

materials

Materials and our environment: sort the classroom waste

Lesson at a glance

Open with one tray of clean classroom waste and ask where each item should go when finished with. Teach the four destinations with real items in hand—clean bottle for recycle, crisp packet for landfill, then compost and reuse—folding in Ireland’s plastic-bag charge. Groups of four sort about 8–10 clean items into labelled trays, hoops or newspaper mats. Settle disputed items on the sorting-tree interactive, then record two or three placements plus one practical reduce-or-reuse class action in the Investigation Journal before the class votes on one action to try.

Learning objectives

- Sort clean classroom waste into recycle, compost, reuse and landfill
- Explain why some materials can be reused or recycled and why sending too much to landfill can harm the environment
- Propose one practical reduce-or-reuse action the class can take

Before the bell – prep

Day before: gather only clean, dry, safe sample waste (scrap paper, cardboard, rinsed bottle, yogurt pot, can/foil, crisp packet, film/polystyrene, fabric scrap, dry leaf or sealed peel)—about 8–10 items per group. Print four labels per group (Recycle, Compost, Reuse, Landfill) and set four trays, hoops or newspaper mats each. Gloves out; no goo, sharp metal or bathroom waste.

**Materials**

Item	Qty	Per	Source	Low-cost substitute
clean dry sample waste items (paper, cardboard, plastic bottle, yogurt pot, can, crisp packet, polystyrene, fabric scrap, dry leaf or tea leaves)	8	group	classroom	cut-out picture cards of the same items if real waste is hard to gather
shallow trays, hoops, or labelled newspaper mats for four destinations	4	group	classroom	four sheets of newspaper as floor mats with labels (often the simplest option)
sorting labels (Recycle, Compost, Reuse, Landfill)	1	group	provided printable	write the four words on sticky notes or card offcuts
disposable gloves	1	pupil	supermarket	shared class set washed as wipe-clean reusable gloves, or hand-sort with hand-washing before and after
Investigation Journal page	1	pupil	provided printable	plain paper with the lesson title at the top
class noticeboard space or IWB for the chosen action	1	class	classroom	a sticky note on the teacher's desk planner

Safety watch-point

Gloves on for the sort; no tasting; glass only with close supervision; wipe spills; everyone washes hands after trays are cleared.



Teaching moves

- **Getting Started:** Hold one class tray (or a bottle beside a crisp packet) and ask only which items could be used again. Keep it light—no full sort and no four groups yet. Surface quick home-bin ideas, then check four labelled destinations are ready per group.
- **Four places for waste:** Teach with items in hand while pupils stay seated. Start recycle (clean bottle) versus landfill (crisp packet), tell the Ireland bag-charge story there, then add compost (dry leaf/sealed peel) and reuse (jar or scrap paper). Model one think-aloud sort of the bottle before groups begin.
- **Audit and sort the classroom waste:** Groups of four work one tray and four labelled destinations. Circulate asking what it is made of, whether it could be used again as it is, and whether dirt would stop recycling. Watch for material-naming, reasoned mind-changes, and debate items (crisp packet, polystyrene, fabric).
- **Settle the ones we could not agree on:** Drive the sorting-tree interactive yourself in explore mode with only the two or three items groups argued about (or crisp packet and greasy pizza box if all agreed). Ask which yes/no question decided it and what would have to change for a different destination—not a second full sort.
- **Record the sort and our idea:** On the Investigation Journal page in about ten minutes: two or three sorted items with destinations, one short reason, and one class-sized reduce-or-reuse action. Oral rehearsal first—We put the ... in ... because ...—and steer actions to scrap-paper trays, jar pencil pots or similar, not huge promises.
- **Share our class action:** One short sentence per group. Shortlist two realistic ideas, show of hands, write the winner on the board and a sticky note for the noticeboard. Before tidy, restate the action and ask the first small step for next week.



What it should show

Expect clean paper, cardboard, rinsed bottles, cans and jars in recycle; dry leaf/peel in compost; jar, fabric scrap or blank-side paper in reuse; crisp packets, film and polystyrene in landfill. Debate items (crisp packet, mixed lids, dirty-looking paper) often start in recycle—clean-and-dry and single-material checks usually move them. Affirm groups that change their mind with a material reason.



Misconceptions & interventions

- **Pupils say all plastic recycles, so crisp packets and film wrappers go in the recycle tray.** — Hold the clean bottle beside the crisp packet. Ask whether it is one clean material or mixed/filmy, then place the packet in landfill and revoice: clean and dry single plastics often recycle; many packets do not.
- **Pupils treat landfill as just another bin, equal to recycle or compost.** — Ask what happens when useful materials are buried instead of used again. Link back to the bag-charge story: we try to send as little as possible to landfill.
- **Pupils want reduce as a fifth sorting tray on the floor.** — Point to the four destinations only. Reduce is the class action idea—use less so there is less to sort—not a place to put an item.





Differentiation

Emerging	Developing	Proficient
• Give a smaller tray of about six clear-cut items and say aloud the starter: We put this in ... because ... • Pair at the teacher table for one modelled placement before the group continues.	• Prompt a second look at one debate item: What is it made of? Would dirt stop it being recycled? • Add one extra sorted item or a second short reason on the Investigation Journal page if time.	• After the main sort, sub-sort recycle items into paper-based versus metal or plastic and say why that matters. • Critique a weak class-action idea and reshape it into something the class can really try this month.

Cross-curricular hook

Link to Geography and Irish life—the plastic-bag charge and home/school bin sorting as everyday ways materials are kept out of landfill.