

Lesson 5

Recycling Scientists

Prep
Science



Duration:
40 minutes



Lesson Focus:

Using knowledge of materials to sort everyday items for reuse and recycling.



Resources



Lesson Story YouTube: Recycling Scientists from (Banjo Education Support YouTube Channel.)



Clean recycling/reuse items or picture cards



Labelled sorting containers/mats



Student Recycling Scientists worksheet



Pencils

Resource Purpose

The story connects material identification with a real-world problem. Students apply their earlier material knowledge to make and justify sorting decisions.

Success Criteria

- ✓ I can identify the material an item is made from.
- ✓ I can sort items into appropriate groups.
- ✓ I can explain my sorting decision using material evidence.

Learning Intention



We are learning to use material properties to make decisions about reuse and recycling.



Key Vocabulary

recycle • reuse • material • sort • plastic • metal • glass • paper • waste • evidence

40-Minute Lesson Sequence

Time	Lesson Stage	Teacher Actions	Student Actions
0–5 min	Engage / Hook	Show a clean mixed pile of common waste items. Ask: Should all of these go in the same bin?	Observe, predict and share existing ideas.
5–13 min	Lesson Story	Play/watch Recycling Scientists. Invite students to identify materials and predict how characters might sort the items.	Watch, listen, respond to prompts and make predictions.
13–18 min	Explicit Teaching	Revisit object versus material. Model checking what an item is made from before deciding how to sort it. Follow local/school recycling rules for the practical activity.	Identify the key scientific idea and practise vocabulary.
18–28 min	Hands-On Activity	Students work in groups to sort clean items/cards into teacher-defined reuse/recycling/waste categories and justify selected choices.	Investigate collaboratively and use observations as evidence.
28–35 min	Worksheet Task	Students classify several example items and record/draw why one item belongs in its chosen group.	Record the most important evidence from the activity.
35–38 min	Analyse & Discuss	Compare decisions and identify items that are difficult to classify because they contain more than one material.	Share findings, compare ideas and justify responses.
38–39 min	I Wonder...	How could making an object from fewer types of material make recycling easier?	Develop or discuss a scientific question.
39–40 min	Exit Ticket	Choose one item and explain how its material helped you sort it.	Give one individual evidence-based response.



Explicit Teaching

Scientific Idea: Knowing what an object is made from helps people make informed decisions about reuse, recycling and waste.

Board Model:



Student Investigation

Story → hands-on activity → worksheet evidence. Students first encounter the scientific idea through the lesson story, then apply it with real objects/materials, and finally record only the key evidence needed to show their understanding.

Investigation Prompt:

What does our evidence tell us?



Teacher Questioning

- What do you notice?
- What evidence supports your idea?
- What is the same? What is different?
- Which science word describes this?
- How do you know?
- What happened when you tested it?



Expected Big Idea

Knowing what an object is made from helps people make informed decisions about reuse, recycling and waste.



Curriculum Links – Prep (AC v9)

AC9SFU03	Recognise that objects can be composed of different materials and describe their observable properties.
AC9SFH01	Explore how people use observations and questions to learn about the natural world.
AC9SFI01	Pose questions and make predictions based on experiences.
AC9SFI02	Engage in explorations safely and make observations using the senses.
AC9SFI03	Represent observations using provided structures and identify patterns with guidance.
AC9SFI05	Share questions, predictions, observations and ideas with others.



LESSON 5 Recycling Scientists!

Name: _____



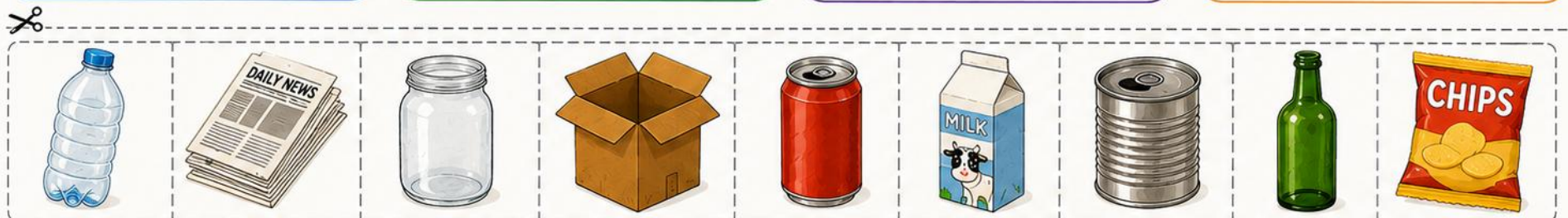
★ Look at each object. **Cut** it out and **paste** it in the correct recycling bin.

PLASTIC

PAPER & CARDBOARD

GLASS

METAL



Think like a scientist!

What material is each object made from?



I sorted the _____ into the _____ group
because it is made from _____.



Recycle today for a better tomorrow! ♥

