



Understanding Waste & The Circle of Stuff



MY CIRCLE OF STUFF

Everything we use begins with something from nature. These are called raw materials — like trees for wood, plants for food, and metals found in rocks and minerals.

Raw materials are used to make products in factories. These products are delivered to stores so people can buy and use them.

But what happens when we're done with them? That's where the circle of stuff comes in.

In a circular economy, we try to reuse, repair, repurpose, recycle, or compost things instead of just throwing them away. If something can't be recycled, it may end up in the landfill.



YOUR TASK:

Pick something you use often — like a juice box, toy, book, or snack.

Draw how that item moves through each step of the circle:

- * What was it made from?
- * How was it produced?
- * How did it get to you?
- * How do you use it?
- * What will you do with it when you're finished?



Draw your CIRCLE OF STUFF below:
(Use each section to show one step in the journey.)

1: Raw materials 2: Production 3: Distribution 4: Use 5: What Happens Next?
(Reuse • Repair • Repurpose • Recycle • Compost • Landfill)



ROSERIDGE

Teacher Resource – My Circle of Stuff

This activity helps students apply what they've learned in Waste in Our World – Part 1 by exploring the journey of everyday items through the lens of a circular economy.

It supports Alberta Grade 4 science outcomes under the Waste and Our World unit, and reinforces the language and strategy used by Roseridge to encourage more waste diversion.

Key Learning Connection:

This activity helps students understand that everything we use comes from somewhere, and everything we throw away goes somewhere. By mapping the journey of a common item from raw material to end-of-life, students begin to connect their own consumption habits to broader systems of waste and its impact.

Through the "circle of stuff," students:

- * Explore how their actions as consumers create or reduce waste
- * Understand the difference between a linear system (take, use, throw away) and a circular system (reuse, repair, recycle, compost)
- * Use the eliminate–reduce–reuse–recycle frame to rethink and redesign wasteful products
- * Reflect on how their school or community could manage waste more sustainably

This activity isn't just about what goes in the bin – it's about rethinking our relationship with stuff. Students see that waste is not just a problem to manage, but a system we can change.

Instructions:

1. Have students choose one everyday item (e.g. juice box, shirt, toy, or snack wrapper).
2. Ask them to draw five steps in the item's journey:
 - * Raw materials – what it was made from
 - * Production – how it was made
 - * Distribution – how it got to them
 - * Use – how they used it
 - * What happens next? – Reuse? Repair? Repurpose? Recycle? Compost? Or landfill?

Classroom Extensions:

- * Review students' "What happens next?" choices together.
- * Have students pair-share and explain their reasoning.
- * Challenge the class to repurpose a real item as a hands-on activity.
- * Compare multiple circles to discuss more sustainable choices.