



AI-GREENER

2024-1-AT01-KA220-SCH-
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Student Guide: Using AI to Produce Organic Food in Our School Garden

Age group: 15–18

Work format: Small groups (3–5 students)

Final product: Mini-poster *or* one-slide presentation

Your Challenge

Design a simple scenario answering this question:

👉 *How could we use Artificial Intelligence (AI) to produce organic food in our school garden?*

Your task is not to build real AI, but to **imagine and explain** how AI *could* help make gardening more efficient, sustainable, and environmentally friendly.

Step 1: Understand the Problem

Think about the challenges of growing organic food in a school garden:

- When should plants be watered?
- How do we know if plants are healthy?
- How can we avoid wasting water or resources?
- How can we grow more food without chemicals?

👉 **Discuss:** Which problem would you like AI to help solve?

Step 2: Choose Your AI Idea

Decide on **one main AI-based idea** for your scenario. For example, AI could:

- Monitor soil moisture and decide when to water plants
- Analyze weather data to plan planting and harvesting
- Use images to detect plant diseases or pests early
- Suggest which crops grow best in your local climate
- Optimize compost use and soil health



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You may combine ideas, but keep your scenario **simple and clear**.

Step 3: Explain How the AI Works (Simply)

Describe your AI system in an easy-to-understand way:

- **What data does it collect?**
(e.g. soil sensors, temperature, sunlight, photos of plants)
- **What does the AI do with this data?**
(e.g. predicts, detects problems, gives advice, makes decisions)
- **What action happens next?**
(e.g. watering starts, students get a warning, planting advice is given)

You do NOT need technical details—focus on the idea.

Step 4: Think About Benefits and Responsibility

Discuss the impact of your idea:

- How does this AI help grow food organically?
 - How does it save water, energy, or time?
 - How does it help the environment or reduce waste?
 - Are there any concerns? (cost, data accuracy, over-reliance on technology)
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Step 5: Create Your Mini-Poster or Slide

Your poster or single slide should include:

1. **Title** of your AI garden idea
2. **The problem** you are solving
3. **How the AI works** (simple explanation)
4. **Benefits** for the garden and the environment
5. *(Optional)* A simple drawing or diagram

👉 Keep text short and visuals clear.

Step 6: Present and Reflect



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Be ready to briefly explain your idea to the class (1–2 minutes):

- What inspired your idea?
 - Why is AI useful in this situation?
 - Would this idea work in a real school garden? Why or why not?
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Remember

AI is a **tool to support people**, not replace them. The goal is to use technology responsibly to create a more sustainable future 🌱

Group members: _____

Date: _____



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