and improve our school's waste management system!

1. Waste Classification

Type of Waste	Amount (kg/week)	Recyclable?	Action Plan
Paper			
Plastic			
Food Waste			
Other			

2. Waste Reduction Strategy

Set SMART Goals:
Specific:
Measurable:
Achievable:
Relevant:
Time-bound:

Design a	school garden that promotes biodiversity!
1. Gard	len Design
[
	Draw your garden design here:
•	Include different plant species
•	Mark water sources
• ;	Show paths and access points
•	Include habitat features for wildlife

Part 8: Biodiversity Enhancement Project (60 minutes)

2. Planting Calendar

Season	Plants to Grow	Care Instructions
Spring		
Summer		
Autumn		
Winter		

Evaluation Criteria	
Criteria	Achievement
Understanding of ecosystem concepts	0000
Quality of field research data	0000
Problem-solving approach	0000
Reflection depth	

Assessment & Next Steps