

BEATRIZ THE BUILDER BEE



By Robin Kropp
Illustrated by Elena Makansi

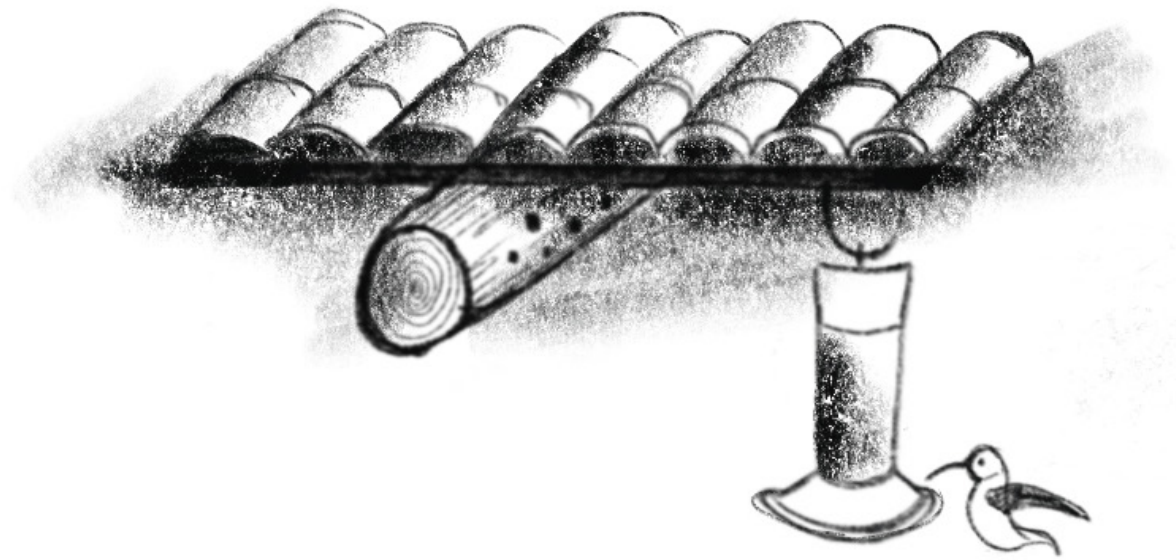


Hi, I am Beatriz. I am a builder bee.
I come from a long line of carpenters.

I live with my mom in the Sonoran Desert.

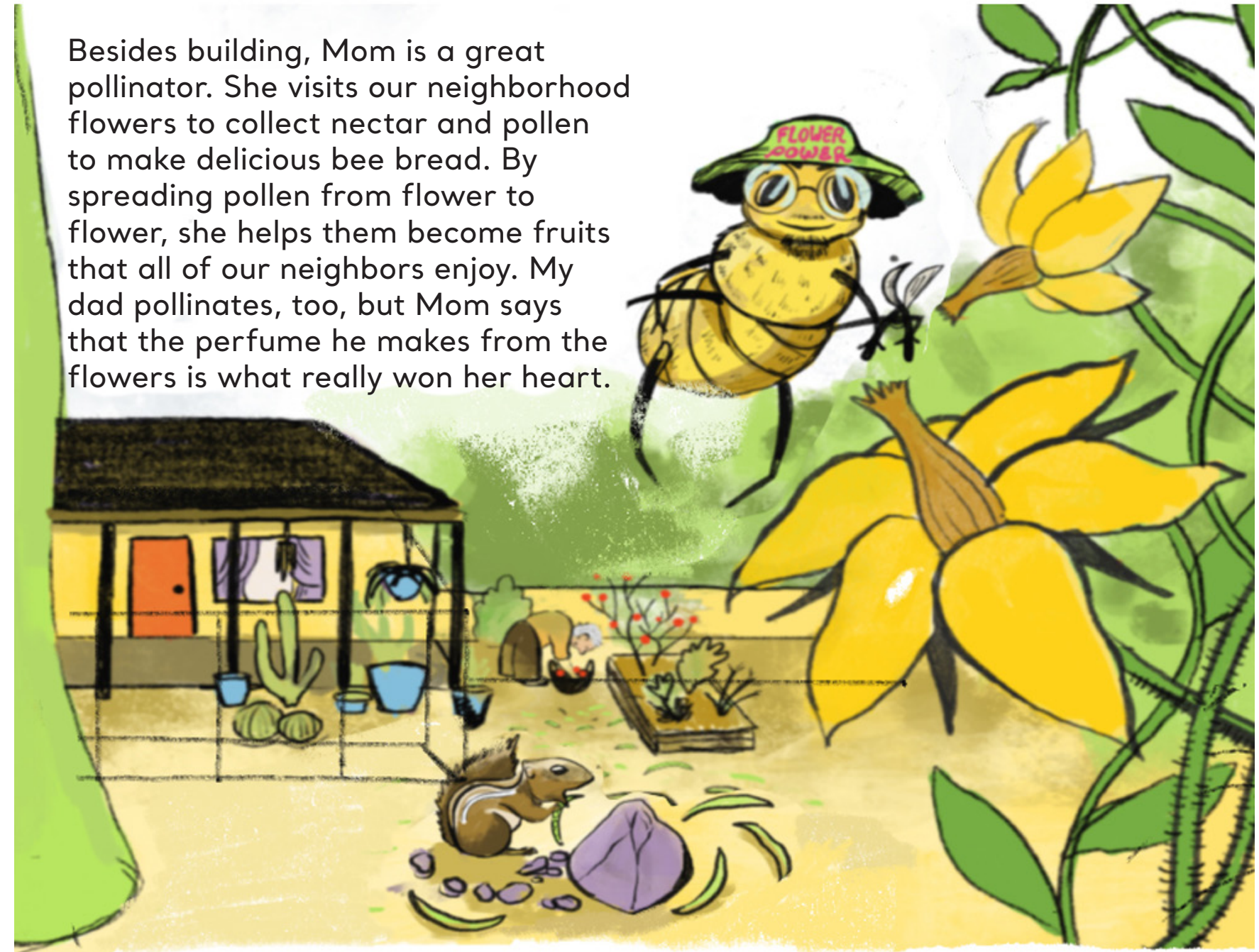


My mom is an award-winning architect, and I think her very best work is the cozy home she built for us.

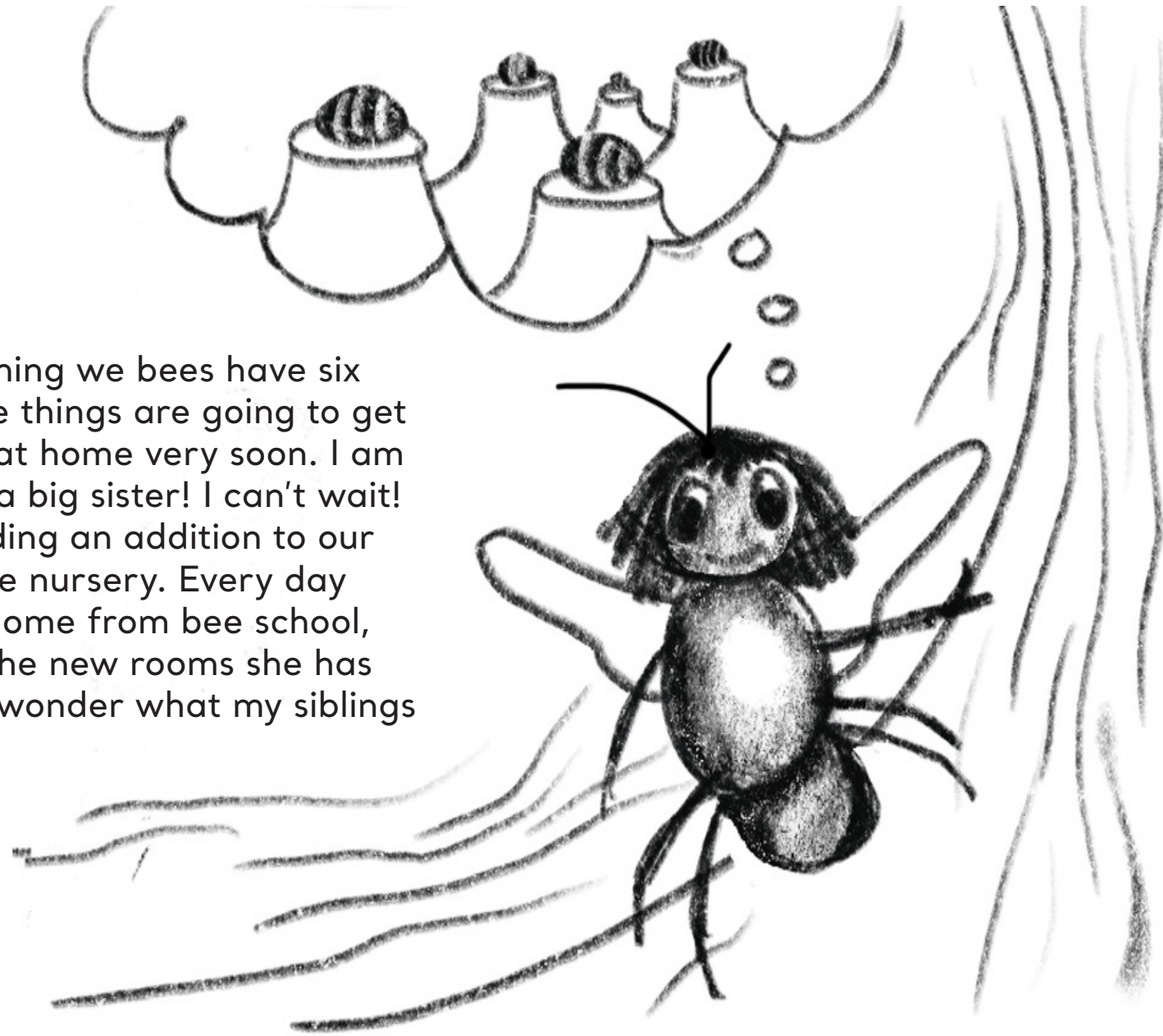


Mom searched far and wide for the perfect place to build. When she found the large, wooden beam under a sheltering roof, she just knew it was home. She carved the doorway into the most protected spot to keep out the sun, rain, and wind, then hollowed out the rooms.

Besides building, Mom is a great pollinator. She visits our neighborhood flowers to collect nectar and pollen to make delicious bee bread. By spreading pollen from flower to flower, she helps them become fruits that all of our neighbors enjoy. My dad pollinates, too, but Mom says that the perfume he makes from the flowers is what really won her heart.

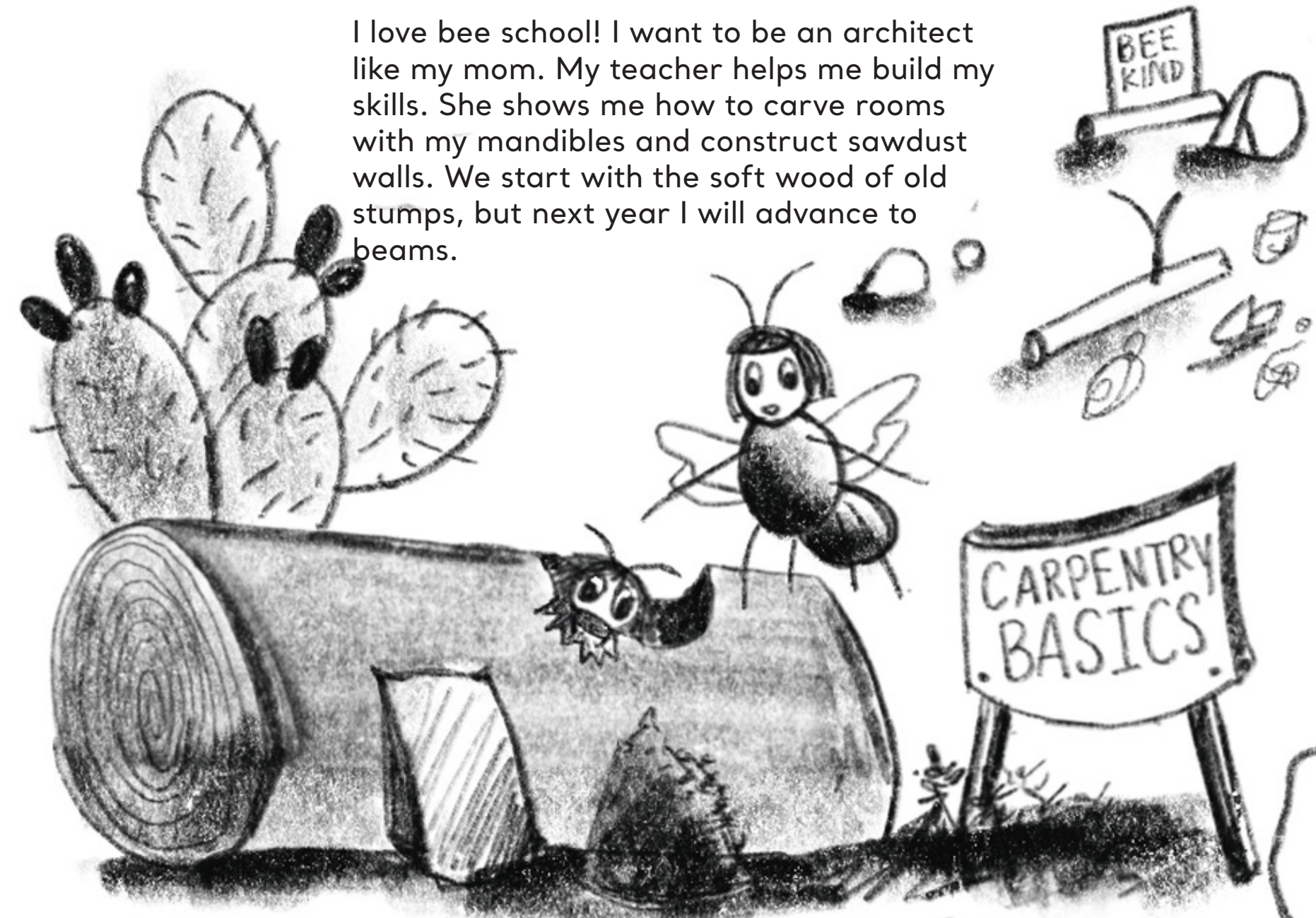


It's a good thing we bees have six legs because things are going to get a lot busier at home very soon. I am going to be a big sister! I can't wait! Mom is building an addition to our house for the nursery. Every day when I get home from bee school, I come see the new rooms she has carved and wonder what my siblings will be like.



My best friend, Gloria, is in my class. She lives next door with her mom. We fly to school together every day.

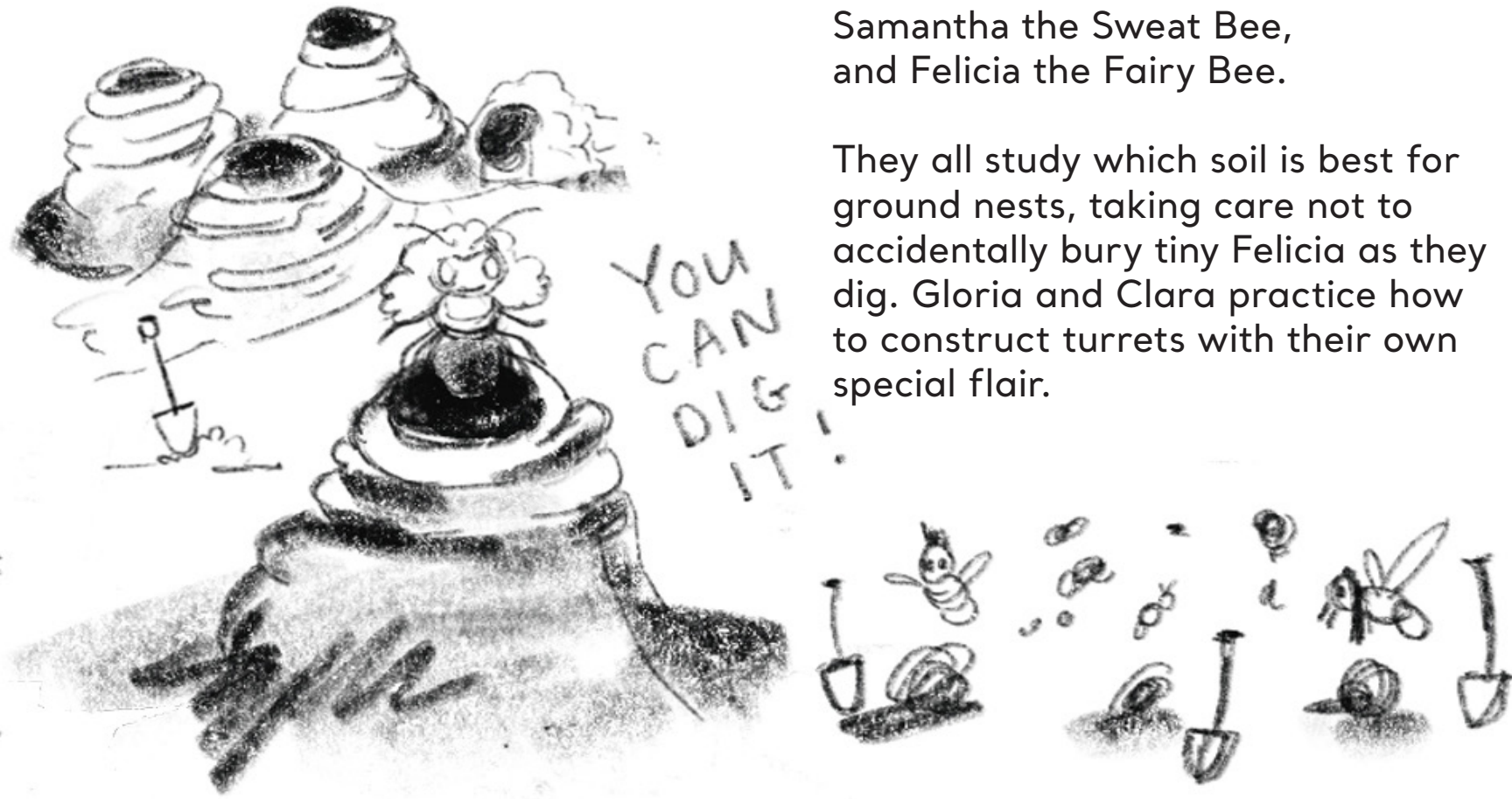
I love bee school! I want to be an architect like my mom. My teacher helps me build my skills. She shows me how to carve rooms with my mandibles and construct sawdust walls. We start with the soft wood of old stumps, but next year I will advance to beams.



We have lots of friends in our class. Gloria is a digger bee, so she joins the digging group along with

Clara and Chris the Cactus Bees, Samantha the Sweat Bee, and Felicia the Fairy Bee.

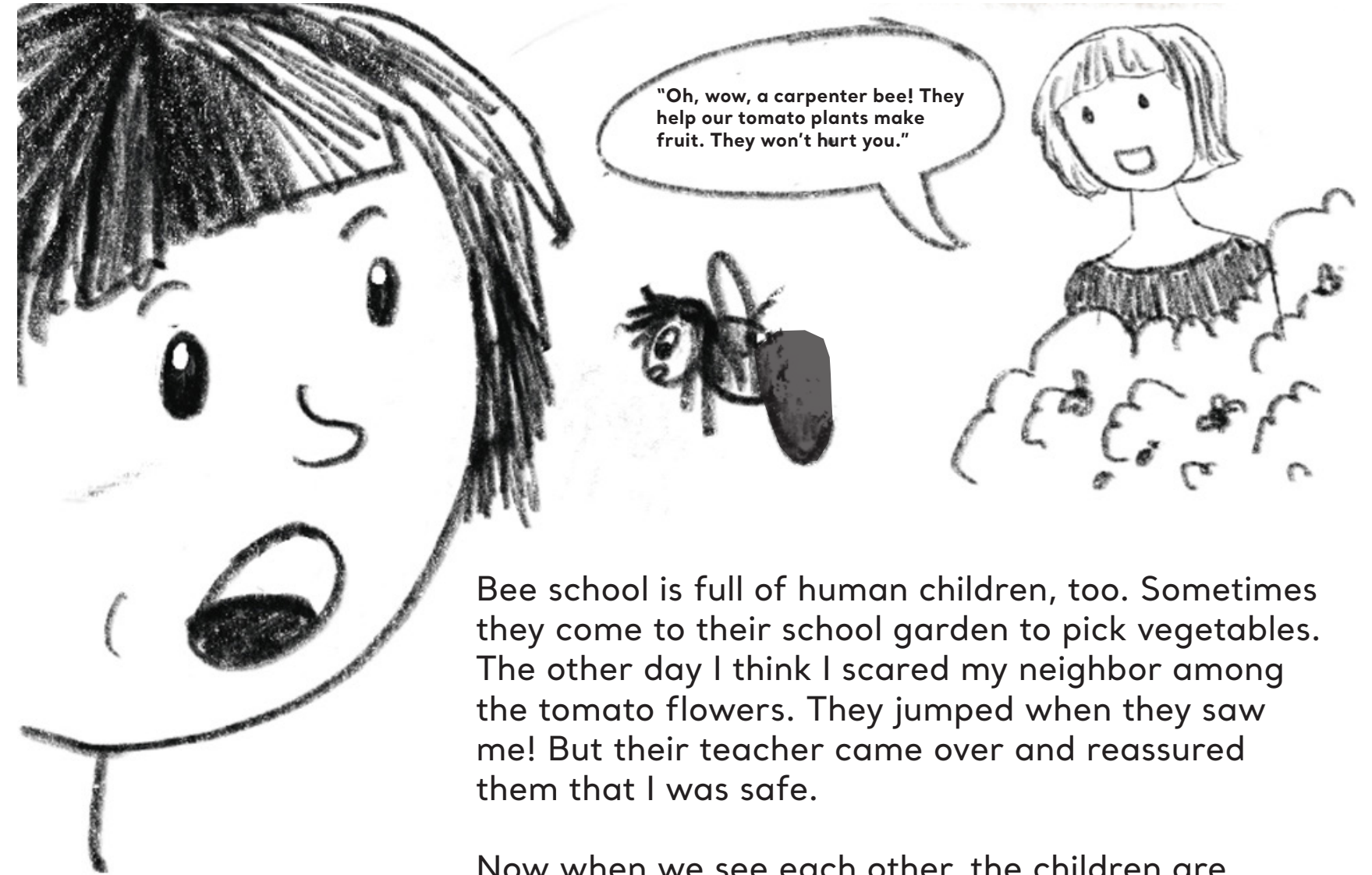
They all study which soil is best for ground nests, taking care not to accidentally bury tiny Felicia as they dig. Gloria and Clara practice how to construct turrets with their own special flair.



Linda and Luis are Leafcutter Bees. They learn to cut half circles of leaves to line their nest holes like tiny sleeping bags.



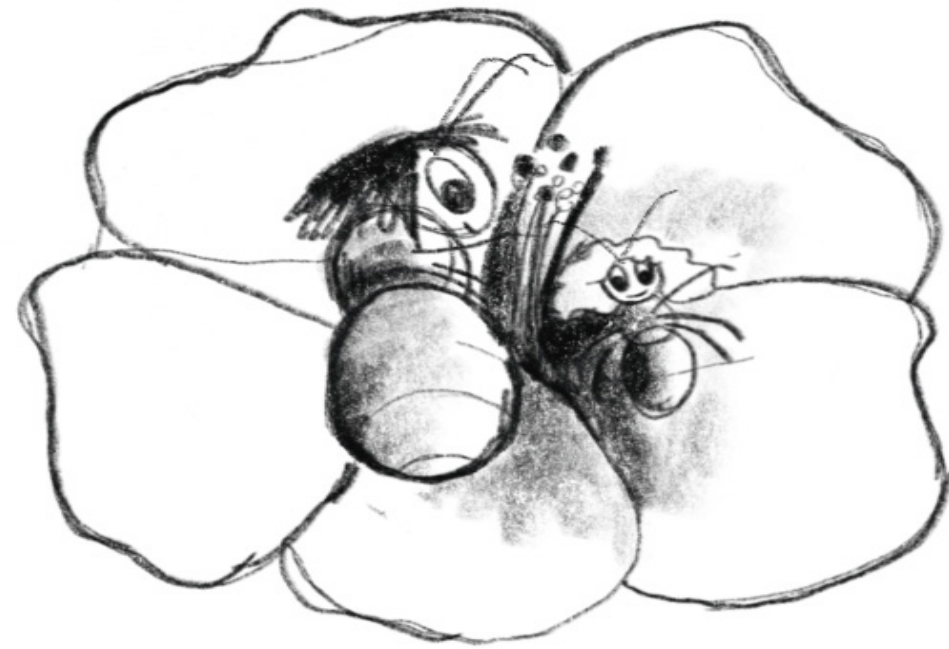
We all study how to find and collect our favorite nectar and pollen. Gloria, Clara, Chris, and Felicia are picky eaters, but Linda, Luis, Samantha and I like all kinds of flowers.



Bee school is full of human children, too. Sometimes they come to their school garden to pick vegetables. The other day I think I scared my neighbor among the tomato flowers. They jumped when they saw me! But their teacher came over and reassured them that I was safe.

Now when we see each other, the children are excited, not scared.

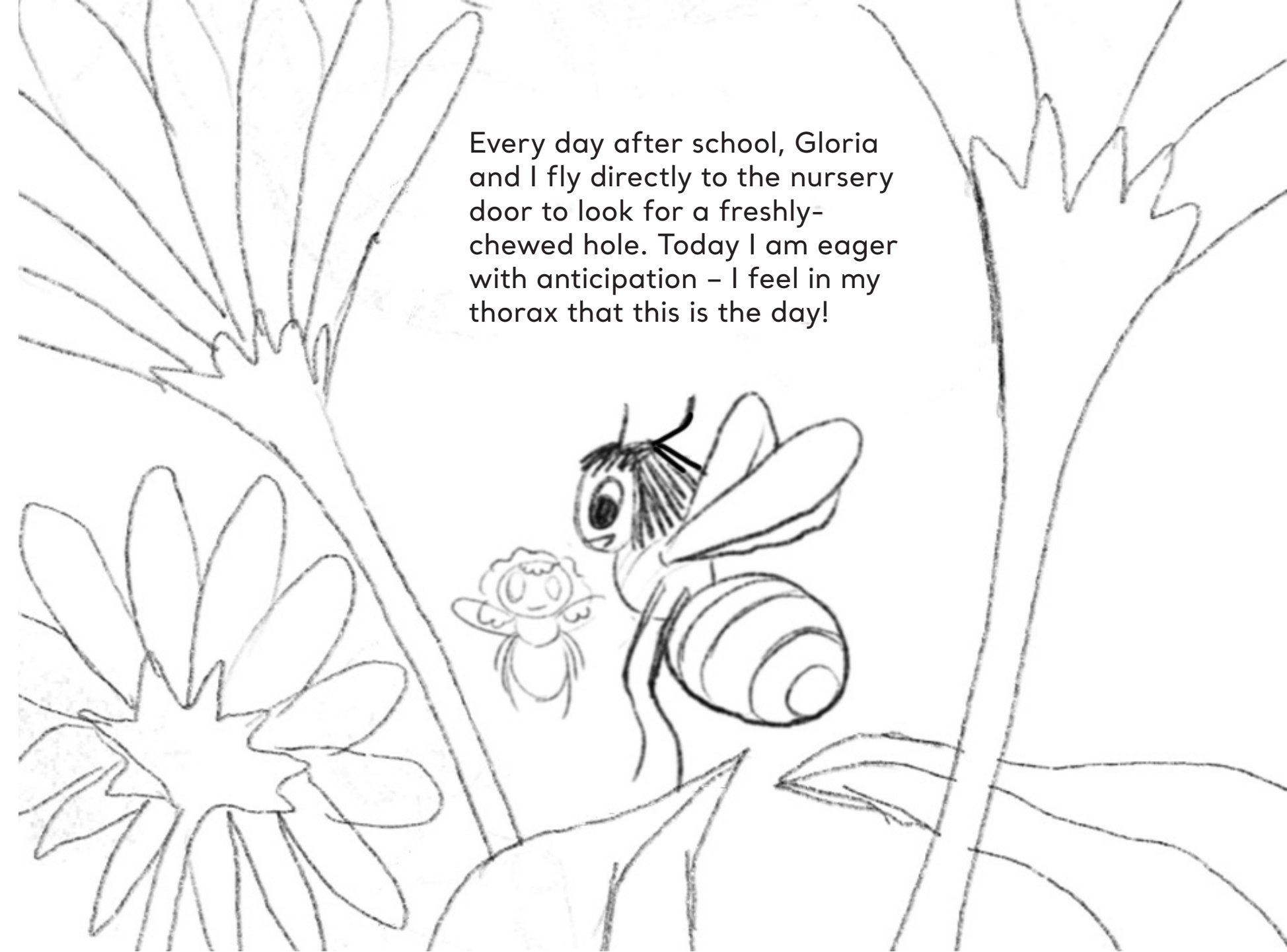
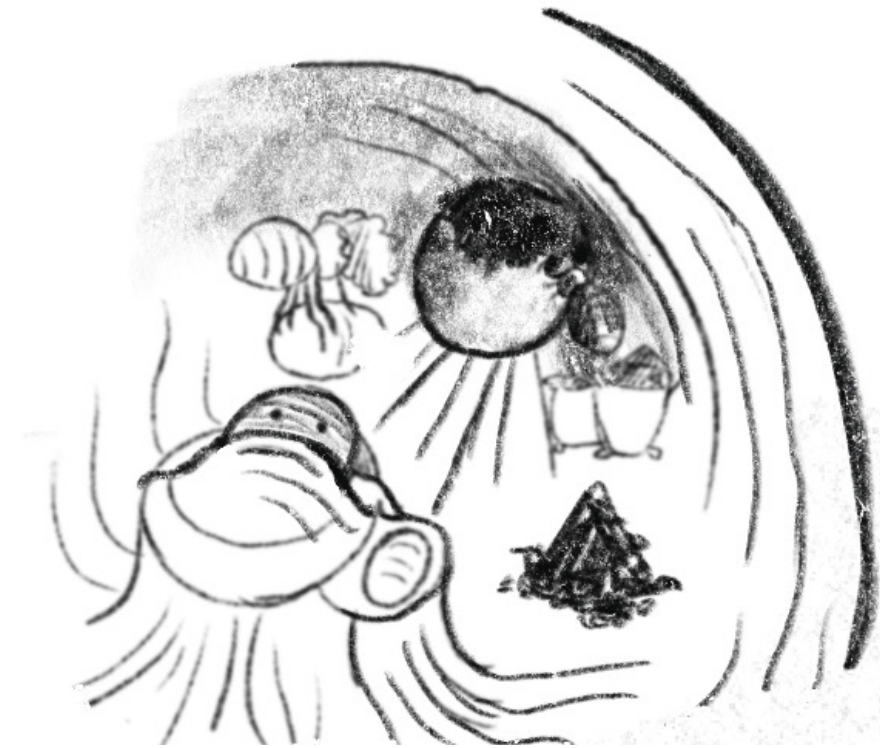
After school, Gloria and I spend almost every afternoon together. Gloria is a Globe Mallow Bee. Her mom built their house near their favorite globe mallow plants. Sometimes Gloria and I take a nap in the pretty orange flowers that hold us like a hammock. Then we have a nectar snack and play.



Today, I want to show Gloria the nursery, so we fly to my house. Mom is beaming and announces that it is ready for her to lay her eggs! She asks if we would like to help make bee bread for the baby bees. We excitedly collect pollen and nectar, just like we practice at school, and she shows us how to form the loaves.

Mom carefully carries a loaf of bee bread into the nursery. She lays an egg on it, then builds a sawdust wall to create a tiny bedroom. She invites me to build the walls for the rest of the brood's rooms while Gloria brings bee bread for each one. It is hard – Mom is so much faster, and her walls are even and smooth. I do my best, and it gets easier.

While we work, Mom explains that the sawdust walls keep each larva safe and comfortable. They will hatch, eat their bee bread, and grow. After a few weeks, they will be big enough to chew their way out and join us!



Every day after school, Gloria and I fly directly to the nursery door to look for a freshly-chewed hole. Today I am eager with anticipation – I feel in my thorax that this is the day!



When school gets out, we quickly buzz home. As we approach, we are stopped mid-flight by a terrifying sight. A man is smearing thick, white goop across our door! As he works, he complains to a woman standing below.

"Those darn bees are ruining my porch beams! I am going to plug this hole so they cannot do any more damage."

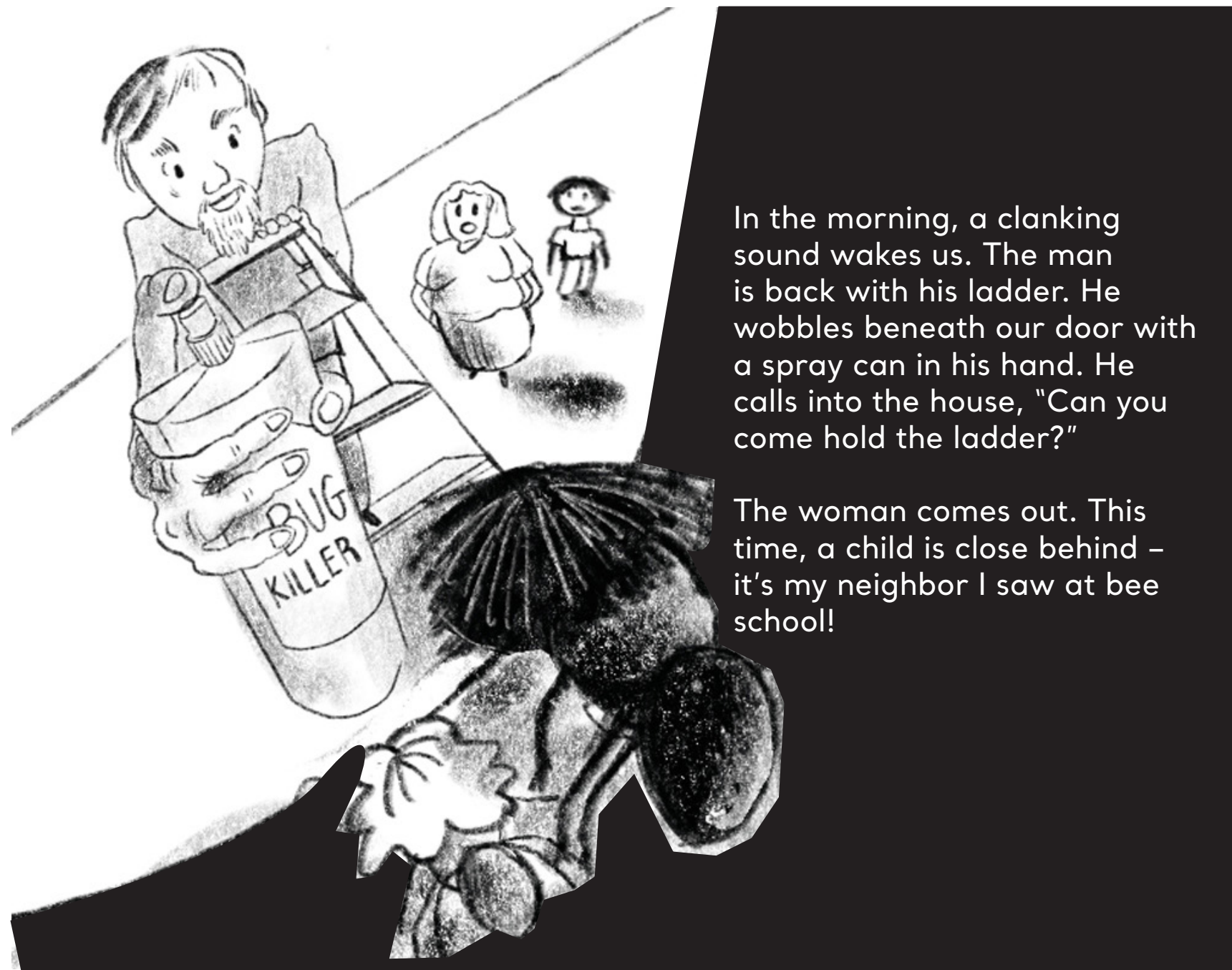


Gloria and I wait till they leave, then approach the door. The goop is hardening fast. We have to do something! We quickly get to work. I chew and Gloria digs, and a small hole forms. We make it wider, and soon we see a tiny bee head. It is one of my siblings.

"Keep chewing!" I encourage them.

They chew the hole until it is wide enough for their body, then, one after the other, all of my sisters and brothers climb out.

Suddenly, Mom and Gloria's mom appear. We tell them what happened, and they hug us gratefully. Everyone stays over, and we fall asleep with our heads full of plans.



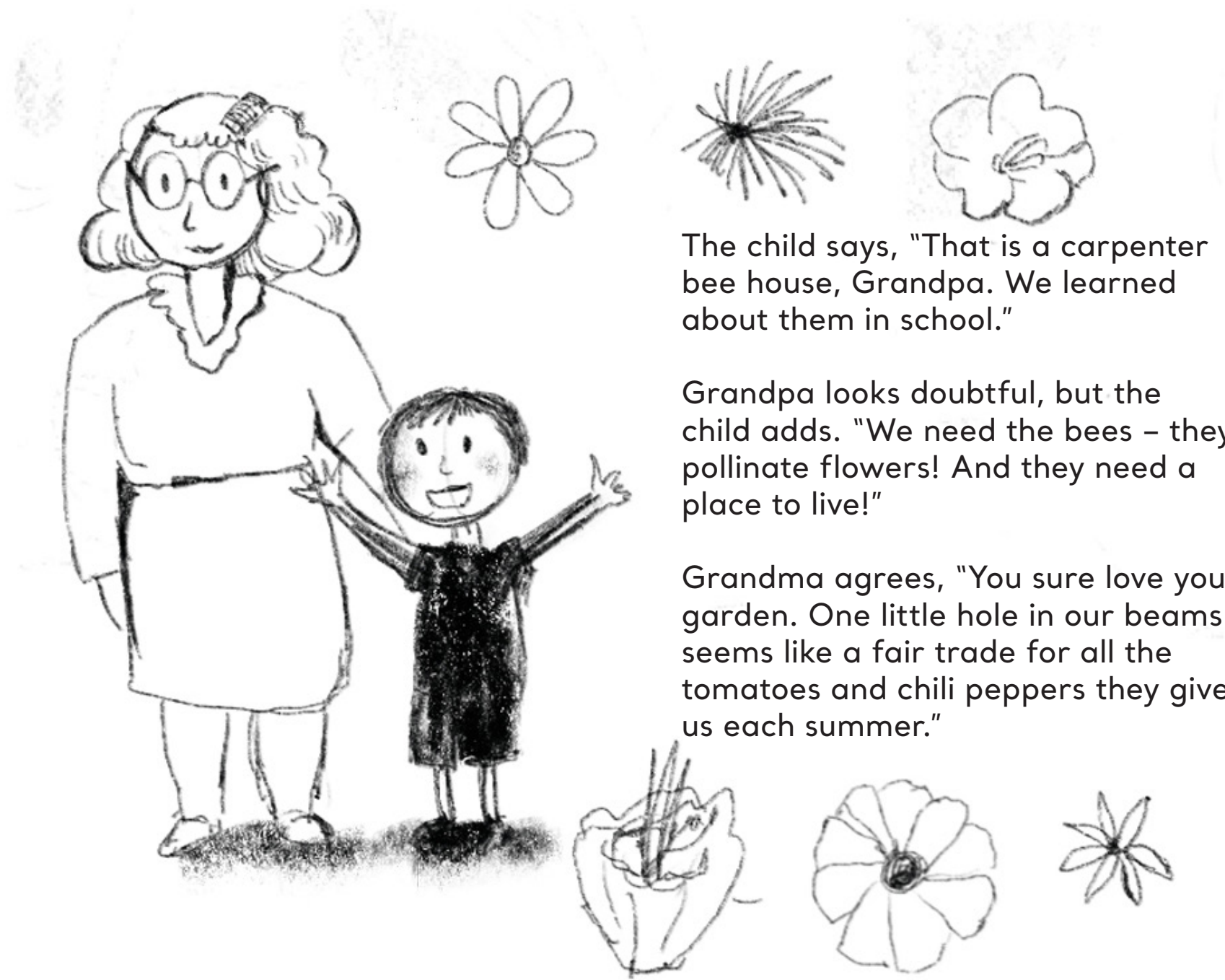
In the morning, a clanking sound wakes us. The man is back with his ladder. He wobbles beneath our door with a spray can in his hand. He calls into the house, "Can you come hold the ladder?"

The woman comes out. This time, a child is close behind – it's my neighbor I saw at bee school!

They ask, "What are you doing, Grandpa?"

"Those darn bees are back in their hole again. We need to spray them to put a stop to this!"

But the woman shakes her head and says, "No, I don't want us to use those chemicals. If they kill bees, they can't be good for us, or the birds, or the ground squirrels, either."



The child says, "That is a carpenter bee house, Grandpa. We learned about them in school."

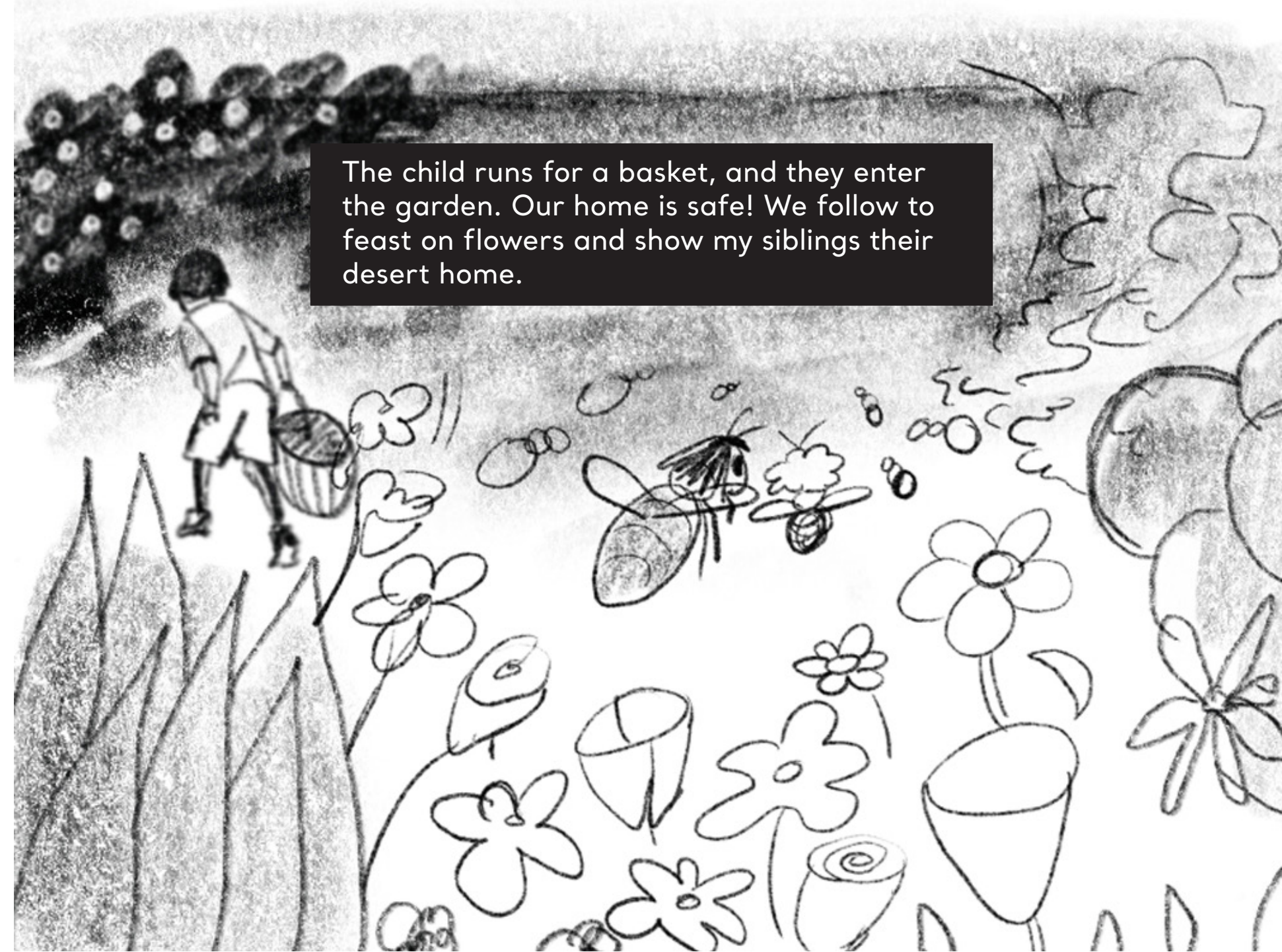
Grandpa looks doubtful, but the child adds. "We need the bees – they pollinate flowers! And they need a place to live!"

Grandma agrees, "You sure love your garden. One little hole in our beams seems like a fair trade for all the tomatoes and chili peppers they give us each summer."

We all hold our breath.

Grandpa looks at the garden for a long moment then lowers his spray can and says, "You've both got a point."

He steps down and sets the ladder aside. "Maybe we can harvest some right now. Do you want to help? We can make salsa!"



The child runs for a basket, and they enter the garden. Our home is safe! We follow to feast on flowers and show my siblings their desert home.

ABOUT THE AUTHOR, ROBIN KROPP

Robin has taught at the Desert Museum since 1998. She loves to tell the stories of the tiny heroes that are all around us, doing their important work, and to help people notice and appreciate them. When the We Bee Scientists curriculum team chose carpenter bees as their symbol, she went online to do research. The top posts were from extermination companies that told people to fear carpenter bee damage to their homes and how to eliminate them. Robin believes we need to share a different story, one where humans and bees can live side by side. This is that tale!

ABOUT THE ILLUSTRATOR, ELENA MAKANSI

Beatriz is Elena Makansi's third children's book illustration project. She is an illustrator and author who fell in love with the Sonoran Desert eight years ago when she first moved to Tucson.

ACKNOWLEDGEMENTS

GLOSSARY

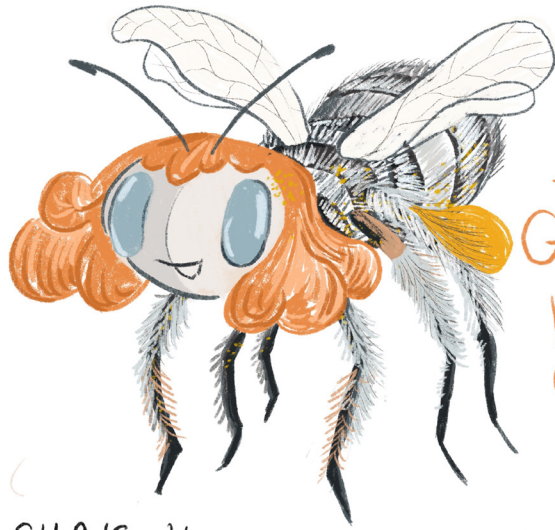
One paragraph overview of bee diversity in the Sonoran Desert. Plus the vocabulary terms, plus a spotlight on each of the five bees we're highlighting.

Five illustrations or photos of the featured bees.

Illustrations of bee pollen balls, nest chamber, etc.

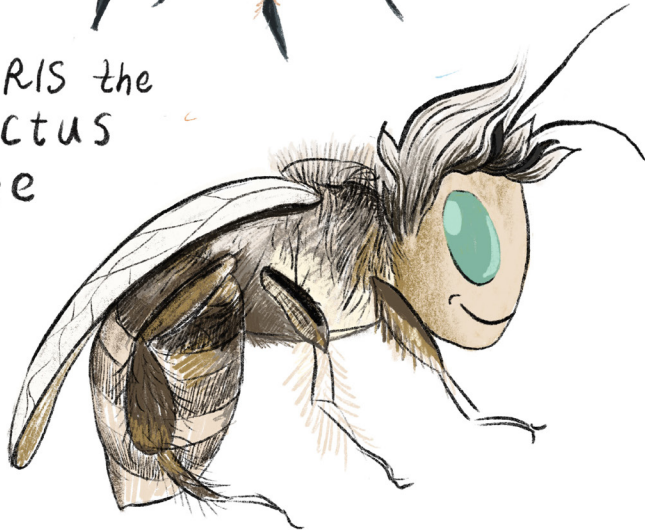
9 vocab words.

Life cycle of bees from grub to adult.



Gloria
the
GLOBE
mallow
BEE

CHRIS the
cactus
bee



Linda
the
zafcutter Bee

