

Designing a Sustainability Solution

Name: _____ **Date:** _____

LEARNING OBJECTIVE

The student will design and build a physical model or detailed plan for one sustainability solution addressing an environmental issue studied this quarter.

MATERIALS NEEDED

- cardboard or recyclable materials for a model
- scissors
- tape
- markers
- paper for a written plan

HANDS-ON ACTIVITY

1. Choose one environmental issue from this quarter (waste, water, energy, or air quality) to address with a real solution.
2. Sketch a labeled design plan on paper showing your solution (e.g., a rain barrel system, a compost bin, a solar-oven model, a bike-share station).
3. Build a small physical model of your solution using cardboard, recyclable materials, tape, and markers.
4. Write a materials and cost list for your design, estimating what it would take to build a full-size version.
5. Write a short paragraph explaining how your solution would measurably reduce environmental impact, using data or estimates from earlier weeks where possible.

QUESTIONS

1. **What environmental issue does your design address, and what is your solution called?**
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2. **List 3 materials your model used and what they represent in a full-size version.**
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3. **Using data or estimates from an earlier week, how would your solution measurably reduce environmental impact?**

4. What is one challenge or limitation your solution would face if actually built at full scale?
