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for PDFs of all the texts in this issue of the *Junior Journal* as well as teacher support materials (TSM) and audio for the following:

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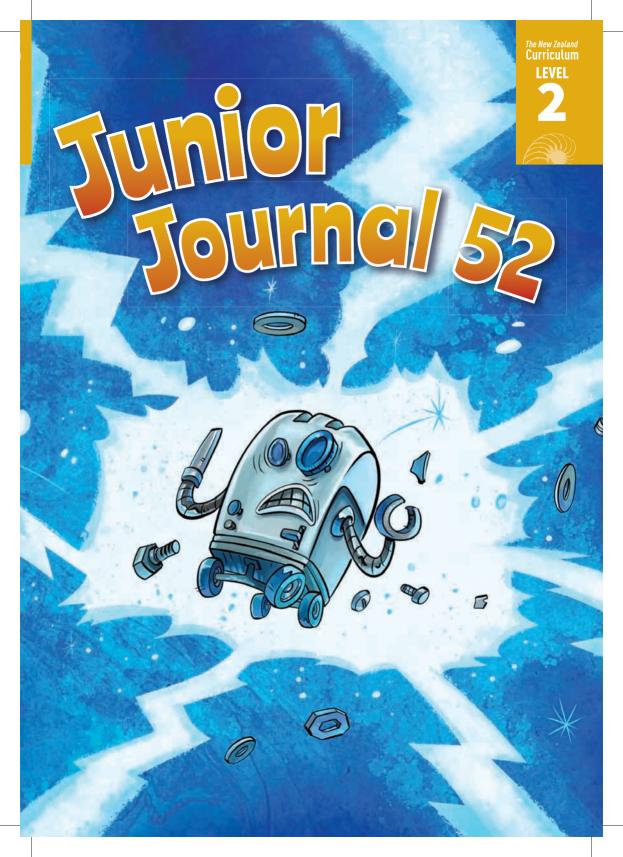
The New Zealand Curriculum
LEVEL

unior Journal 52

MINISTRY OF EDUCATION TE TÄHUHU O TE MÄTAURANGA

New Zealand Government





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"The Jungle in My Garden", page 23: Answers

a. monarch caterpillar b. stick insect

c. common house spider

"Māra", page 24: Names of creatures in English

kihikihi – cicada mumutawa – ladybird pēpepe – butterfly

pī – bee

pūngāwerewere – spider

rō – praying mantis (can also mean a stick insect)

The *Junior Journal* is for students who are working at early level 2 in the New Zealand Curriculum and reading Ready to Read texts at Purple and Gold. The *Junior Journal* supports students to make the transition from reading individual Ready to Read texts to reading the level 2 *School Journal*. This *Junior Journal*, for the first time, includes an instalment of a serial story, "Zapped!", designed to help year 3 students into chapter book reading through developing "stamina" on a longer text. You can use this text for shared reading, guided reading, or independent reading, according to students' reading level.

TITLE	GUIDED READING LEVEL
The Green Team	Gold 1
Zapped! Chapter 1: The Project	Purple and Gold (Use this as a shared reading text with year 3 students who are reading below Purple.)
Dig In!	Gold 1
The Jungle in My Garden	Gold 1



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Ministry of Education

The Green Team

by Diana Noonan

"Grab your sunhats, and follow me to the garden!" said Mr Wetini to the Green Team. "We've got a competition to win!"

The Green Team was the school's gardening group. To win the competition, they would have to use vegetables from their school garden to make a special lunch for Mr and Mrs Farrell, the owners of the local garden centre. The prize was a new wheelbarrow and a set of gardening tools for the school.

"Lots of other schools will be entering the competition," said Mr Wetini. "If we want to win, Mr and Mrs Farrell have to think our kai is the best."



Sefa looked at the school garden and gave a big sigh. "The only vegetable here is silverbeet," he said.

"We can't make a special lunch with that," added Ara. "Silverbeet is *gross*!" said Nico.

"Silverbeet is strong," said Mr Wetini. "It stayed alive all winter. Now it's spring, and it's still growing."

"But we don't *have* to use silverbeet to make our special lunch," said Shai. "That's why we got these." She held up some packets of seed.

"That's right," said Lucca. "We've got three whole

months. We can grow lots of different vegetables for our competition lunch. Now let's get gardening!"

By the end of the afternoon, the group had sown carrot, lettuce, and radish seeds to grow a salad. They'd also sown zucchini seeds so they could make zucchini and egg fritters.

"Did someone remember to plant some eggs?" joked Mr Wetini.

Over the next few months, the Green Team watched and waited for their vegetables to grow. But there was one *big* problem – the weather. It was the coldest spring for years. The sun hardly ever

came out. Instead, the rain kept falling, and the wind kept blowing. The garden turned into a big, muddy pond.

"The competition is only a week away," said Sefa, "and our vegetables still haven't grown."

"The silverbeet is looking good," said Mr Wetini.

"We can't win a competition with silverbeet," said Ara.

"I don't even like silverbeet," groaned Nico.

"Silverbeet is all we've got," said Lucca. "We'll *have* to use it."

"My dad makes some yummy fritters with silverbeet," said Shai. "I could ask him how he makes them."

"Hey," said Sefa. "Why don't we see if we can all find some recipes for special things we can make with silverbeet. We could ask at home." The next day, everyone brought along silverbeet recipes – there were enough to fill a cookbook!

"I had to show my grandfather a photograph of silverbeet," said Lucca. "He wasn't sure what it was. He calls it 'bietola'."

"My gran wants to come and help us with the cooking," said Nico.

"So does my dad," said Shai.

"Excellent!" said Mr Wetini. "The more helpers, the better."

On the morning of the competition, the school kitchen was full of the sound of chopping, mixing, and beating. Nico's gran was there and so was Shai's father. Ara's mother and Lucca's grandfather had come to help, too. Pots were steaming, and pans were sizzling.



At twelve o'clock, Mr and Mrs Farrell arrived. Shai showed them to their table, and everyone sat down. Then Sefa welcomed the visitors and explained what had happened to their garden. "We had a very cold, wet spring," he said, "but our silverbeet grew well! So we've used silverbeet recipes from around the world."



"These are silverbeet dolmas," said Ara. "They're from Kurdistan, like me!"

"These are silverbeet bhaji," smiled Shai. "They're from India."

"This is silverbeet lasagne," said Lucca. "It's Italian."



"This pie is spanakopita," explained Nico. "It's a kind of Greek silverbeet pie, but it's got pūhā in it too, so it's half Greek and half Māori!"

Sefa unwrapped a warm tinfoil parcel. "This is silverbeet palusami," he said. "It's a bit Samoan and a bit Kiwi."





Nico said a karakia, and then everyone began eating. Ara watched Mr and Mrs Farrell nervously. She saw Mr Farrell take a mouthful of dolma and smile. Then Mrs Farrell ate a piece of bhaji, and she smiled, too. The visitors tried a little of everything. Then they tried a little more ... and some more after that.

When the meal was over, the Farrells were both looking very happy.

"Thank you," said Mrs Farrell as they left. "I didn't know silverbeet could be so tasty!"



Two weeks later, just before the school holidays, a parcel arrived at the school. It was addressed to the Green Team. At lunchtime, Mr Wetini called the group together. Then he opened the letter that came with the parcel.

"Great work, everyone!" he grinned. "We've won a special prize in the gardening competition!"

The Green Team cheered.

"Kauri Drive School came first," he continued, "but it says here that they grew their vegetables in a greenhouse. That means they won't have been bothered by the wet weather. We've been given a special prize for making the best lunch using only *one* vegetable."

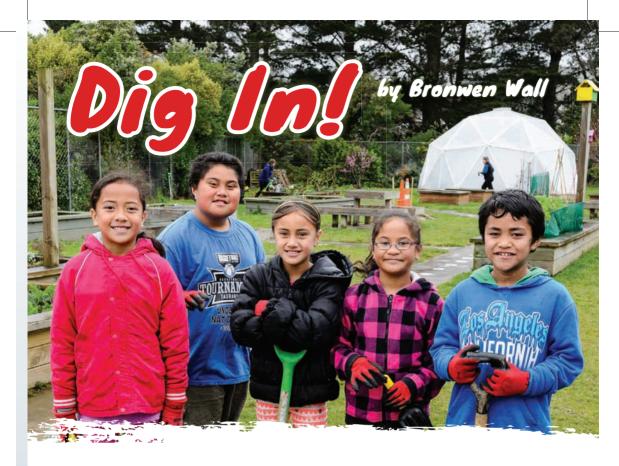
Mr Wetini opened the parcel.

"A worm farm!" gasped Ara. 'Coo-ool!'

And when Mr Wetini took the lid off the worm farm, there was *another* surprise inside – a giant packet of silverbeet seed!



illustrations by Josh Morgan



Two, four, six, eight. Dig in, don't wait ...

And that's just what these students at Cannons Creek School in Porirua do every Thursday morning in their "Garden to Table" class. The students slide on their gumboots, pull on gardening gloves, and grab their gardening tools, ready to start work in their school garden.

They dig and they pull, they snip and they hoe, they water, weed, and **mulch** to help their plants to grow. The students grow vegetables, fruit, and **herbs** in the school's garden. And when the plants have grown, the students get to eat them!

What is "Garden to Table"?

Garden to Table is a programme that helps students learn how to look after plants in their school garden. The students also find out about healthy eating and how to cook tasty meals using the plants they grow. Teachers and volunteers from the local community help with the programme. Many New Zealand schools take part in Garden to Table.



Busy in the garden

At Cannons Creek School, classes take turns to work in the garden and the kitchen each week. They learn lots of things as they work in their garden. They learn about the seasons and the things that plants need to live and grow. They learn how much it costs to grow vegetables and how much it costs to buy vegetables from a shop.

Charlotte and Breana plant lettuce seeds in the greenhouse. Breana sprinkles the seeds into a seed tray and covers them with a thin layer of soil. Then Charlotte waters the soil. Now they must wait for the seeds to grow.







◆ A packet of lettuce seeds from the garden centre costs only a little more than one lettuce from the supermarket, but one packet has enough seeds to grow lots of lettuces. The students also learn how to improve the soil. Compost provides food for the soil and helps the plants to grow. It is made when plant waste and other material is heaped in a pile and left to rot.

The students add grass clippings, food scraps, and paper to the compost pile. Then they dig into the pile and turn the compost over to give it air and mix it together.

There are bugs and worms that like to live in compost heaps.
They help to change the waste into good compost more quickly.





Ashley and Saint are busy at the compost heap all morning.



◆ This compost will help our vegetables grow big. A healthy compost smells good. It is full of worms and good bugs, and it's crumbly and light.

It will take about four months be for this compost to be ready to put round our plants.



The students grow potatoes, carrots, broccoli, and strawberries, and they have planted apple and feijoa trees as well.

Sometimes the students grow plants that none of them have ever heard of before.



■ We've been growing kohlrabi in our garden. I'd never seen kohlrabi before. I don't know what it tastes like yet. My favourite vegetable is beetroot.

My favourite vegetable ► is potato. That's pateta in Samoan!













Cooking up a storm

The students also learn how to work as a team. Some days, they are busy digging in the garden, but on other days, they are busy in the kitchen, making lunch for everyone to share. They wash their hands, tie back their hair, and pull on aprons to cover their clothes. Now they are ready to start cooking. They chop and grate and stir and pour.

When the lunch is cooked, the students call in their classmates from the garden. They wash their hands, and everyone sits down at the tables.

Potatoes and carrots ► are both root vegetables. You can peel them if you want, but you don't have to.

Breana tells everyone about the menu. Then Jade tells everyone facts about the vegetables that came from their garden.

Some of the students bring out the plates of food. It looks good, and it smells great! Saint thanks everyone for all their good work in the garden and in the kitchen. He thanks the parents and other volunteers who have helped, too.

Then everyone stops talking. They close their eyes, and Saint says the karakia.



to make food more tasty. Some herbs are also used as medicines or in perfumes.

mulch - a layer of bark, leaves, or compost that is spread over the soil like a blanket. It stops the roots of plants from getting too hot or too cold and helps hold water in the soil.

The Jungle in My Garden

by Dr Simon Pollard

I know a lot about spiders.
You could say I'm a spider expert.
I think they are amazing creatures, and I travel all over the world looking for them. I write about spiders (and about insects as well), and I take photographs of them.

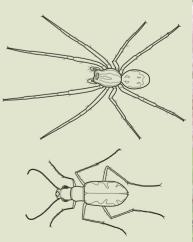
Spiders and insects are mostly very small, but with my photos I can make them look much bigger, as you will see in this article.

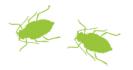


Do you know that spiders and insects are not the same?

There are two easy ways to tell them apart.

- 1. A spider has eight legs, and an insect has six legs.
- 2. A spider's body has two parts, and an insect's body has three parts.





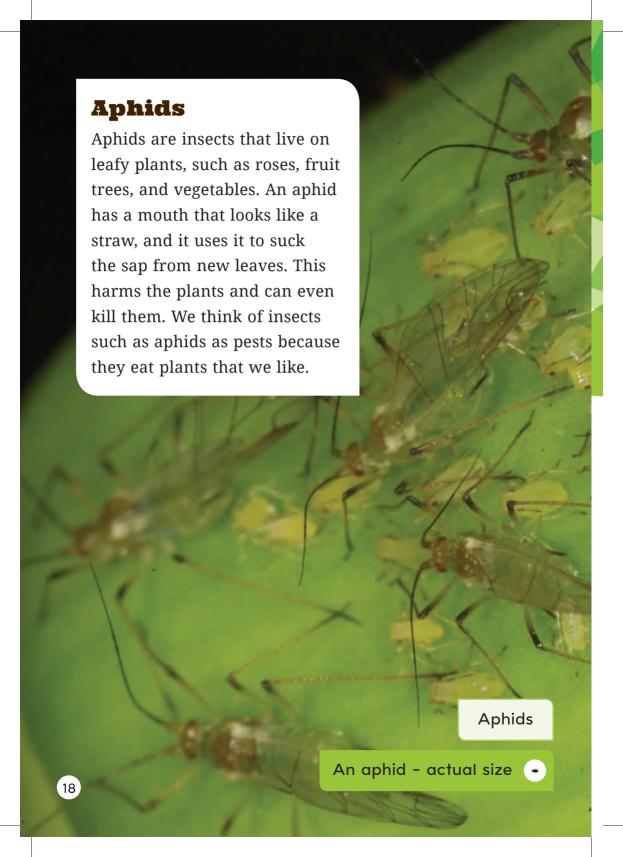
Some spiders and insects live in jungles.

A jungle is an exciting place. When you imagine what a jungle is like, you might picture creatures like monkeys and tigers and other wild animals, but I'm more interested in the spiders and insects. To me, my garden is just as exciting as a jungle.

In any garden, there are thousands of insects and spiders, but they're usually hard to see unless you look carefully. There is something special about each one, and just like wild creatures in the jungle, they all have to eat to live.

Let me tell you about some of the spiders and insects in my garden ...







Ladybirds

Fortunately for us, some insects, such as ladybirds, like to eat aphids. A ladybird is a non-stop eating machine. It can eat up to fifty aphids in an hour.

Ladybirds eat aphids, but what eats ladybirds?
Ladybirds are easy to see because they are brightly coloured. You might think that birds would eat them. But ladybirds taste bad to birds, so when a bird sees a ladybird, it leaves it alone. Ladybirds are safe from birds, but they are not safe from spiders ...

Spiders

Spiders eat insects – crawling insects, scuttling insects, and even flying insects. But spiders can't fly, so how can they catch flying insects?

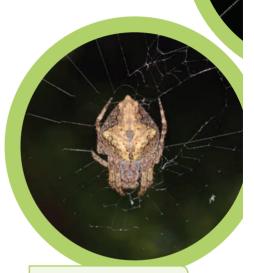
Some spiders catch insects in webs

A lot of spiders build webs to catch insects. These webs catch flying insects as well.

To make a web, a spider spins silk out of its spinnerets.

The orb web spider builds a web that looks like the spokes of a bicycle wheel. At night, the spider sits in the middle of its web, but during the day, it hides so that birds and wasps can't see it (and eat it).

The spider keeps a line of silk



Orb web spider

from the web attached to its body. When an insect flies or walks into the web, it gets trapped in the sticky silk. As the insect moves, it shakes the web. This shaking tells the spider that dinner has arrived!



An insect caught in a web

Imagine what would happen if you tied a long piece of string to your finger and attached the other end to a trampoline.

When somebody bounced on the trampoline, the string would pull your finger. The silk line works the same way. When an insect gets trapped in the web and makes the web bounce, the line tugs on the spider.

Some spiders grab their prey

Not all spiders make webs. The crab spider uses camouflage to make itself hard to see. It is the same colour as the green leaves it sits on. It has two long pairs of front legs, and it stays very still with these front legs stretched out, looking as if it's ready for a big hug. When an insect lands nearby, the crab spider does give the insect a "hug" – but it doesn't let go again until it has finished eating the insect!

Crab spider

The king of the jungle

The lion is known as "the king of the jungle". There are no lions in my jungle garden, so what creature is the "king"? Like the crab spider, this creature uses camouflage by matching the colour of the leaves it sits on. It also stays very still and waits for dinner to arrive. It has long front legs that it uses to grab anything that comes too close. But this insect is a lot bigger than a crab spider ... it's the praying mantis. It eats spiders, aphids, ladybirds, and many other insects – even bees and wasps.

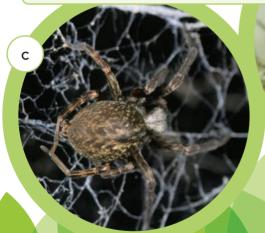


Next time you are in a garden, look carefully and you will see tiny creatures all around you. Many only come out when it's dark. You could use a torch and look for them in your garden at night. Have a close look and see what you can find.

a

h

Can you name the creatures in these photos? Go to the inside back cover to check your answers.



Look, but don't touch!

If you find any spiders or insects, don't touch them. They are very small, so you could hurt them or even kill them if you do. Also, some insects or spiders might bite you or sting you. So look, but don't touch!

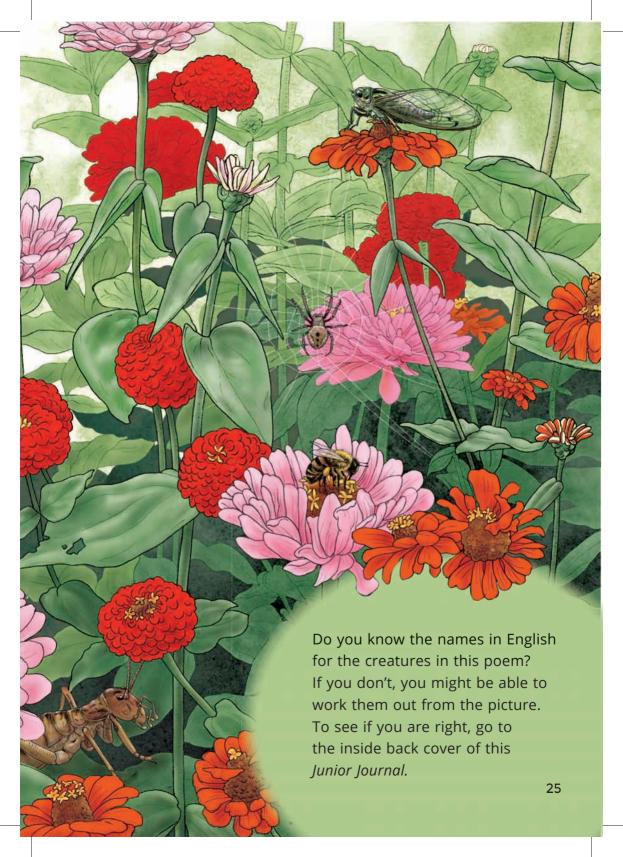
Māra

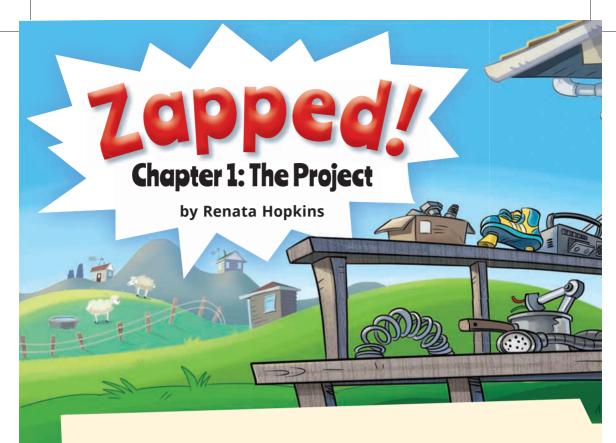
Out in the māra is where I like to be.
Out in the māra, what insects can I see?

Bright green rō
is praying for a fly.
Polka-dotted mumutawa
sees pēpepe flutter by.
Pī gathers honey.
Pūngāwerewere spins a web.
Kihikihi enjoys the sun –
wētā likes the dark instead.

Out in the māra, come along with me.
Out in the māra, what insects can you see?

Moira Wairama





Ana and Tai were building a robot for a school project.

"What shall we call it?" Ana asked.

"What about 'Tidy-bot'?" suggested Tai.

"Tidy-bot?" Ana giggled. It sounded funny and a teeny bit rude.

"Because it's going to do all our tidying up for us," explained Tai.

The twins had a list of jobs they had to do each week, and a robot helper was just what they needed.

"Maybe we should give it four arms," suggested Ana.

"Then it could do two things at once."



The twins looked at their robot. They had made it from an old toaster, a broken hairdryer, a pair of roller skates, and other bits of household junk they had found in the garage. It looked fantastic. There was just one small problem.

"I wish it worked," said Ana.

"Me too," said Tai.

Just then, they heard Mum calling.

"Kids! Come inside. You need to tidy your rooms before bed."

Ana and Tai sighed, at exactly the same time. They went inside, leaving the small, silent robot on the porch.

That night, a huge storm blew in. Tai and Ana could sleep through anything, so when lightning flashed and thunder boomed, they just dreamt of fireworks and volcanoes. They didn't see the lightning bolt hit the little robot. They didn't see the robot's bottle-top eyes spin or hear it start to squeak.

"Bleep, bloop?" said the robot, in a helpful, hopeful sort of way. "Bleep, bloop?" It unlocked the back door with one of its handy gadgets and rolled into the house.

In the morning, Tai woke up first, He pulled.

In the morning, Tai woke up first. He pulled back the curtain and saw the rain. He jumped out of bed and rushed into Ana's room.

"Ana, it's raining! We left the robot outside. It might go rusty."

"Caterpillars," said Ana. She was still half asleep.

Tai tried again. "Ana! The robot's getting wet."

Ana sat up, yawning. "So what?" she grumbled. "It's just a pile of old junk."

But she climbed out of bed and followed Tai to the porch. When they opened the back door, they both gasped. The robot was gone!

"Somebody's stolen it!" Tai wailed.

"Who would want it?" said Ana. "It doesn't even work."

Just then, the twins heard something – a bleeping noise, or maybe a blooping noise. They followed the sound to the kitchen. They pushed open the door and came face to face with their robot! It was holding a jar of peanut butter.

"Breakfast time," it said. "Bleep, bloop."

Usually Tai and Ana made a lot of noise. Now, they were very, very quiet.

"Toast?" asked the robot. "Or cereal? I am here to help."

Ana and Tai looked at each other.

"It works," they said, at exactly the same time.
"IT WORKS!" They did a crazy dance around the kitchen.



"Toast?" asked the robot again. "Or cereal?"

The twins had a lot of questions, but they were also quite hungry.

"Toast, please," said Tai.

"Cereal, please," said Ana.

"Bleep, bloop," said the robot. It rolled to the bench, took two slices of bread from the packet, and slotted them into its toaster head. Then it rolled to the pantry and grabbed a new bag of Rice Delights. The robot looked at the bag, puzzled.

"You have to rip it open," Ana explained.

"Rip!" said the robot. It gripped the bag and pulled – hard. Rice Delights exploded all over the kitchen!

"Uh-oh," said Tai and Ana, at exactly the same time. They looked at the clock.

"6.52," said Tai. "Mum and Dad will be up soon."

"Quick," said Ana. "Get the broom."

"You get it," said Tai.

"No, you get it," said Ana.

Meanwhile, the robot rolled to the fridge and opened the door.

"Milk?" it asked. Before Ana and Tai could stop it, the robot began to pour milk onto the Rice Delights – on the floor, on the bench, in Tai's hair! "Stop!" shouted the twins.

Just then, smoke started coming out of the robot.

"Done," said the robot. Out popped two pieces of black toast.

"You mean 'burnt'," said Tai.

The robot wasn't listening. It was busy taking the lid off the peanut butter.

"Maybe you should give that to me," said Ana. She held out her hand. The robot scooped out some peanut butter and blobbed it onto Ana's hand.

"Not like that!" she shrieked.

Just then, the twins heard a door close and the shower start. Their mother was up.

"You have to hide!" said Tai. He rolled the robot out of the kitchen and into the laundry. Ana threw a towel over it.



"Stay there," she said, "and be quiet."

"Bleep, bloop," whispered the robot.

Just then, the twins heard the roar of an angry mother. "WHAT'S GOING ON IN HERE?"

Tai and Ana had a lot of cleaning up to do. It was half an hour before they could sneak away to see the robot. When they finally crept into the laundry, they both stopped dead in their tracks. The back door was open – and the robot had gone! Tidy-bot was on the loose!

