

Session Leader Notes

Part 3: Composting and organic waste

This lesson plan introduces composting and organic waste to Key Stage 1-2 students in an interactive, hands-on way.

It covers the basics of composting, the importance of reducing waste, and how students can start composting at home or school. If this lesson is being delivered after lunch, get the children to keep their leftovers and incorporate those into these activities.

Recommended for:

Key stage 1-2 (Ages 5-11)

Session duration:

40 – 60 Minutes

Objectives

By the end of this lesson, students will:

1. Understand what goes in the green caddy bin and brown bin.
2. Understand what composting is and why it's important for the environment.
3. Know which materials can be composted and which cannot.
4. Understand how composting helps reduce waste and enrich the soil.
5. Understand how you can start composting at home or school.

Recommended group rules

- Listen to each other.
- Treat each other with respect.
- Engage with and enjoy the learning.

Materials (what you need)

• **For Slide 11: Sort it Out – Composting Sheet – this activity can be done using this sheet or provide the below materials for a more hands on activity:**

A variety of organic waste items (e.g., fruit and vegetables scraps, leaves, eggshells, paper, cardboard),

A few non-compostable items (e.g., plastic, glass, metals),

Coloured bins or bins labeled : "Compost Brown," "Caddy Green" and "Other".

• **Slide 12 – In class Activity or Homework:** Compost Bin Sheet and a large container for making a compost bin.

• **Slide 13 – In class Activity or Homework:** Pens and paper for poster designing.

Technical requirements

- A good standard of audio and visual for the group size for the short video on slide 9.

Lesson Outlines

Part 3: Composting and organic waste

1. Introduction to composting (10 minutes)

Start with a question: "What do you think happens to food scraps or plant waste if we put them in the black bin?"

- Discuss with the students where food scraps and organic materials go after being thrown away (e.g., landfills or waste incineration) and how this contributes to pollution.

Introduce composting:

- Explain that composting is a way to recycle organic materials (like food scraps, leaves, and plant waste) to make rich, healthy soil.
- Define composting as the natural process of breaking down organic matter into useful soil.

Discuss the benefits:

- Reducing waste going to landfills.
- Creating nutrient-rich soil for gardens and plants.
- Helping to reduce greenhouse gases by decreasing organic waste in landfills.

Video (Slide 9)

- Show a short video focusing on the brown and green caddy bins:
- How they work together and what goes in each of them.
- The basic process of decomposition (organic materials breaking down).
- The importance of composting and balancing "green" (e.g., food scraps, grass clippings) and "brown" materials (e.g., leaves, paper) for healthy compost.

2. Activity - Sort it out: What can and cannot be composted? (15 minutes)

If this lesson is being delivered after lunch, have students keep their leftovers and incorporate those into this activity:

Alternate worksheet provided if not.

- Ask students to pick some items from a mixed set of materials / or their lunch leftovers (food and wrappers) and decide whether they can go into the compost or should be thrown away. Provide explanations as to why some things are compostable and others are not. You can also display the bins, food / brown / blue / black for this purpose.

Examples:

Compostable materials:

- Food scraps (fruit and vegetable peels, coffee grounds, eggshells).
- Garden waste (leaves, grass clippings, small twigs).
- Paper products (paper towels, cardboard, tissue paper).

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Non-compostable materials:

- Plastic, glass, metals, and anything that doesn't decompose (e.g., plastic packaging).
- Diseased plants or meat (which can attract pests and cause issues).

After sorting, discuss any mistakes or confusion with the students, reinforcing the concept of what should go in the compost bin and what shouldn't.

3. The importance of reducing waste (10 minutes)

Start a classroom compost:

Set up a small compost bin in a dry outdoor area of the school and have students take turns adding compostable materials.

This could be a term / year-long project where students track the progress of the compost.

- **Layer the materials:** Start with a layer of "brown" materials (like dry leaves or cardboard), then add "green" materials (like vegetable scraps). Continue to alternate.
- **Turn the pile:** Mix or turn the compost regularly to allow air to flow and help the decomposition process.
- **Wait for it to decompose:** Over time, the materials will break down into dark, rich compost that can be used for gardens or plants.

4. Main Activity: Compost care:

- Have students design posters to display around school about composting and how to properly compost organic waste. Include key information like what can and can't be composted.

5. Conclusion and reflection (5 minutes)

Recap key points:

- Remind students that composting helps reduce waste and makes healthy soil for plants and gardens.
- Food scraps to go in the caddy bin and garden waste goes straight into the brown bin.

Exit Ticket:

- As students leave the lesson, ask them to share one thing they learned about composting and one thing they will compost at home (e.g. "I will compost banana peels!").

Reflection for Teachers:

- Ensure that students grasp the importance of composting to reduce waste and contribute to sustainability.
- Observe students during the sorting activity to identify areas where they might need further clarification on what materials are compostable.
- If needed, offer additional resources (books, videos, local composting programs) to help students learn more about composting.