



SCHOOL JOURNAL

NOVEMBER 2018



TITLE	READING YEAR LEVEL
The Plastic-free Challenge	4
Tafoe O!	4
Plastic Planet	4
A Waste of Space	4
Baskets of Fire	4

This Journal supports learning across the New Zealand Curriculum at level 2. It supports literacy learning by providing opportunities for students to develop the knowledge and skills they need to meet the reading demands of the curriculum at this level. Each text has been carefully levelled in relation to these demands; its reading year level is indicated above.

Published 2018 by the Ministry of Education,
PO Box 1666, Wellington 6140, New Zealand.
www.education.govt.nz

All rights reserved.
Enquiries should be made to the publisher.

Publishing services: Lift Education E Tū

ISBN 978 1 77669 451 8 (print)
ISBN 978 1 77669 454 9 (online PDF)
ISSN 0111 6355

Replacement copies may be ordered from Ministry of Education Customer Services,
online at www.thechair.minedu.govt.nz
by email: orders@thechair.minedu.govt.nz
or freephone 0800 660 662, freefax 0800 660 663

Please quote item number 69451.

ARTICLES

2 **The Plastic-free Challenge**
by Deanna Ferguson

18 **Tafoe O!**
by Hio Kelemete

POEM

10 **Plastic Planet**
by James Brown

STORIES

11 **A Waste of Space**
by Simon Cooke

26 **Baskets of Fire**
by Whiti Hereaka



THE PLASTIC-FREE CHALLENGE

by Deanna Ferguson

Have you heard of the Great Pacific Garbage Patch? It's a mass of floating rubbish in the Pacific Ocean. Most of the rubbish is plastic that's been thrown away by humans. The students of Room 5 at Motueka South School watched a video about it. The video showed images of dead or injured sea creatures. Some had eaten the plastic. Others had become tangled in it.



THE STATISTICS

The Great Pacific Garbage Patch:

- covers about 1.6 million square kilometres (nearly six times the size of New Zealand!)
- is made up of about 80 million kilograms of plastic.

Scientists believe that over a million seabirds and one hundred thousand marine mammals die each year from eating plastic.



We were amazed that there was so much plastic in the ocean.

Plastic is made from oil. It breaks down into little pieces, but it never, ever goes away!

Plastic is killing animals - I want to help save them.

The students wanted to do something to help solve the plastic problem. That's how the Plastic-free Challenge began.



Maybe we could have a challenge, where one day a week, we bring a lunchbox with no plastic in it.

The challenge begins

The class made Tuesdays the day for the challenge to be plastic-free. It wasn't hard to reduce the amount of plastic in lunchboxes. The students wrapped their sandwiches in lunch paper instead of cling film. They replaced shop-bought muesli bars with home-made ones. They brought fruit instead of other snacks. The amount of plastic went down fast.

It was a good start, but what about the rest of the school? How much plastic was being brought by other classes? The students wanted to find out. One Tuesday, Room 5 collected the whole school's plastic rubbish. They were shocked – there was so much!



The challenge goes school-wide

Room 5 decided to challenge the whole school to join Plastic-free Tuesday. At assembly, they showed the Great Pacific Garbage Patch video to the other students. Everyone was silent when they saw the photos of the sea creatures. Then Nikson and Pepper walked onstage. They were carrying a net full of plastic – the rubbish Room 5 had collected in only one day. The hall was filled with sounds of shock and surprise. Room 5 knew they had everyone hooked. The challenge was on!



Some Room 5 students teamed up with buddies from Room 6 to make models of sea creatures. Every Tuesday, Room 5 collected the school's plastic rubbish and stuffed it into the model creatures. To begin with, the creatures needed to be large. As the weeks passed, the creatures became smaller. After seven weeks, the amount of plastic had reduced by half!



What do we do with all the plastic?

Room 5 were really pleased that people were using less plastic. However, now they had another problem – a huge pile of plastic in their classroom! What could they do with it?

Then Ryan saw a headline in the paper: “Soft plastic recycling has landed.” The article said the major supermarkets were collecting soft plastic for recycling. This was just what the group needed. They sorted the plastic into different types. Then they bundled it up and took it to a nearby supermarket.





Daily collection

Room 5 had solved the problem of what to do with the plastic. But then they asked themselves, “Why only Tuesdays?” They decided it was time for daily collections across the school. This was turning into a big project!

They made a plan. First, they found out where they could buy recycling bins. Then they made two lists – things that could be recycled and things that couldn’t. They took photos of the recyclable items and made a poster to put on the bins. That way, everyone would know what should go in them.

The students presented their plan to the principal. He agreed that it was a great idea – the daily school-wide rubbish collection was under way.



Making it sustainable

Today, the project is going well. The students take turns to monitor the plastic collection. Every Friday, Ryan and his mum take the plastic to the supermarket collection bin.

A group of students gets together regularly to discuss how the project is going. They share ideas, solve problems, and brainstorm ways to make the system better. They also decide who will be responsible for making the ideas happen.

The group is training younger students to be monitors, too. That means when the older students move on to high school, there will be others to take over and keep the project going. They want it to be sustainable.



THE OCEAN CLEAN-UP KID

When Room 5 were learning about the Great Pacific Garbage Patch, they also found out about a young Dutch man named Boyan Slat. His achievements helped inspire Room 5's own plastic clean-up project. Boyan has a plan to clean up the Great Pacific Garbage Patch. He wants to use huge floating booms to trap the rubbish as it moves on the ocean currents. After a lot of research and trialling, his project started in 2018. The students will be watching with great interest.



Everyone can make a difference

The students have learnt a lot about plastic and what it does to our planet. Now they are always looking for new ways to reduce plastic use and to share the “reduce, reuse, and recycle” message.

Most of all, they've learnt that although some problems can seem huge, it's still possible to make a difference. You might start small, but you can inspire others to join you. That can lead to really big changes – for your school, your community, your country, and your planet.

Plastic Planet

Plastic, plastic, it's fantastic.
Everything is made of plastic.

Plastic flowers, plastic grass.
Plastic bricks and plastic glass.

Plastic that's as strong as metal.
Water boiled in plastic kettles.

Plastic islands in the sea
bob with plastic towns and trees.

Plastic dishes, plastic spoons.
Plastic cows jump plastic moons.

Plastic dogs do plastic poos,
scooped up in plastic bags (reused).

Plastic food in plastic wraps
bought with plastic swipes and taps.

Plastic screens show plastic styles.
Plastic friends swap plastic smiles.

Plastic raincoats, plastic rain.
Plastic in our hearts and brains.

Long after we've come and gone,
our plastic footprints will live on ...

James Brown



A WASTE OF SPACE

BY SIMON COOKE



“Warning!” said the ship’s computer. “Impact in –”

Bang! Something slammed into the ship. Mia and Tane were thrown across the flight deck.

Mia climbed back into her seat and pulled the ship back under control. “Computer! Damage report!”

“Ship undamaged,” said the computer. “Hold on, here we go again!”

Crash! The ship shook as it took another hit.

“Are we under attack?” asked Tane.

“Yes,” said the computer. “But you won’t believe what’s attacking us. You’ll think my microchips are fried.”

Mia sighed. “Computer, just tell us, please.”

“We’re being attacked by washing machines,” it replied.

Mia saw something fly past on the viewing screen.

“Not just washing machines. I just saw a bicycle!”

Tane scratched his head. “You don’t usually find bicycles and washing machines in space,” he said.

“Maybe there’s a vacuum cleaner out there,” said the computer hopefully. “Tane could use it to clean his room.”

“It doesn’t need cleaning,” grinned Tane. “I can still see *some* of the floor.”

Mia checked the screen again. “Everything’s being pulled towards that large object in Sector 4. It could be an asteroid.”

“I’ve looked through my database,” said the computer. “There is no asteroid in Sector 4.”

“Well, it sure looks like one,” said Tane.

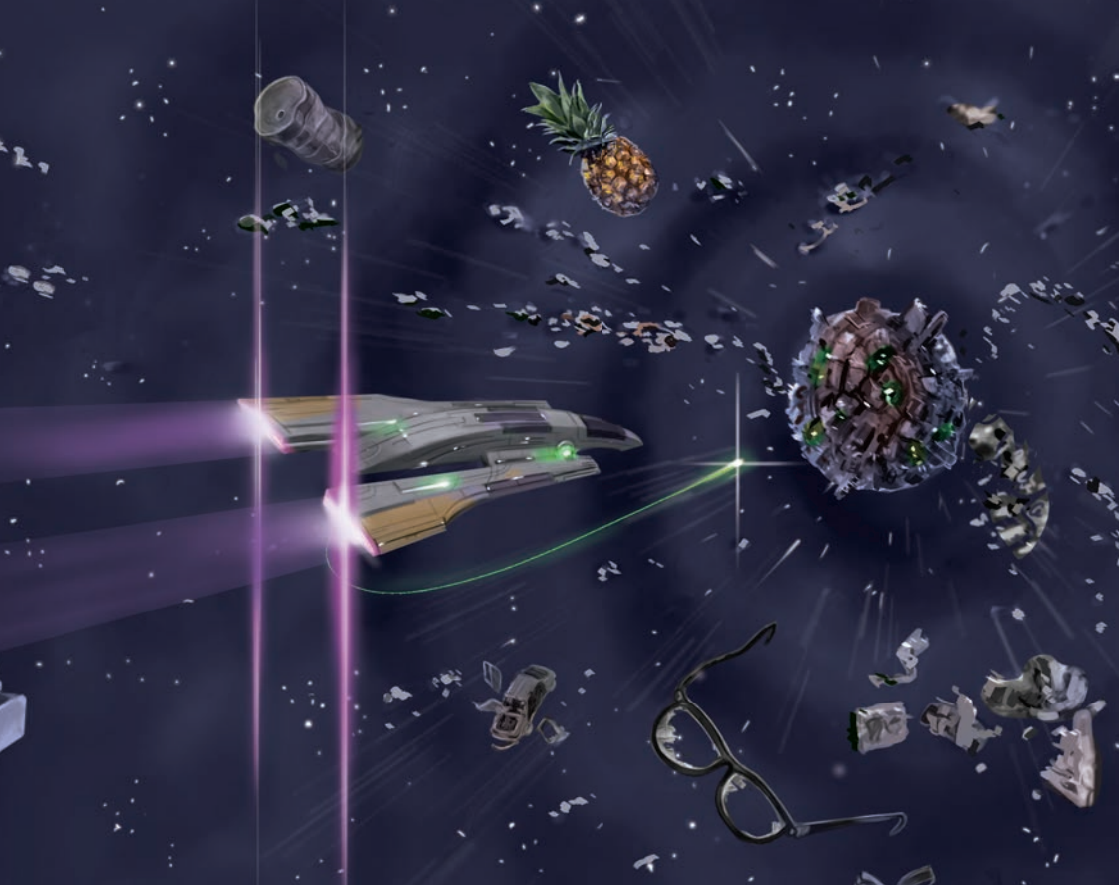
More things flew past the ship. Mia shook her head. “I don’t understand. Bits of old engines, broken plastic buckets, tyres ... there’s even a rotten pineapple. Where’s it all coming from?”

“Come on, computer,” said Tane. “You say you have information on just about everything in the universe. What’s going on?”

The ship’s computer buzzed for a moment. “The planets in this star system have no more room for rubbish. The creatures that live here put their rubbish in garbage chutes that empty out into space. Some rubbish burns up in the atmosphere. The rest just drifts away.”

“The rubbish isn’t drifting, though,” said Mia. “It’s being pulled towards Sector 4. But why?”

Lights began flashing on Mia’s screen. “I’m picking up a life form on the asteroid. Maybe some creature is in trouble.”



“A crashed ship?” asked Tane.

“Could be,” said Mia. “All this rubbish is dangerous.” She pressed a button, and a small silver object shot out of their ship. It had a flashing light. “That will warn other ships of the danger.”

Mia steered the ship carefully through the junk and towards the asteroid.

“I can’t see any crashed spaceships,” said Tane.

The computer buzzed. “According to my scanner, the asteroid is made of rubbish. The life form is at the centre.”

Tane suddenly froze. “If I said a giant hand made from rubbish was reaching towards us, would you believe me?”

“Yes,” gasped Mia. “Because I can see it, too. I think the rubbish heap is alive!”

She pulled back on the controls. “Computer – engines to full reverse! Tane, clear me a path through that trash!”

Tane used the ship’s lasers to blast the space junk out of their way. Mia glanced at the asteroid again. It had grown several more arms. In its centre, a great jaw opened to show jagged rubbish teeth.

“Look out,” she said. “It’s coming after us!”

“Do you have a plan?” asked Tane.

“Always,” grinned Mia. “Hang on tight!”

Mia spun the ship around and sped towards a nearby planet.

“It’s Zargos Minor, a giant storm planet. It has really strong gravity.”

“Interesting fact, Mia,” said Tane. “But how’s that going to help?”

“You’ll see,” said Mia.



The rubbish monster tried to grab the spaceship with one of its hands. The ship rocked and shuddered.

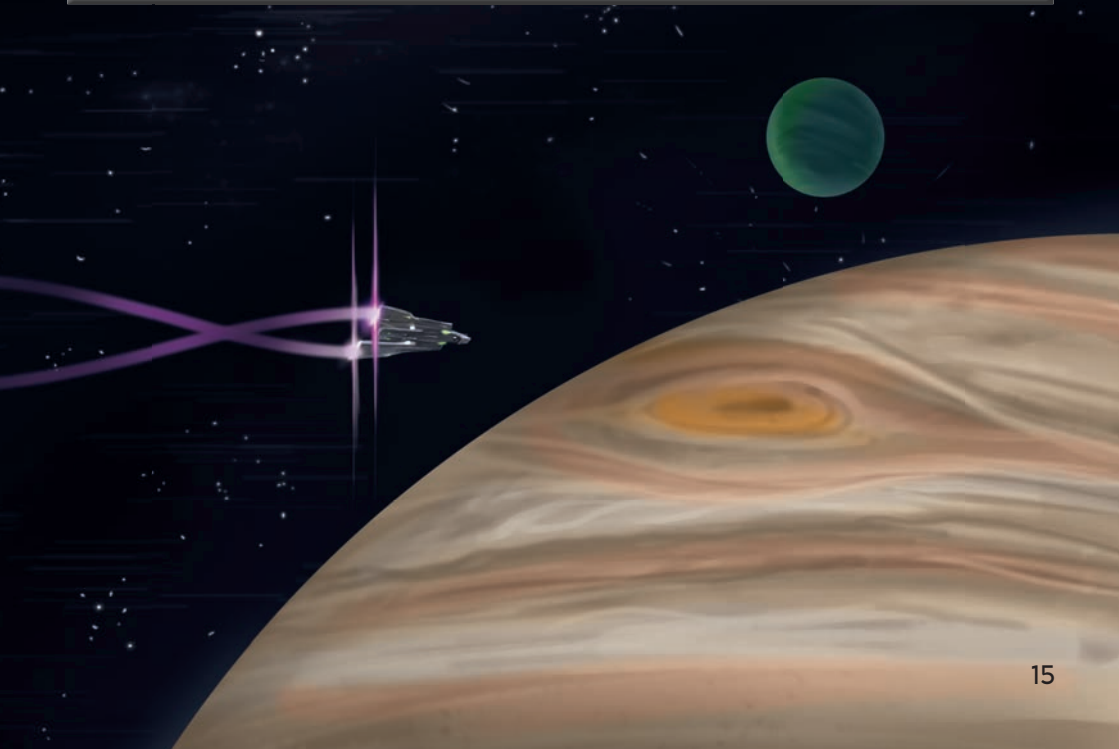
Mia flew closer and closer to Zargos Minor. The rubbish monster followed. The planet filled the view screen. It was covered with boiling clouds of red and orange gas. Mia kept the ship aimed straight at it.

“Mia, we need to pull up,” said Tane. “The planet’s gravity is too strong. We’ll never be able to get away!”

“Just a bit closer,” she said. She held grimly to the controls. The ship rattled and shook.

“I compute doom,” whined the computer.

At the last moment, Mia turned the ship to one side. They skimmed across the top of the gas clouds. “Turn on the booster rockets. It’s time for planetary exit!”



The ship flew out of the pull of the planet's gravity and into the calm of space. Behind them, bits of rubbish were breaking off the monster and being dragged towards the planet.

“Brilliant plan, Mia!” said Tane. “Zargos Minor’s gravity is pulling the monster to bits. It’s still chasing us, but it’s half the size.” More rubbish broke off. “Now it’s a quarter the size!”

Soon the rubbish monster was no more than a glowing green blob. It too had managed to break away from the planet’s gravity and was now floating in space.

“That’s your life form,” grinned Tane. “It’s tiny when it’s not hiding behind rubbish.”



“We can’t just leave it here,” said Mia. “It’ll start attracting space rubbish again.” She turned on the ship’s suction pipe, and the blob was sucked into a glass container. Mia examined the creature. She could see right through it.

“It’s like a hermit crab,” said Tane. “But instead of old shells, it uses space junk to make a home.”

“We’ll take it to the alien sanctuary on Vegos 3,” said Mia.
“It’ll be safe there until we can find it a new home. Or –”

The ship’s computer buzzed. “I compute that Mia is having one of her brilliant ideas.”

Mia laughed. “Not really. I was just wondering if this creature could help us solve the problem of space junk.”

“What do you mean?” asked Tane, watching the blob try to find a way out of the container. An empty cup suddenly flew through the air and stuck to it. A lolly wrapper followed. Soon the flight deck was spotless, and the container was hidden under rubbish.

“What if this creature could be trained to collect space waste? Maybe it could learn to sort and recycle,” said Mia.

“You’re full of great ideas!” said Tane. He grabbed the container. “Back in a minute.”

“Where are you taking it?” asked Mia.

Tane grinned. “We’ll clean up the universe later. Right now, I think I’ll clean my room!”

ILLUSTRATIONS BY DEDE PUTRA



Tafoe O!

BY HIO KELEMETE



It's Sunday morning, and Kewa, Rosa, Mouanaki, and their friends are learning a dance. The dance is called "Te Tafoe". A **tafoe** is a traditional dance from Tokelau. The dance is performed using **foe** (paddles).

LEARNING THE TAFŌE

First, the group has to learn the song that goes with the dance. Dalsia and Vaha are the teachers. They get the group to practise the words. Then they go over the tune. After that, it's time to learn the actions.

Dalsia and Vaha teach the actions one line at a time. They make sure the group knows each action well, before they move on to the next line.

The words of the tafoe are very old. Mouanaki's dad, Paulino Tuwhala, was the one who took these traditional words and set them to music. Then he added the actions.

"I think your dad has made up an awesome tafoe," says Kewa. "Dalsia and Vaha are great dance teachers, too!"





TE TAFOE

*Kaufao ke mau ai
Kaufao ke mau to malo
Ke mau! Ke mau!
Kua maua, kua taia
Si! Si!
E hulu te foe ki oku mua
E hulu te foe ki oku tua
E fakapatato
Eo ea ia
Tafoe o!*



The words of this song are taken from a traditional Tokelau war cry. They tell the warrior Kaufao to be alert and stand his ground in battle, to be brave, and to fight for victory.



Learning about Aganuku Faka-Tokelau (Tokelau Culture)

Kewa, Rosa, and Mouanaki are part of a **kaulotu** (church group) that meets every Sunday. The group from the local Tokelau community has been meeting for over thirty years. They come together to share **fakatuatua** (faith), **aganuku** (culture), and **lotokaiga** (a sense of belonging).

Some of the adults were part of the group in the 1980s. They were children then. Now they are teaching their own children the language, dances, and songs they learnt when they were young. They are continuing the great work of their own mums, dads, nanas, and papas.



MAKING THE FOE

Paulino Tuwhala is a master carver and artist. He learnt the art of **talatalai** (carving) by watching his grandad, uncles, and dad in Nukunonu, Tokelau. Later, he studied at Leulumoega Fou (The School of Fine Arts in Sāmoa) for three years. When he finished studying, he wanted to pass on his skills to others.

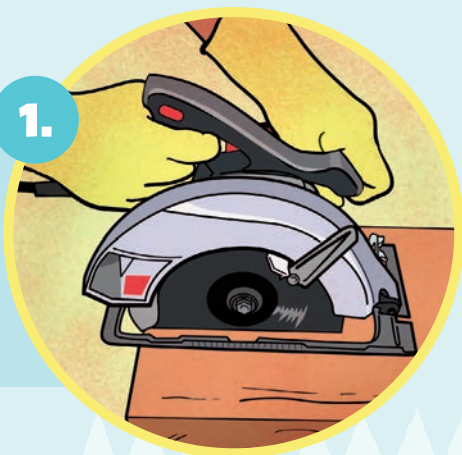
Paulino Tuwhala is teaching some of the parents, grandparents, and young people how to make the foe. First, he shows them the right way to use a **toki** (a tool used for carving). Then they begin to make the foe.



TO MAKE A FOE:

Cut out the general shape of the foe with a circular saw. (An adult wearing safety gear does this.)

1.



2.



Use the tuki to give the foe its exact form. (This step takes a lot of slow, careful work.)

3.

Use sandpaper to make the foe smooth.





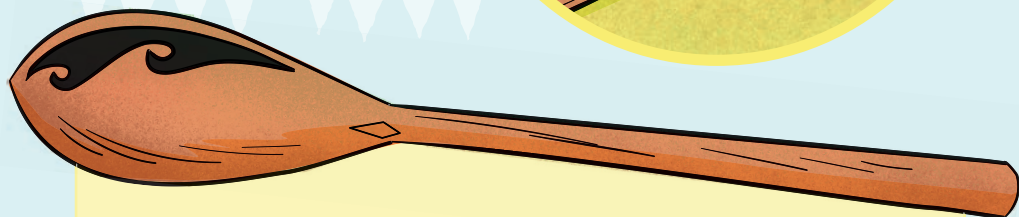
4.

Paint each foe with koru-shaped designs. The designs represent waves.



5.

Varnish the foe.



"The key to beautiful carving is finding your own style," says Paulino Tuwhala. "Then you have to let the carving tell its own story. My carving helps me show my Tokelau culture and identity."

PERFORMING THE TAFŌE

The children have practised the words, the tune, and the actions for their foe dance. Now it's time to share it with the kaulotu. Kewa, Rosa, and Mouanaki wait excitedly for their group's turn to perform.

"We need to concentrate," says Kewa.

"Yes," agrees Mouanaki. "Singing and dancing at the same time is quite tricky!"

"I really hope I can remember the actions," says Rosa.

They listen for the drum beat. Then they begin to sing and move their foe to the rhythm. As the song speeds up, their feet move faster and faster. The foe move faster, too, spinning and flowing with the music.

"Malo te hiva! Malo te lagi! Kai te gali! Malo ni, tamaiti!
Great dancing! Great singing! How beautiful! Well done, kids!"





TOKELAU VOCABULARY

aganuku: culture

fakatuatua: faith

foe: paddles

kaulotu: church group

lotokaiga: a sense of belonging

tafoe: a type of traditional dance from Tokelau

talatalai: carving

toki: a tool used for carving

BASKETS OF FIRE

by Whiti Hereaka



A cold southerly wind is blowing. It's the kind of wind that has snow on its breath. It's the kind of wind that makes you wish you were cosy and warm at home. And it's the kind of wind that makes me think of a story from many, many years ago – the story of Ngātoro-i-rangi and the baskets of fire.

Ngātoro-i-rangi was a brave explorer. He was also a powerful tohunga. A tohunga is an expert, and Ngātoro-i-rangi was an expert in many things. He knew about the stars and the sea. He also knew about magic. He lived a very long time ago, when the first people came and made Aotearoa their home.

Ngātoro-i-rangi came from Hawaiki on the great waka *Te Arawa*. He used his knowledge of the stars, the sea, and the birds to guide the waka on that long journey.

When he arrived in Aotearoa, he set off to explore the new land. He travelled inland from the coast with his slave Ngāuruhoe. Ngātoro-i-rangi found a place with a huge lake and many mountains. Today, we call that place Taupō.

Near the lake, he saw a magnificent mountain. Its beauty was reflected in the calm waters of the great lake below.

Ngātoro-i-rangi wanted to claim the mountain for his people. The land here was good, and the mana of the mountain would protect them. However, there were two other explorers in the area. Their names were Tia and Hape-ki-tūārangī. Ngātoro-i-rangi knew he had to climb the mountain and claim it before they did.



When he lived in Hawaiki, Ngātoro-i-rangi was able to ask the atua (gods) for help. They would listen to him. (Of course, being atua, they didn't always do exactly what he asked them to do.) He hadn't called on the atua in this new land yet, but he knew he needed their help now.

Ngātoro-i-rangi asked them to send a storm so that no one else would try to climb the mountain before him. Straight away, Tāwhirimātea sent cold winds, sleet, and snow. Ngātoro-i-rangi had never felt such a terrible storm. His cloak was useless. The cold seemed to stab right through his body and go deep into his bones. Ngāuruhoe begged him to turn back, but Ngātoro-i-rangi kept climbing. He was a brave and proud man.

In Hawaiki, Ngātoro-i-rangi was known to the ahi tipua – the children of Rūaumoko. They were the fire demons who lived under the earth. He stamped his feet on the icy ground, hoping to bring them to the surface. Perhaps their warmth would save him and Ngāuruhoe. But in this new land, he could not feel them. On this mountain, he could not feel their warmth at all.



Ngātoro-i-rangi knew he was freezing to death. He hoped he had enough power to send a message to his sisters back home in Hawaiki. He spoke his words even though his teeth were chattering with the cold. He spoke his words even though he only had the strength to whisper. He spoke his words even though they seemed to be ripped from his mouth and scattered by the wind.

Back in Hawaiki, his sisters suddenly felt a cold breeze. Then they felt the sting of ice on their faces. They drew their cloaks closer around themselves. Even though it was warm in Hawaiki, they could see their breath hang frozen in the air.

Then they heard the voice of Ngātoro-i-rangi whispering: “Oh, my sisters! Send me fire!” They filled kete with embers from deep within the earth – ahi tipua. Then they called on the demi-gods Te Pupū and Te Hoata to carry the kete to Aotearoa. Te Pupū and Te Hoata raced beneath the ocean. As they ran, the hot embers burnt a tunnel through the rock.



The kete were heavy. Sometimes Te Pupū and Te Hoata had to stop and rest. They were in such a rush, they didn't notice that each time they stopped, they left some of the embers behind. They stopped at Whakaari, Moutohorā, Rotorua, Rotoiti, Tarawera, Ōrākei Kōrako, Wairākei, and Tokaanu. When finally they reached Tongariro and found Ngātoro-i-rangi, there was only one kete left. There weren't enough embers to warm both Ngātoro-i-rangi and Ngāuruhoe. Ngātoro-i-rangi was very angry at Te Pupū and Te Hoata for being so careless. He stamped his foot. It made a large hole or crater in the side of the mountain. He tipped the last embers into the crater. The heat from the mountain was enough to save him, but it was too late for Ngāuruhoe.

Now Ngātoro-i-rangi could feel ahi tipua beneath him. From the top of the mountain, he could see the path Te Pupū and Te Hoata had followed on their journey – the journey that brought volcanic fire to Aotearoa.





Whakaari

Moutohorā

Rotorua

Rotoiti

Tarawera

Ōrākei Kōrako

Wairākei

Lake Taupō

Tokaanu



The mountains still tell the story of Ngātoro-i-rangi in their names: Tongariro (which means “strong, southerly wind”) and Ngāuruhoe (the slave of Ngātoro-i-rangi). The place where he received the last kete is called Ketetahi. The descendants of Ngātoro-i-rangi still live under the protection of the mountain he climbed so long ago.

So whenever a cold southerly blows, and your teeth chatter, remember the story of Ngātoro-i-rangi and his baskets of fire.



ACKNOWLEDGMENTS

The Ministry of Education and Lift Education would like to thank the staff and students of Motueka South School for their help with “The Plastic-free Challenge” and Kaulotu Katoliko Tokelau Petone o te Whinagalo Paia for their help with “Tafoe O!”.

All text copyright © Crown 2018 except for the lyrics of “Te Tafoe” (page 20), which are traditional.

The images on the following pages are copyright © Crown 2018:

front cover, 2 (bottom right), 3 (bottom left and bottom right), and 4–8 by Tim Cuff

3 (map) by Jodi Wicksteed

10 by Fraser Williamson

11–17 by Dede Putra

18–20 and 24–25 by Mark Coote

21–23 (background pattern) by Liz Tui Morris

22–23 by Adele Jackson

26–31 by Andrew Burdan

The images on the following pages are used under a Creative Commons licence (CC BY 2.0):

front cover, contents page, 2–3, and 9 (water texture) by Felipe Skroski from goo.gl/9BZRxG

32 by Flashpacker travelguide from goo.gl/vEa9qd

The images on the following pages are in the public domain:

contents page and pages 2–3 (water bottle) from goo.gl/utXLJh

pages 19–21 and 24 (wood texture) by Pixabay from goo.gl/EEH3R9

The images on the following pages are used with permission:

2 (bottom left) copyright © Robert Marc Lehmann/Greenpeace

9 (photograph of Boyan Slat) copyright © The Ocean Cleanup

9 (photograph of sea boom) copyright © Erwin Zwart/The Ocean Cleanup

21 copyright © Paulino Tuwhala Tavite

20–23 (Tokelau pattern) copyright © Liz Tui Morris

Editor: David Chadwick

Designer: Jodi Wicksteed

Literacy Consultant: Melanie Winthrop

Consulting Editors: Hōne Apanui and Emeli Sione



Go to www.schooljournal.tki.org.nz

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

	TSM	Audio
The Plastic-free Challenge	✓	
Tafoe O!	✓	✓
Baskets of Fire	✓	✓



MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

[New Zealand](http://www.govt.nz) Government

ISBN 978-1-77669-451-8



9 781776 694518