

Sustainability Investigator: A Sustainability Fact-File

Learning objective: To understand the concept of sustainability and evaluate how we can manage Earth's resources for future generations.

Use this fact-file to research and document how we can protect our planet. Consult books, encyclopaedias, or trusted educational websites to fill in the sections. Think like Finn the dolphin as you consider how our actions on land impact the wider world's oceans and ecosystems.

Word bank: sustainability · renewable · non-renewable · conservation · carbon footprint · biodiversity · reforestation · finite · habitat · ecosystem

1. Defining Sustainability: In your own words, explain what it means to live sustainably. Why is it important that we do not use up all of our natural resources at once? (3 marks)

2. Resource Comparison: Compare and contrast renewable energy sources (like solar or wind) with non-renewable sources (like coal or oil). Justify why a transition to renewable energy is vital for the future. (4 marks)

3. Local Impact: Identify one way your school or local community could improve its sustainability. Explain why this change would be effective. (3 marks)

4. Economic Choices: If a sustainable item costs £4.50 and a non-sustainable alternative costs £2.25, explain why someone might still choose the more expensive option. What might happen if we only ever chose the cheaper, non-sustainable item? (4 marks)

5. Biodiversity and Habitats: Explain why maintaining diverse ecosystems helps to support a sustainable planet. How does human activity threaten these delicate balances? (3 marks)

6. Future Vision: What might happen if the global population continues to consume resources at the current rate? Propose two long-term solutions to prevent resource depletion. (4 marks)

Extension challenge: Design a 'Sustainability Pledge' poster. Include a persuasive argument for why your peers should adopt one new sustainable habit, using at least four words from the word bank to justify your reasoning.