

Case 13: Can the crew cut waste before it reaches the bin?

Overview

Students read a story in which Dec’s box of replacement parts arrives half full of packaging. The crew’s “recyclable” cups turn out to be on the city’s not-accepted list. They place items from the supply list on EPA’s waste hierarchy and check them against the city’s accepted-materials list. They then fill in an event materials sheet and propose one change with a way to measure it.

Before this case

Students should already be able to:

- read a list and pull out numbers
- explain a trade-off between two goals
- write a short proposal for a named reader

Objectives

Students will be able to:

- propose one purchasing change for the next screening
- use the EPA hierarchy accurately
- check local acceptance instead of trusting a label
- include a measurement plan and one access or cost concern

Materials

- This chapter, one copy per student
- Evidence A, B and C

Materials, continued

- A proposal template and a before-and-after data table

The task in this edition

Task: Write a proposal to the event organizers for one purchasing change, with a measurement plan.

Students make: Proposal, 250—350 words

Pacing

Opener (page 240): 5 min. Short on time: 5 min.

Key terms (pages 241 and 242): 5 min. Short on time: skip. Define source reduction and local acceptance aloud in one minute.

Look at the evidence (page 246): 8 min. Short on time: 8 min.

Look at the evidence (page 247): 4 min. Short on time: 4 min.

Key idea (pages 248 and 249): 8 min. Short on time: 2 min. Read the first paragraph of the key idea aloud. Skip the rest.

Sort the evidence (pages 250 and 251): 6 min. Short on time: skip.

Practice (page 252): 5 min. Short on time: skip.

Your task (pages 253 and 254): 8 min. Short on time: 8 min.

Pacing, continued

Your draft (page 255): 20 min. Short on time: 20 min.

Check your work (pages 256 and 257): 6 min. Short on time: skip. Collect proposals and score them with the rubric yourself.

Questions to discuss (pages 258 and 259): 8 min. Short on time: 3 min. Use question 3 as an exit ticket.

Talk about this case at home (page 260): at home.

Periods: full chapter 83 minutes; one period 50 minutes.

Standards

RI.9-10.1 Support an analysis with solid, complete evidence from the text, both for what it states and for what it implies.

W.9-10.1 Write arguments that analyze substantial topics or texts, using valid reasoning and enough relevant evidence.

W.9-10.5 Strengthen writing by planning, revising, editing or rewriting, focusing on what matters most for the purpose and audience.

SL.9-10.1.c Move a discussion forward with questions that connect it to larger ideas, bring others in and test ideas and conclusions.

SL.9-10.1.d Respond to different views, sum up where people agree and disagree, and adjust your view when the evidence calls for it.

Case 13 plan, continued

Standards, continued

D4.6.9–12 Use one or more disciplines to understand the causes of local, regional and global problems and the challenges of addressing them. In this case: Students use disciplinary lenses to understand a local waste problem.

D4.7.9–12 Assess options for individual and group action on local, regional and global problems through reflection and causal reasoning. In this case: Students assess options for individual and collective action on waste.

Codes of ethics

- **FTC Green Guides (16 CFR Part 260):** § 260.12 Recyclable claims
- **AIGA Standards of Professional Practice:** The designer’s responsibility to society and the environment
- **IABC Code of Ethics for Professional Communicators:** “I do not guarantee results”

Heat map

- **Opener (page 240):** Low
- **Key terms (pages 241 and 242):** Low
- **Look at the evidence (page 246):** Low
- **Look at the evidence (page 247):** Low
- **Key idea (pages 248 and 249):** Medium

Heat map, continued

- **Sort the evidence (pages 250 and 251):** Low
- **Practice (page 252):** Medium
- **Your task (pages 253 and 254):** Low
- **Check your work (pages 256 and 257):** Low

Try it at your school

Change one thing before the next event.

- Pick one repeated item at a school event: cups, flyers, plates
- Count how many were used last time
- Check your city’s recycling list and propose one reduction or reuse option
- Count again after the event and share results with the organizers

Who to ask: Student council, custodial or facilities staff, a science teacher, your city’s sanitation or recycling office

Safety: Don’t sort through trash with your hands; unsafe items can be hidden. Make sure changes don’t leave out people who need disposable items.

Sources

- NPR, “Starbucks To Eliminate Plastic Straws In Its Stores By 2020,” July 9, 2018

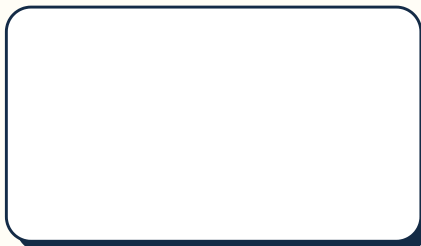
Sources, continued

- NPR, “Why People With Disabilities Want Bans On Plastic Straws To Be More Flexible,” July 11, 2018
- U.S. Environmental Protection Agency (EPA), “Sustainable Materials Management: Non-Hazardous Materials and Waste Management Hierarchy,” No date listed

Case 13: Can the crew cut waste before it reaches the bin?

The last Common Room screening used about 120 cups the city won't recycle, and a box of parts arrived half full of packaging.

On your own Read What happened. Underline the number of cups and what the city list says about them. About 5 minutes.



Anika, Dec and Sami react to a round of their tabletop game.

Your role: You're the one who counts the cups before and after the change. **New skill:** Count a starting point before you claim a change works.

What happened

It is Tuesday in the theater shop. Dec opens a box of replacement parts. Three separate orders of small LED connectors and switches, placed over one week, arrived together. About half of the box is plastic air pillows and foam.

The supply list from last Friday's screening at the Common Room shows a second problem. The crew used about 120 single-use cups. The cups are plastic-lined paper and labeled "recyclable." But the city's recycling list does not take plastic-lined paper cups.

Your question: What could the crew change before the next screening, and how would they know it worked?

Dec wants to fix how they order parts before anyone redoes the recycling sign. Anika tracks the parts and the budget. She agrees with Dec, but she wants numbers before anyone says a change saves money. Some people need a disposable cup or a straw, so any plan has to work for them too.

Pacing

Full chapter: 5 min.

Short on time: 5 min.

Say this

"The cups say "recyclable." Where do you think they went after the screening?" — Hear guesses. Do not reveal the city list yet.

Watch for

Misconception: Students think the label decides where the cups go. **Listen for:** "They said recyclable, so they got recycled." **Then:** Ask who decides what a city recycles. Promise to check the city list in the evidence.

Support

- Read What happened aloud. Show a paper cup if you have one.

Heat check

Low.

Key terms

On your own Read each key term and its example. Then write your first guess in the box. About 5 minutes.

Source reduction Source reduction is preventing waste before it is created, for example by buying less packaging.

En español: reducción en la fuente

In this case: Dec wants to combine the parts orders so less packaging arrives in the first place.

Reuse Reuse is using an item again instead of throwing it away after one use.

En español: reutilización

In this case: Borrowing washable cups from the bookshop is reuse. Washing uses water and someone's time.

Local acceptance Local acceptance is the list of materials that your own city's recycling or compost program actually takes.

En español: materiales aceptados en tu ciudad

In this case: The cups say "recyclable," but the crew's city does not accept plastic-lined paper cups.

Who is involved

Dec

Opened the parts order

"Three orders of tiny connectors in one week. One big box, and half of it's packaging."

Anika

Tracks the parts and the budget

"I'm in. But if anyone says it saves money, I want the numbers. Right now we have one box and a guess."

⌚ Pacing

Full chapter: 5 min.

✂ Short on time: skip this page. Skip this page. Define source reduction and local acceptance aloud in one minute.

💬 Say this

"Source reduction happens before the waste exists. Which item in the story could the crew stop buying?" — Listen for the packaging and the cups.

👁 Watch for

Misconception: Students treat reuse and recycling as the same. **Listen for:** "Reusing is recycling." **Then:** Reuse means using the same item again, like a washable cup. Recycling depends on what the city list accepts.

📎 Support

- Use picture cards: a washable cup, a paper cup and a recycling bin.
- **Cognates:** reduction (reducción), recycle (reciclar), plastic (plástico), material (material), accessible (accesible), alternative (alternativa), container (contenedor), quantity (cantidad).

🔥 Heat check

■□□ Low.

🔑 Answer key

Any first guess is fine. Students return to it on the My take page.

Before you look at the evidence, what is the best way for the crew to cut waste?

➤ My first guess is a clearer recycling sign, because people may be putting cups in the wrong bin.

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

This page continues page 241. The notes for both pages are on the sheet for page 241.

Reading passage

Count first, then claim

On your own Read the passage. At each Stop and think box, pause and answer the question in your head or with a partner. About 5 minutes.

Words to know

- **Source reduction:** Source reduction is preventing waste before it is created, for example by buying less packaging.
- **Reuse:** Reuse is using an item again instead of throwing it away after one use.
- **Local acceptance:** Local acceptance is the list of materials that your own city's recycling or compost program actually takes.
- **Proposal:** A proposal is a change that someone suggests and that has not been approved yet.
- **Trade-off:** A trade-off is a choice where getting one benefit means accepting a cost or giving something up.

The story: The box and the supply list

Dec opens the box in the theater shop on Tuesday and laughs, a little. Over one week, the crew placed three separate orders for small LED connectors and switches. All three arrived together in one full box, and about half of it is plastic air pillows and foam wrapped around parts the size of a fingernail.

Anika tracks the parts and the budget, so she has the other half of the picture. The supply list from last Friday's screening at the Common Room shows about 120 single-use cups, plastic-lined paper and labeled "recyclable." It also lists 80 paper plates, 150 printed flyers and 40 paper straws handed out on request. The folding chairs were borrowed from the bookshop.

Dec, who is thinking about an electrical apprenticeship and likes following a problem to where it starts, wants to fix the ordering before anyone redoes the recycling sign. Anika is on board, with a condition. If anyone says a change saves money, she wants the numbers. Right now, she says, they have one box and a guess.

Your role in this case is to count the cups before and after the change.

Stop and think. Why does Dec start with the order form instead of the recycling bins?

Pacing

Reading: about 5 min (572 words). Short on time: read it aloud together, pausing at each Stop and think.

Stop and think

1. **After “The story: The box and the supply list”:** Why does Dec start with the order form instead of the recycling bins?
2. **After “Upstream and downstream”:** What does the baseline of 120 cups let the crew claim later, and what does it not?
3. **After “What the EPA and the straw debate show”:** How could a change that reduces waste create an access problem, and how would you find out?

Upstream and downstream

Source reduction is preventing waste before it is created, for example by buying less packaging. **Reuse** is using an item again instead of throwing it away after one use. Dec's ordering fix is source reduction. Borrowing the bookshop's washable cups is reuse.

The cups show why checking matters. They are labeled "recyclable," but the city's recycling list accepts metal cans, glass, rigid plastic bottles and containers and flattened cardboard. It does not accept plastic-lined paper cups, plastic bags and film, foam or items labeled compostable. **Local acceptance** is the list of materials that your own city's recycling or compost program actually takes. Case 9 taught you to go to the official source for your own area, and this is the recycling version of that skill. Anika adds a warning. Compostable cups are not on the list either, so switching to them would not solve anything by itself.

The new skill is counting a starting point before you claim a change works. The baseline is about 120 cups. The test is one screening with washable cups. The count covers cups used and cups left, plus the new costs of water and washing time. Case 4 gives you the words for the result. It is a **proposal**, a change that someone suggests and that has not been approved yet. It is also a **trade-off**, a choice where getting one benefit means accepting a cost or giving something up. Anika also rejects a total ban on disposables. Some people need a disposable cup or a straw, so the plan keeps some on request.

? **Stop and think.** What does the baseline of 120 cups let the crew claim later, and what does it not?

What the EPA and the straw debate show

The Environmental Protection Agency ranks ways to handle waste. Source reduction and reuse come first. Recycling and composting come next, then energy recovery, then treatment and disposal. The EPA also notes that no single approach fits every item (EPA, updated December 19, 2025). An NPR investigation found that less than 10 percent of plastic has ever been recycled, which is one reason reduction comes first (NPR, September 11, 2020).

In 2018, Starbucks announced it would phase out plastic straws by 2020 using a sippable lid (NPR, July 9, 2018). Two days later, NPR reported that some people with disabilities need flexible plastic straws, and advocates said few people seemed to know about the exemption in Seattle's straw ban (NPR, July 11, 2018).

? **Stop and think.** How could a change that reduces waste create an access problem, and how would you find out?

This page continues page 243. The notes for both pages are on the sheet for page 243.

Real source | NPR | July 11, 2018

Why People With Disabilities Want Bans On Plastic Straws To Be More Flexible

[illegible]

This page continues page 243. The notes for both pages are on the sheet for page 243.

Look at the evidence

On your own Read each document. For each one, fill in both boxes. About 8 minutes.

Evidence A | Supply list

Screening supply list, last Friday

Single-use cups (plastic-lined paper, labeled “recyclable”): about 120. Paper plates: 80. Printed flyers: 150. Paper straws, on request: 40. Folding chairs: borrowed from the bookshop.

Look closely: Which item did the crew use the most? Could it be reused?

What it shows

➤ What the screening used, including about 120 cups labeled “recyclable.”

What it leaves out

➤ Where each item went after the event, and which items could be reused.

Evidence B | Delivery

The parts order

Delivered Tuesday to the theater shop. Three separate orders of small LED connectors and switches, placed over one week, arrived together. They came in one full box, about half of it plastic air pillows and foam around tiny parts.

Look closely: How many orders came in this one box? Why does that matter?

What it shows

➤ Three small orders arrived in one box that was about half packaging.

What it leaves out

➤ Whether one combined order would come with less packaging.

Case 13 | Look at the evidence

| Grades 9–10 educator edition

Pacing

Full chapter: 8 min.

✂ Short on time: 8 min.

Say this

“Put the supply list next to the city list. Which item appears on both?” — Wait for the plastic-lined paper cups.

Watch for

Misconception: Students say the cup label is a lie. **Listen for:** “The label is fake.” **Then:** Ask what the city list tells us: this city does not accept them. Other places are not in the evidence.

Support

- Give each document on its own half-page.
- Read the city list aloud, pausing after “Not accepted.”
- **Cognates:** reduction (reducción), recycle (reciclar), plastic (plástico), material (material), accessible (accesible), alternative (alternativa), container (contenedor), quantity (cantidad).

Stretch

- Ask which document shows waste made before the event and which shows what happens after it.

Heat check

■□□ Low.

Look at the evidence, continued

Evidence C | Sanitation guide

City recycling list

Accepted in recycling: metal cans, glass bottles and jars, rigid plastic bottles and containers, flattened cardboard. Not accepted: plastic-lined paper cups, plastic bags and film, foam, items labeled compostable.

Look closely: Find the plastic-lined paper cups. Which list are they on?

What it shows

☞ The city does not recycle plastic-lined paper cups, foam or items labeled compostable.

What it leaves out

☞ Where the items the city does not accept end up.

What is still missing from the evidence?

☞ We don't know how many cups reuse would replace or what washing costs in water and time. We also don't know if the bookshop can lend cups every time.

Notes

Case 13 | Look at the evidence | Grades 9–10 educator edition

🕒 Pacing

Full chapter: 4 min.

✂ Short on time: 4 min.

💬 Say this

“Put the supply list next to the city list. Which item appears on both?” — Wait for the plastic-lined paper cups.

👁 Watch for

Misconception: Students say the cup label is a lie. **Listen for:** “The label is fake.” **Then:** Ask what the city list tells us: this city does not accept them. Other places are not in the evidence.

📄 Support

- Give each document on its own half-page.
- Read the city list aloud, pausing after “Not accepted.”
- **Cognates:** reduction (reducción), recycle (reciclar), plastic (plástico), material (material), accessible (accesible), alternative (alternativa), container (contenedor), quantity (cantidad).

🔗 Stretch

- Ask which document shows waste made before the event and which shows what happens after it.

🔥 Heat check

■□□ Low.

Key idea: source reduction

On your own Read the key idea and the Professional standards card. Then answer the question in the box. About 8 minutes.

Source reduction is preventing waste before it is created, for example by buying less packaging. The Environmental Protection Agency (EPA) ranks ways to handle waste. Source reduction and reuse come first. Recycling and composting come next, then energy recovery, then treatment and disposal. The EPA also notes that no single approach fits every item or situation.

Reuse is using an item again instead of throwing it away after one use. Borrowing washable cups from the bookshop is one example. Reuse has costs too. Washing takes water and someone's time, so a fair comparison counts those costs along with the cups.

A “recyclable” label does not tell you where an item will go. **Local acceptance** is the list of materials that your own city's recycling or compost program actually takes. The crew's cups say “recyclable,” but their city's list does not take plastic-lined paper cups. The list does not take items labeled compostable either. So the crew has to check the list before choosing any new cup.

Professional standards

Real source | Law or regulation | Federal Trade Commission (FTC)

FTC Green Guides (16 CFR Part 260): § 260.12 Recyclable claims

“A product or package should not be marketed as recyclable unless it can be collected, separated, or otherwise recovered from the waste stream through an established recycling program”

In plain words: FTC guidance says a company should call a product recyclable only when recycling programs can collect and process it.

Question: The crew's city rejects plastic-lined paper cups. What else must you know before saying the “recyclable” label breaks the guide?

Your answer

Before saying the label breaks the guide, I would need to know ____, because ____.

➞ Before saying the label breaks the guide, I would need to know whether other programs collect these cups, because the guide asks about established programs.

⌚ Pacing

Full chapter: 8 min.

✂ Short on time: 2 min. Read the first paragraph of the key idea aloud. Skip the rest.

💬 Say this

“The EPA ranks source reduction and reuse first. Where on that list is Dec trying to act?” — Wait for “source reduction.”

“This card is FTC guidance, not an ethics code. Who does it apply to?” — Marketers who call a product recyclable.

👁 Watch for

Misconception: Students treat the EPA ranking as a rule for every item. **Listen for:** “Reuse is always better.” **Then:** Reread the key idea: no single approach fits every item. Washing has costs too.

📄 Support

- Draw the ranking as a staircase, with source reduction and reuse on the top step.

🔗 Stretch

- Use the AIGA card: what could the next parts order change before anything reaches the shop?

🔥 Heat check

■ ■ □ **Medium.** The straw story raises disability access, and students may describe their own needs or others'.

Cool-down: Keep the talk to the NPR report. No one needs to say what they or anyone they know needs.

Real source | NPR | July 9, 2018

A throwback to a company cutting waste at the counter, before anything reached a bin.

Real source | NPR | September 11, 2020

Investigation finding less than 10% of plastic has ever been recycled, which is why reduction comes first.

[illegible]

This page continues page 248. The notes for both pages are on the sheet for page 248.

Sort the evidence

On your own Follow each choice to its consequences in the diagram. Then name one view that is missing. About 6 minutes.

Follow each choice to its consequences, including new costs. Which consequence would you measure first, and what would count as success?

Keep buying “recyclable” single-use cups

About 120 cups go to the trash because the city does not accept them

Who is affected

→ The city collection
service and the
neighborhoods near
where waste ends up

Borrow washable cups and run a wash station

Fewer cups in the trash, if people use the washable ones

Who is affected

Check: Count cups and bags after the next event and compare with last time

New costs: water, washing time and volunteers

Who is affected

Check: Count cups and bags after the next event and compare with last time

Combine parts orders into one shipment

Less packaging arrives before anything reaches a bin

Who is affected

Notes

Pacing

Full chapter: 6 min.

 Short on time: skip this page.

Say this

“Follow the washable-cup choice. What new costs appear?” — Model the first chain together.

Watch for

Misconception: Students list only benefits for the washable cups. **Listen for:** “Washable cups are just better.” **Then:** Point to the new-costs box: water, washing time and volunteers.

Support

- Let students draw arrows before writing labels.

Heat check

 Low.

Whose view is missing from these documents? What would you ask them?

The view that is missing is _____. I would ask _____.

☞ The bookshop's view is missing. I would ask whether it can lend washable cups every time, and who would wash them.

Notes

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

This page continues page 250. The notes for both pages are on the sheet for page 250.

Practice: choose a response

On your own Choose the plan the crew should try and explain why. Then fix the two marked lines.
About 5 minutes.

The last screening used about 120 single-use cups, and the city’s recycling list does not take that type. Which plan should the crew try for the next screening?

☒ **A** Compare a washable-cup option, washing time, cost, access and the city list, then test one change.

☐ **B** Buy a different cup labeled “recyclable” and put up a clearer recycling sign.

☐ **C** Stop offering disposable cups and straws, and ask everyone to bring their own.

Why I chose it

➤ **A. It names the trade-offs: washing time, cost, access and the city list. B repeats the label mistake, and C could leave out guests who need a cup or a straw.**

Improve a draft

A student’s first draft

We should make the screening zero waste. Everyone should bring their own cup and we’ll **1** ban all plastic. We can also put up posters that say “save the planet” so people remember to recycle. Recycling is the best thing you can do for the environment. This will be easy and **2** it will save money too. Last screening there were cups everywhere and the bins were overflowing by the end of the night. People will love it once they get used to it. Let’s start next week!

Rewrite each marked phrase so it says only what the evidence supports.

Rewrite phrase 1

➤ **We will offer washable cups and keep disposable cups and straws on request.**

Rewrite phrase 2

➤ **We won’t say it saves money until we count cups and washing costs.**

⌚ Pacing

Full chapter: 5 min.

✂ Short on time: skip this page.

💬 Say this

“You are planning the next screening. Which plan would you try first?” — Vote before any discussion.

👁 Watch for

Misconception: Students choose C because a ban cuts the most waste. **Listen for:** “Just ban them all.” **Then:** Ask who at the screening might need a disposable cup or a straw. Point to the straw story.

📖 Support

- Read the three options aloud before students choose.

🔥 Heat check

■ ■ □ **Medium.** Talk about bans can turn to who “really” needs a straw.

Cool-down: Say: “Nobody has to prove a need.” Keep the focus on how the plan offers items on request.

➤ Answer key

A revised version: For the next screening, we propose one change: cups. Last time we used about 120 single-use cups, and our city’s recycling list doesn’t accept that type. We’ll borrow 60 washable cups from the bookshop, keep 40 compostable cups for anyone who needs one, and ask Rafa and Jordy to run a quick wash station. Flexible straws and single-use cups stay available on request. We’ll count cups used and leftover supplies after the event and compare with last time before deciding whether to keep the change. We’re not claiming it saves money yet.

Grades 9—10

Your task

On your own Read the steps. Fill in the planner boxes before you start your draft. About 8 minutes.

Write a proposal to the event organizers for one purchasing change, with a measurement plan.

Use: EPA hierarchy, supply list and local accepted-materials list.

You'll make: Proposal, 250—350 words

Time: 50 minutes

- 1 Choose one item from the screening supply list in Evidence A.
- 2 Check the city list in Evidence C to see whether the city recycles that item.
- 3 Name one way to reduce or reuse the item before it reaches a bin.
- 4 Add a backup plan for people who need a disposable item, such as a cup or a straw.
- 5 Plan what you will count before and after the next screening, including any new costs.
- 6 Write your proposal of 250 to 350 words on the Your draft page.

Prefer typing? Scan to open the online workspace.

The item and how many were used

🔗 Single-use cups: about 120.

Does the city list accept it?

🔗 No. Plastic-lined paper cups are not accepted.

Reduce or reuse option

🔗 Borrow washable cups from the bookshop and run a wash station.

Case 13 | Your task | Grades 9—10 educator edition

🕒 Pacing

Full chapter: 8 min.

✂ Short on time: 8 min.

💬 Say this

“Your organizers will ask two questions: what changes, and how will we know? Answer both in your planner.” — Write the two questions on the board.

👁 Watch for

Misconception: Students choose a new “recyclable” cup. **Listen for:** “Just buy better recyclable cups.” **Then:** Send them back to Evidence C. The list decides, and it rejects items labeled compostable too.

📄 Support

- Proposal template
- Before/after data table
- Before-and-after table headings: item, count last time, count next time, new costs.

🔗 Stretch

- Address one access or cost concern.

🔥 Heat check

■□□ Low.

📋 Standards

Common Core: RI.9-10.1; W.9-10.1; W.9-10.5; SL.9-10.1.c; SL.9-10.1.d.

C3 Framework: D4.6.9-12; D4.7.9-12.

The Case plan sheet gives each code in plain words.

Backup for people who need a disposable item

What we will count, before and after

☛ Cups used and left over, compared with about 120, plus water and volunteer time for washing.

Notes

This image shows a single sheet of white paper with horizontal blue lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

07 Answer key

A strong response:

- Specific change
- Uses the hierarchy accurately
- Checks local acceptance
- Measurement plan and access concern included

Your draft

On your own Write your draft in the boxes. Use your planner from the page before. About 20 minutes.

Your proposal, 250 to 350 words

To the event organizers:

🔗 **To the event organizers:** For the next Common Room screening, we propose one change to the cups. At the last screening, we used about 120 single-use cups. They are plastic-lined paper and labeled “recyclable,” but the city’s recycling list does not accept plastic-lined paper cups. The EPA ranks source reduction and reuse above recycling, so we want fewer cups before any reach a bin. We propose borrowing washable cups from the bookshop and running a wash station during the screening. We will ask Rafa and Jordy to run it. Some guests need a disposable cup or a straw, so single-use cups and flexible straws will stay available on request. This change has costs. Washing uses water and someone’s time, and the bookshop may not be able to lend cups every time. To measure the result, we will count the cups used and left over after the event and compare the total with about 120. We will also record how long the wash station took. We expect fewer cups in the trash, but we won’t claim savings until we compare the counts and the cost of washing.

Pacing

Full chapter: 20 min.

✂ Short on time: 20 min.

Say this

“Read your proposal as the organizer who has to wash the cups. What would you ask?” — Partners trade drafts and write one question.

Watch for

Misconception: Proposals promise savings. **Listen for:** “This will save money.” **Then:** Ask what the crew has counted so far. Replace the promise with a plan to count.

Answer key

What to notice in the sample:

1. Checks local acceptance instead of trusting the label.
2. Builds the access concern into the plan.
3. Uses the supply-list count as a baseline.
4. Avoids promising results that have not been measured.

Check your work

On your own Answer the Check your work questions and mark your level in each rubric row. Then write one change you made. About 6 minutes.

- Does your proposal name one specific change? ☒ Yes ☐ No
- Does it rely on the city list instead of the label on the item? ☒ Yes ☐ No
- Does it keep an option for people who need a disposable item? ☒ Yes ☐ No
- Does it say what you will count, without promising savings you have not measured? ☒ Yes ☐ No

How your work is scored

Mark one box in each row.

Skill	Beginning	Developing	Proficient	Advanced
Evidence	☐ No data.	☐ General claims about recycling.	☐ Uses quantities and local rules.	☐ Uses quantities, local rules and a before/after plan.
Reasoning	☐ Treats one fix as solving everything.	☐ Ignores trade-offs.	☐ Applies the hierarchy and names a trade-off.	☐ Weighs trade-offs including access and cost with a measurement boundary.
Audience & purpose	☐ Commands people.	☐ Relies on slogans.	☐ Specific change organizers can do.	☐ Specific, inclusive change with roles assigned.
Revision	☐ No change.	☐ Wording only.	☐ Narrows to a measurable change.	☐ Explains how narrowing makes success testable.

Pacing

Full chapter: 6 min.

 Short on time: skip this page. Collect proposals and score them with the rubric yourself.

Say this

“Find the sentence that says what you will count. Is there a number in it?” — If not, that is the revision.

Watch for

Misconception: Proposals still promise savings. **Listen for:** “It will definitely save money.” **Then:** Ask what the crew has counted so far. Replace the promise with the count.

Heat check

 **Low.**

Answer key

How to assess: The proposal is scored with the case rubric, with a check that it verifies local acceptance and avoids unmeasured claims about savings.

Proficient looks like:

- **Evidence:** Uses quantities and local rules.
- **Reasoning:** Applies the hierarchy and names a trade-off.
- **Audience & purpose:** Specific change organizers can do.
- **Revision:** Narrows to a measurable change.

Check your work, continued

One change I made after feedback

I changed ___ because ___.

Q I replaced the promise that the change will definitely save money with a plan to compare the counts, because nothing is measured yet.

Notes

This image shows a single sheet of white paper with horizontal blue lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

This page continues page 256. The notes for both pages are on the sheet for page 256.

Questions to discuss

On your own Write a short answer to each question. Then complete each sentence frame below the questions. About 8 minutes.

- 1 Could a change that reduces waste create an access problem for someone, and how would you find out?

➤ Yes. Banning disposable cups or straws could leave out people who need them, as the NPR straw story shows. The crew could ask guests and keep some on request.

- 2 How does “add more bins” define the problem differently from “order less packaging”?

➤ The phrase “add more bins” treats waste as a sorting problem at the end. The phrase “order less packaging” treats it as a buying problem, which the EPA ranks higher.

- 3 What would the crew need to count before saying a change saves money?

➤ Cups used and left over, compared with about 120 last time, plus the cost of water and volunteer time for washing.

My take

My claim: ____.

➤ The crew should test washable cups at one screening and count the result.

The best evidence is ____, because ____.

➤ The city list, because it shows the “recyclable” cups are not accepted.

⌚ Pacing

Full chapter: 8 min.

✂ Short on time: 3 min. Use question 3 as an exit ticket.

💬 Say this

“Use a number or a document in every answer.” — Hear one answer per question, then ask for a different view.

🔗 Stretch

- Design the count sheet for the next screening: items, numbers before and after, and new costs.
- Going further: Compare two plans for the theater shop: order all the parts at once, or keep ordering when a part breaks. What problem does each plan solve? What new problem could each one create?
- Going further: List who would have to change a routine if the crew switched to washable cups. Write a two-sentence note to them. Say what the crew will count to show whether the change worked.
- Going further: Write two event plans for the next screening and a small test for each. After the tests, explain which plan you would improve and which you would drop.
- Going further: Pick one item that appears at many school events, such as cups, flyers or plates. Count how many were used last time, and check your city’s recycling list. Do not sort through trash with your hands.
- Find your city’s recycling rules and compare with a neighboring city
- Research where your area’s trash goes after pickup

My take, continued

Someone who disagrees might say ____.

- ☞ Washing cups uses water and time, so it might not help.

I would change my mind if ____.

☐ The count showed washing cost more than it saved, or guests could not use the cups.

Notes

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

This page continues page 258.

Heat check

Question 1: Medium. Students may describe their own disabilities or those of people they know.

Cool-down: Keep the talk to the case and the straw story. No one needs to say what they or anyone they know needs.

Talk about this case at home

Case 13: Can the crew cut waste before it reaches the bin?

In this case, a group of friends learns that the cups from their movie night can't be recycled in their city. Your student planned one change to cut waste before the next event and a way to count whether it worked.

Questions to talk about

- 1 How could someone find out what their city or town recycles?
- 2 What is one item people often throw away after a party or event?
- 3 Why might a rule to cut waste need an exception for some people?

Nobody needs to share personal stories or private information to talk about this case.



See the case online.

Case 13 | Talk about this case at home

| Grades 9–10 educator edition

Pacing

At home: this page takes no class time.

Say this

“Bring this page home or read it with someone you trust.” — Nobody needs to share personal needs or health information.