



TURNING TRASH INTO TREASURE

The TerraCycle Curriculum Series was co-created by The Cloud Institute for Sustainability Education and Learner-Centered Initiatives.

Student
Handout



creativecommons.org/licenses/by-nc-sa/3.0/us/ TerraCycle-Cloud Institute curriculum by The Cloud Institute www.cloudinstitute.org is licensed under a Creative Commons Attribution-NonCommercial-Share Alike 3.0 United States License creativecommons.org/licenses/by-nc-sa/3.0/us/. Permissions beyond the scope of this license may be available at www.cloudinstitute.org/privacy-policy.

THE
CLOUD
INSTITUTE
FOR
SUSTAINABILITY
EDUCATION

A long, heavy scraping sound came from upstairs, and suddenly, there were several loud thumps, as if someone had fallen down the stairs. Thump, thump, thumpety-thump, thud!

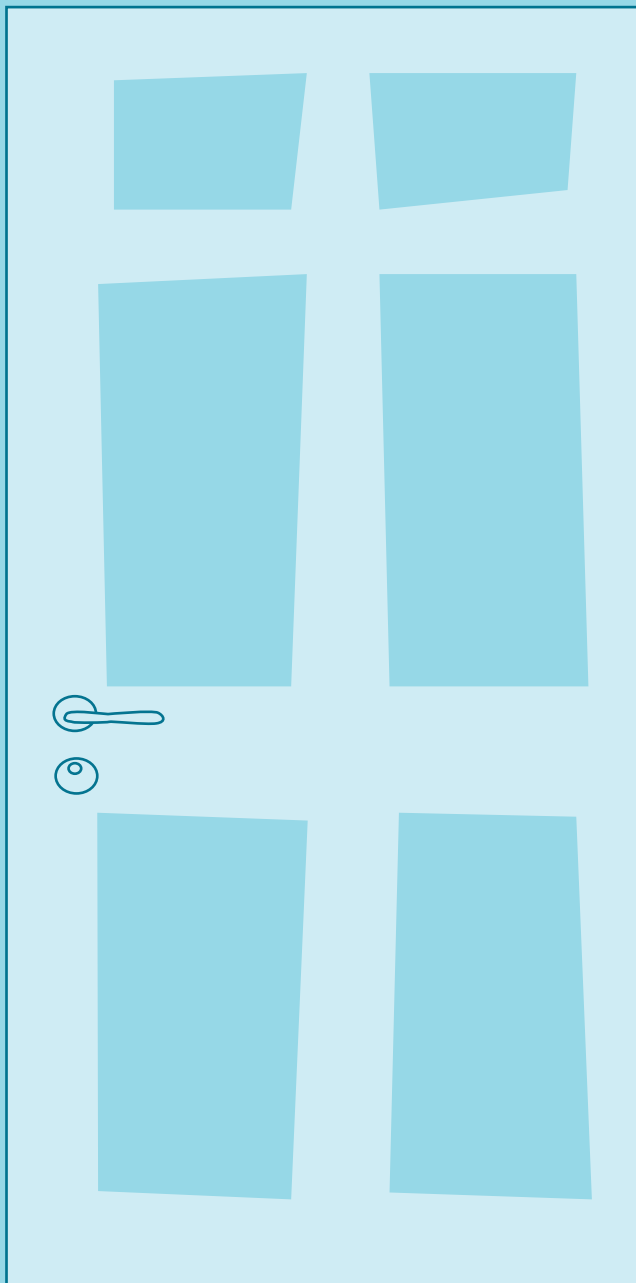
Grandmother leaped up from her chair. “What on earth are you doing up there, Maria? Are you alright?” she exclaimed.



Oh, Grandmother,” Maria peeked around the corner, grinning, “I was cleaning up my room. I filled a bag with things to be thrown away, but it slipped out of my hands and fell down the stairs. Good thing I tied a knot in the top, or we would have had trash all over the place!”



“You wouldn’t have liked that, would you?” Grandmother said. “Having to live with trash all over the place wouldn’t be very nice.”



“Oh, Grandmother, we wouldn’t have had to live with trash all over the place. I would have put it all back in the bag and thrown it away.” Maria giggled at how silly her grandmother was being. “Grandmother, why do you look so serious? The bag didn’t even break. Look, I’m going to throw it away right now.”

Maria headed for the door, dragging the big, bulky bag behind her.

“Maria...” Something in Grandmother’s voice made Maria stop. “Maria... what exactly is in the bag?”

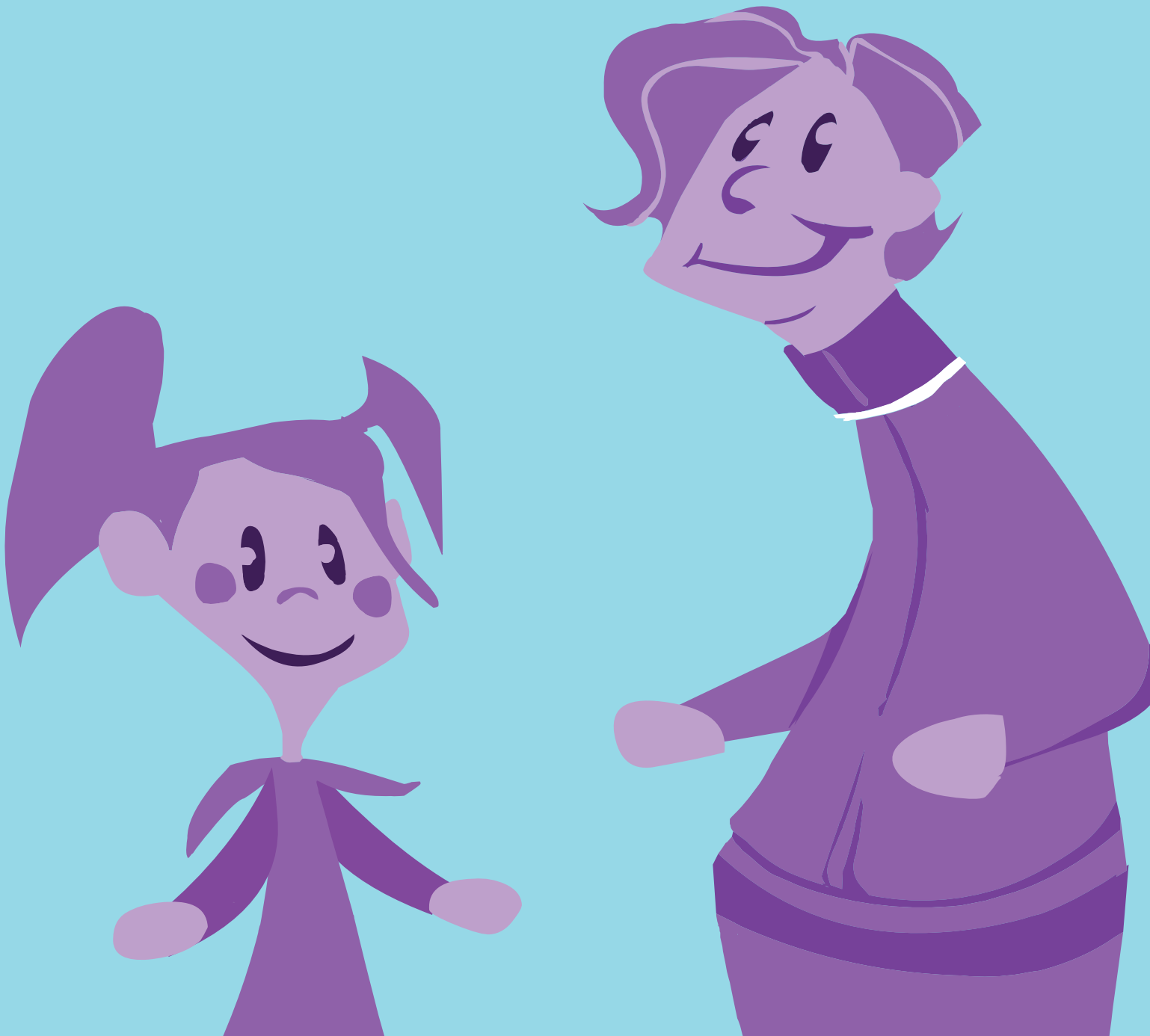
“Just a bunch of trash, Grandmother...I had a bunch of water bottles and old juice pouches under my bed, some granola bar wrappers, old colored paper that I don’t use anymore, my old rubber rain boots – stuff like that. I haven’t cleaned my room in a while. Mom told me that I can’t bring more stuff into my room faster than I take stuff out. She’s right; my room would overflow because things would just pile up in there. I know I should be better about cleaning up after myself. I will work on it, Grandma.”



“Your cleaning habits are one thing,” Grandmother replied. “We’ll talk about that later. I’m more interested in your thinking habits right now.”

“My thinking habits?” Maria asked. “What do you mean?”

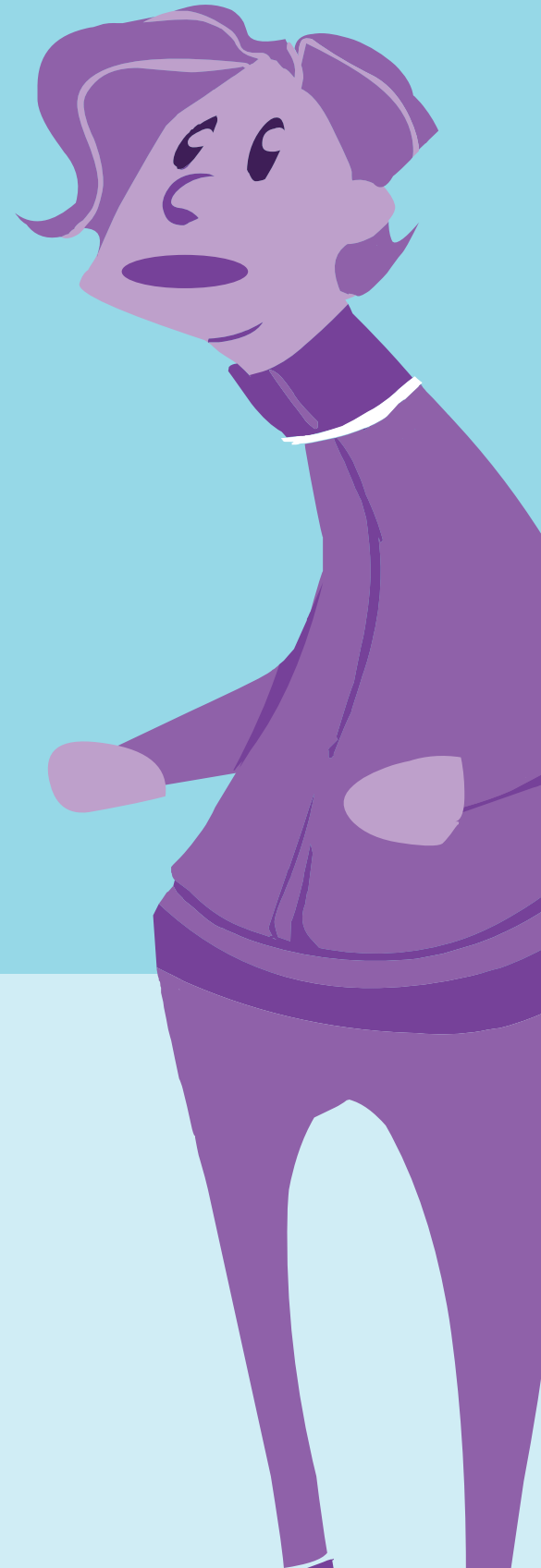
“Thinking habits are what help you make choices and take actions. Your thinking habits are at work right now.”





“Ohhhh...my thinking habits are helping me be neat and clean up after myself! That’s good, right?” Maria grabbed the bag of trash and started for the door again.

“Hold on, Maria,” Grandmother said.
“What are you doing with that bag of plastic bottles, juice pouches, paper, and old rain boots?”



“Grandmother, I’m throwing it away!”

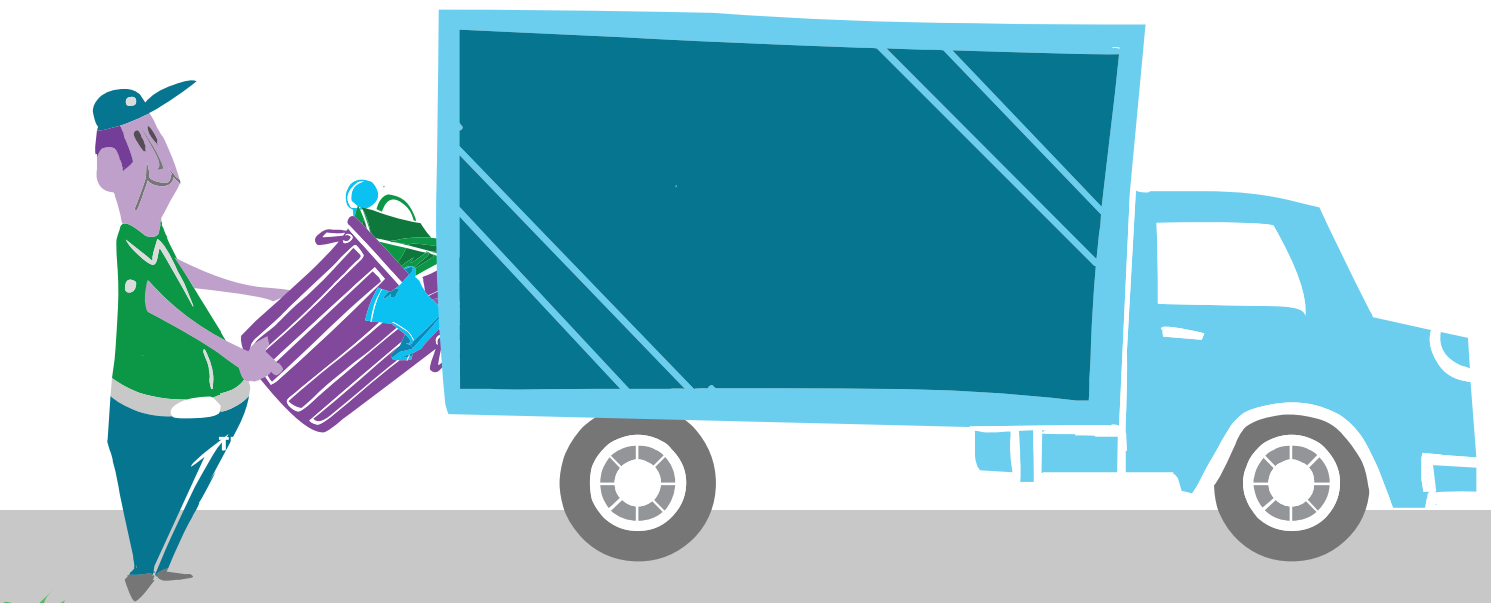
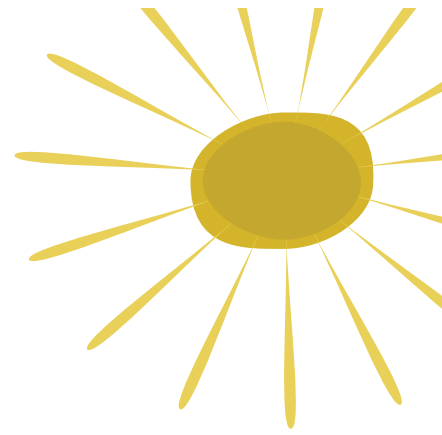
“And where exactly is ‘away,’ Maria?”

“Um...in the garbage can outside?”

“And then what?” Grandmother asked.

“And then the sanitation men come and put it in their big truck.”

Grandmother continued, “Do you know what happens then, Maria?”



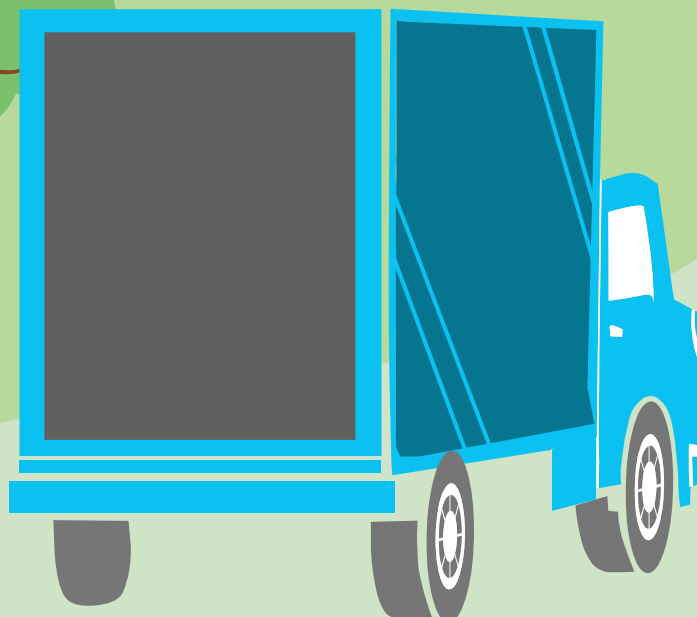
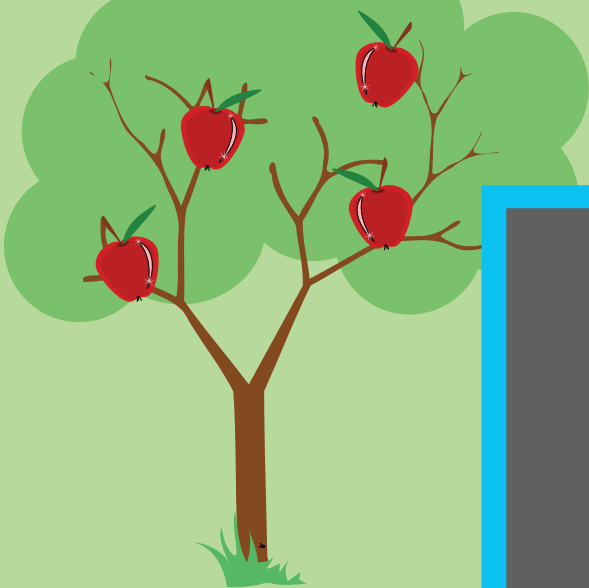
“Sure, they go next door to Emily’s and pick up her trash,” Maria replied. “They will pick up all of the trash on our block and on all of the blocks around here.”

“And where do they take all of that trash?”



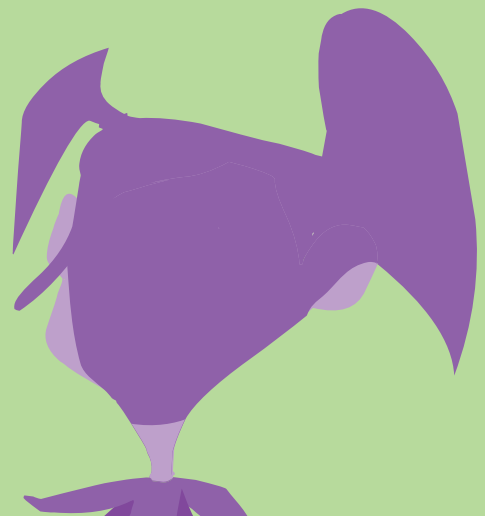
“That’s easy! We learned about that in school when we were learning about community helpers. They take the garbage to the landfill!” Maria replied.

“Leave the bag of trash by the door. It’s a beautiful day. Let’s go out for a little while,” Grandmother suggested.



Maria and Grandmother walked past the apple tree growing in the yard. “Remember how you threw your apple core on the ground and it grew into that little tree?”

“And the wrapper that I left there never grew into anything,” Maria added. They continued past the park where Maria and her best friend, Emily, had spent an afternoon picking up cans, bottles, and plastic wrappers. “Look, Grandmother. The recycling bins are full, and the park looks so much cleaner! People are really taking care of the park now.”





They walked all the way to the library and went inside.

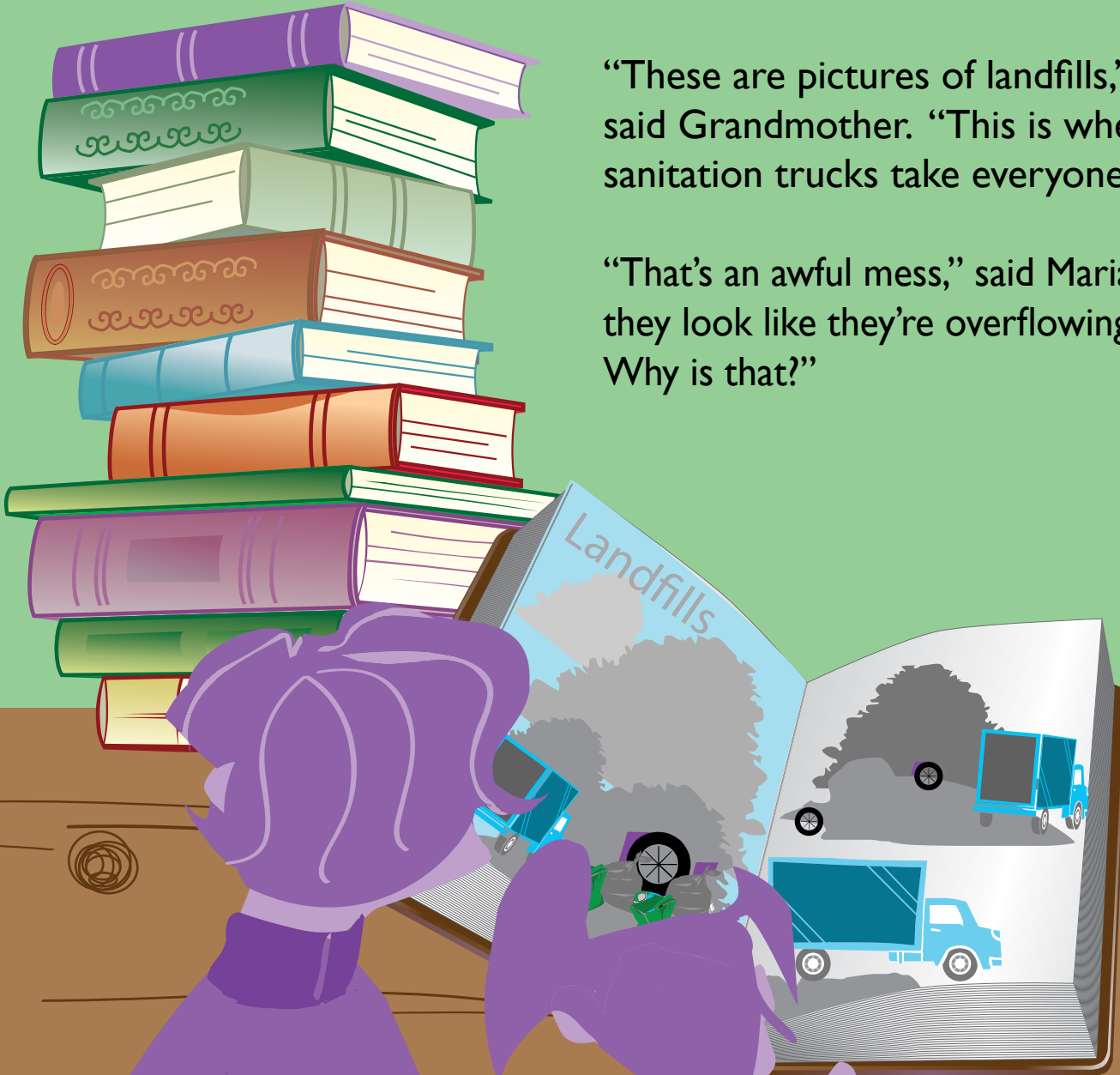
Grandmother spoke quietly to a librarian, who took them to a table and brought out books and photos of large areas filled with garbage.



“Ewww...what’s all this?”
Maria said softly.

“These are pictures of landfills,”
said Grandmother. “This is where the
sanitation trucks take everyone’s waste.”

“That’s an awful mess,” said Maria. “And
they look like they’re overflowing.
Why is that?”

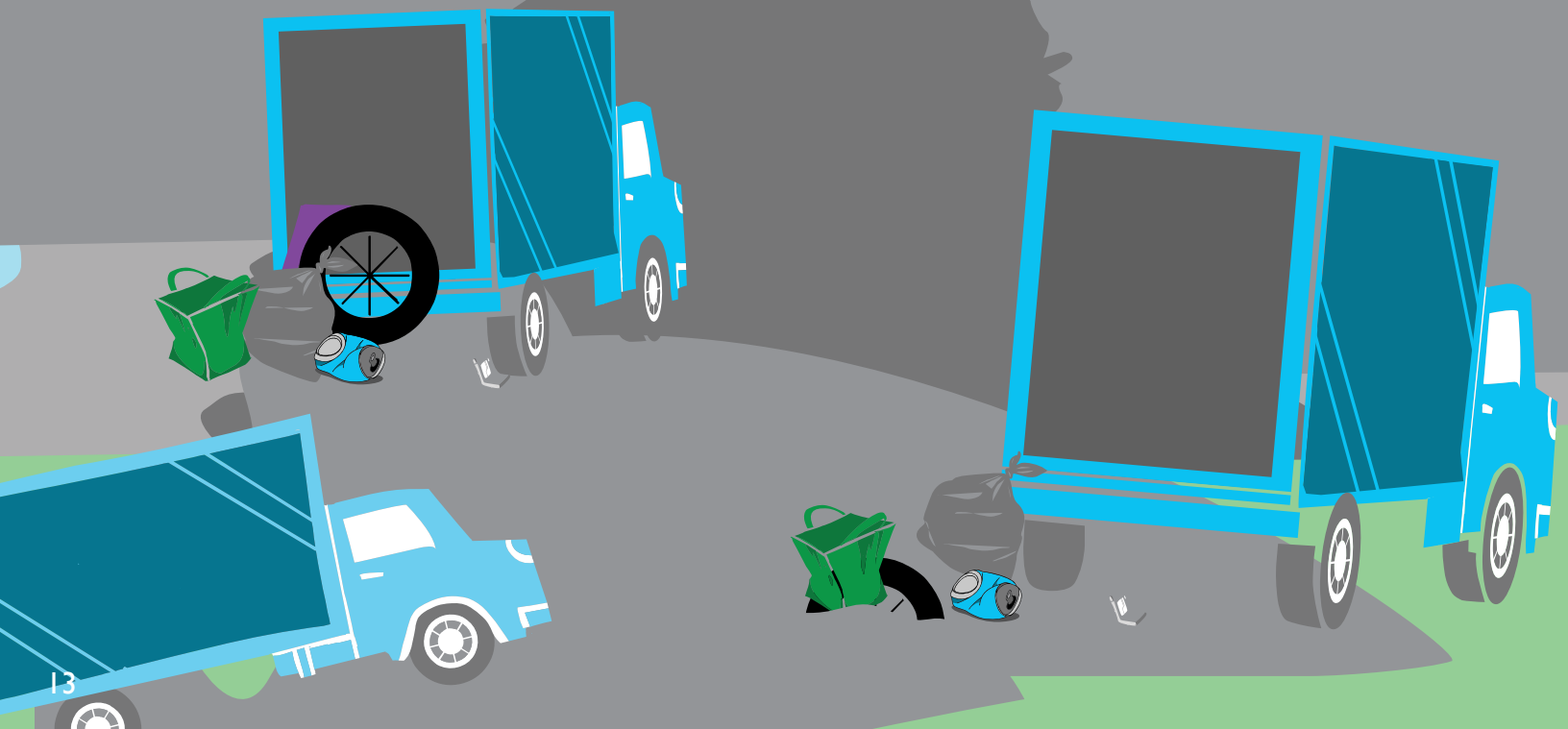


“Well, Maria, think about your apple core and granola bar wrapper. Remember that nature can take care of what comes from nature. It cycles back into nature and becomes something new from nature. But nature cannot take care of the things that people make.”

“People have to take care of that!” Maria gasped.

“People think when they throw things away, they’re cleaning up their mess, but really they’re just sending it somewhere else,” said Grandma.

“Grandma, there is no such place as away! So, it’s all piling up and overflowing in the landfill because stuff is flowing in faster than it is flowing out!”





Maria was quiet and very serious all the way home.

Back in the kitchen, Maria finally asked, “What can we do, Grandmother? Nature can’t take care of all of the stuff that people send to the landfills! It’s all just sitting there making a bigger and bigger mess. Can we do something?”

“In order to get a different result, Maria, first you have to think differently—you can change your thinking habits. When you were throwing stuff in that bag, you were only thinking about your room, not where your stuff would go next. If you really want to do something, think about yourself as part of something bigger than just you. Think of yourself as part of a living system, a community in which nature and people are helpful to one another. You can develop thinking habits that help you make decisions that are good for the whole living system.

“So, my thinking habits can become ‘systems thinking habits?’” Maria asked.



“Exactly!” said Grandmother. “Let’s look at what’s in your bag and think about what we might do with it, besides sending it to the landfill. How can we think about the stuff differently so that we can use it to help our living system instead of dumping things into landfills?”

“How can I do that?” asked Maria, confused.



“Look in this magazine. See this picture?” Grandmother showed Maria a picture of a shiny rain boot planter.

“That’s just like mine!” Maria exclaimed as she dug through the bag. “And I have two! If I fill them with dirt, and plant flowers in them, they will make our house look like spring inside.”

“What a great idea, Maria! How else can you imagine using what you have in your bag?”



“Well, there are lots of plastic water bottles and granola bar wrappers in my bag. I have a reusable water bottle now, but I got these bottles before I knew better. What if I wash everything very carefully, then wrap my old colored paper around them, and glue some crumpled granola bar wrappers on them to make them look fun? We could use them as vases for cut flowers.”

“Maria, when you turn trash into something that people want to keep instead of throwing it in the garbage, it’s called ‘upcycling.’ When we upcycle, we turn materials that would be wasted, into materials that we value. It helps nature and all of us. That’s using your systems thinker!”



Maria and Grandmother spent the rest of the day upcycling the rain boots into flower planters, and the plastic bottles into vases. At the end of the day, they had four plastic bottles and caps left. Maria jumped up and ran to the kitchen. She came back with a handful of dried beans.

“If I put the beans inside the bottle, and then I put the cap on, I have a shaker like the ones we use in music class! I can use the rest of the colored paper to decorate it, and I’ll bring them to school for my class to use in our music center!”



“I’m going to tell all of my friends about upcycling to help all the living systems. I’m sure they will want to make beautiful things out of their trash too! Maybe we could sell what we make and use the money to buy plants and trees for our playground and for around the school!”

“Why don’t we pack up some of the things you made so you can take them to school and show them to your friends?” suggested Grandma. “That will help them to understand what they can do.”



That night, Maria fell asleep thinking about all of the beautiful things that could be made by turning trash into treasure.

