

ICONIC GAMES

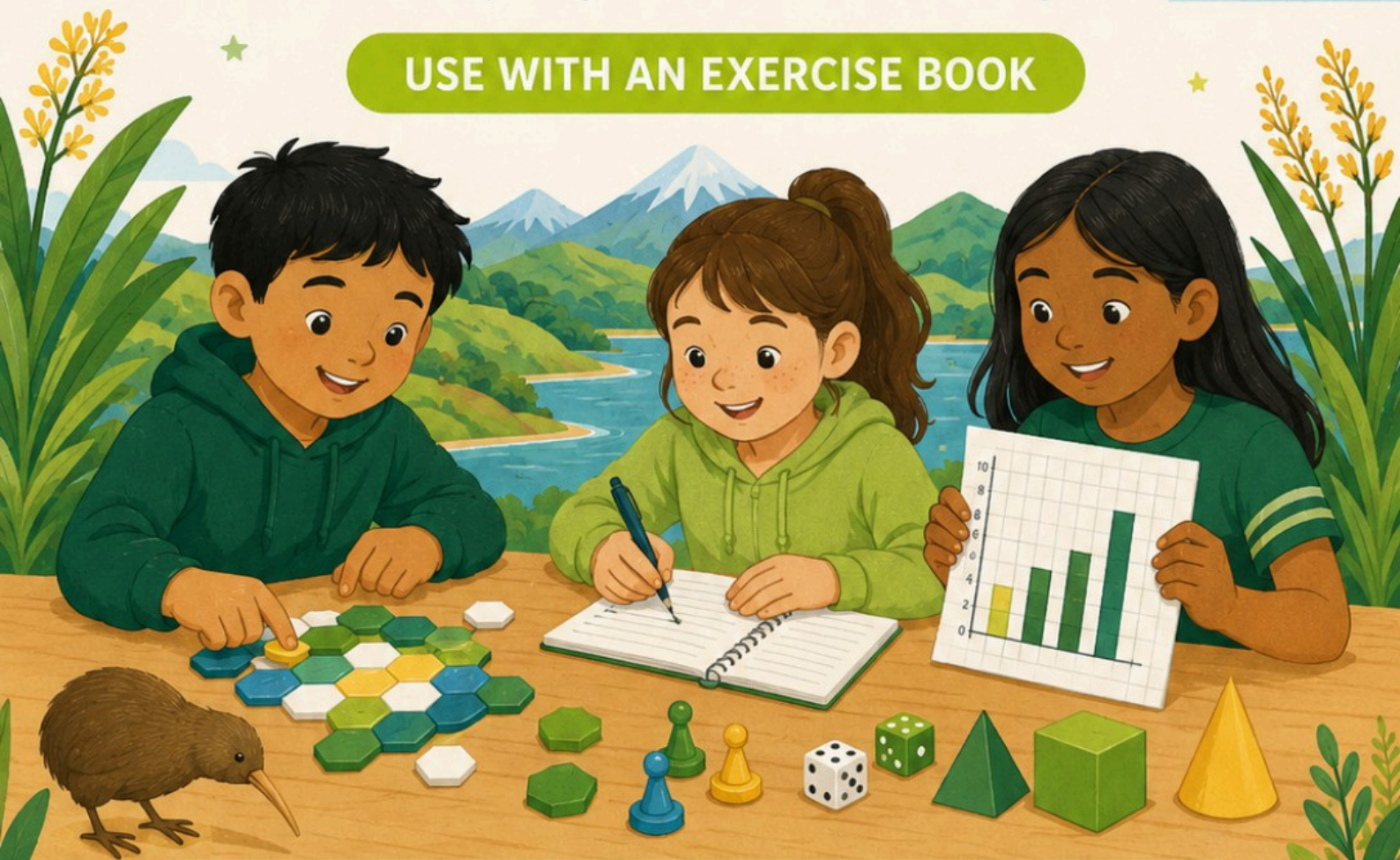
YEAR 6

HOMework BOOK

English • Mathematics and Statistics

A complete year of after-school learning

USE WITH AN EXERCISE BOOK



My name:

.....



My school:

.....



My class:

.....



Year:

.....

THE ICONIC GAMES
HOMEWORK CLUB

YEAR 6
TERM 1 – PAGE 2

EXPLORE
LEARN
THINK CRITICALLY
SOLVE PROBLEMS
A BRIGHTER
AOTEAROA
TOGETHER



WELCOME TO YEAR 6

THINK • EXPLORE • CREATE •
CHALLENGE YOURSELF

PLAY
LEARN
GROW
TOGETHER

KINDNESS
CURIOSITY
EFFORT
CREATIVITY
BELONGING



Good
Learners
Brighter
Futures



A BRIGHTER
AOTEAROA
TOGETHER



Kia ora and welcome to Year 6 Homework Club!

This year is all about practising your skills, investigating ideas, solving problems, creating things and learning from mistakes. You'll explore Aotearoa, discover new ideas, use your creativity and build confidence. Every effort you make helps you grow — and you're part of a community of learners who are on this journey together!



TRY SOMETHING NEW



Be curious! Have a go at new ideas, activities and ways of solving problems. You might discover a new favourite!

CHALLENGE YOUR THINKING



Ask questions, look for clues, make connections and think in different ways. The best ideas often come from a fresh perspective!

KEEP GOING



It's okay if it's tricky. Mistakes help you learn! Keep trying, use the strategies and be proud of your progress.

This book belongs to:

HE
MĀHERE NĀ TĀTOU
A BRIGHTER AOTEAROA
TOGETHER



EXPLORE
LEARN
THINK CRITICALLY
A BRIGHTER AOTEAROA
TOGETHER

HOW HOMEWORK CLUB WORKS

SAME PROCESS. BIGGER POSSIBILITIES.

Each page in Homework Club follows the same 5-step process. This helps you build your skills, think deeply and make great progress!

Curious minds
create brighter
futures!

PLAY
LEARN
GROW

Let's go!
Same steps
every time!

1 READ



Read the information, question or instructions carefully. Look for important words and clues.

I'm looking
for key
information.

2 THINK



Think about what it means. Use what you already know and make a plan. Ask yourself what you need to do.

What's the
best way
to solve this?

3 TRY



Have a go! Do the activity, write your answer, solve the problem or create your ideas.

I'll give
it a go!

4 CHECK



Check your work. Does it make sense? Look for mistakes and use the success criteria if there is one.

I'll check
my work
carefully.

5 REFLECT



Think about what you have learned. What went well? What was challenging? What will you do next time?

I'm proud
of what
I've learned!

CHALLENGE

Some pages have a **CHALLENGE** badge. This means there's an extra thinking question or a harder activity for you to try. Give it a go and see how far you can go!

Challenge
yourself!
You might surprise
yourself!

WHĀNAU CHALLENGE

Some pages have a **WHĀNAU CHALLENGE**. This is an activity you can do with a family member, friend or whānau. Share your ideas, work together and see what you can discover!

Learning
is better
together!

? STUCK?

If you get stuck, don't worry! Use the **Helpful Strategies** on page 76.

HELPFUL
STRATEGIES
PAGE 76

- Take a deep breath
- Read it again
- Look for clues
- Ask someone
- Try a different strategy

YOU CAN DO THIS!

HE MĀHERE NĀ TĀTOU
A BRIGHTER AOTEAROA TOGETHER

FACT FINDER

READ • THINK • DISCOVER

Good readers ask questions, look for key information and use evidence from the text. Let's explore an amazing place in Aotearoa and find out what makes it special!

Real places.
Real stories.
Brighter futures
for Aotearoa!

EXPLORE
ANALYSE
INFER
WRITE
DISCOVER
GROW

1 READ THE TEXT

Te Waihora – Lake Ellesmere

Te Waihora, also known as Lake Ellesmere, is the largest lake in Te Waipounamu (the South Island). It lies near the city of Christchurch and is a special place for both people and wildlife.

The lake is a shallow, coastal lagoon, separated from the sea by a narrow strip of land called Te Waihora Spit. Because it is shallow, the depth of the lake changes with the seasons and the weather. In some places it is less than two metres deep. During dry periods, the lake can become much smaller, but when there is heavy rain, it can grow and cover a much larger area.

Te Waihora is an important habitat for many native birds. It is especially well known for its large number of tūteku (Australasian shoveler), a rare native duck. Other birds that live here include kōtuku (white heron), kāruhiruhi (pied stilt) and poaka (pied avocet). The wetlands and surrounding plants provide food and shelter for these birds.

Te Waihora is also significant to Ngāi Tahu, who have a deep cultural connection to the lake. It provides mahinga kai (food gathering places) and is part of their whakapapa and kaitiakitanga (guardianship) responsibilities. Today, local communities, scientists and iwi work together to protect Te Waihora so that it can continue to support unique wildlife and be enjoyed by future generations.



TAONGA PLACES
TAONGA SPECIES
HEALTHY ENVIRONMENTS
BRIGHTER FUTURES

2 MAIN IDEA

What is the main idea of this text? Write one or two sentences.

.....

.....

3 SUPPORTING DETAILS

Write three important details from the text.

1.

2.

3.

4 VOCABULARY

Find the meaning of each word using the context of the text or a dictionary.

- a) lagoon:
- b) habitat:
- c) mahinga kai:
- d) kaitiakitanga:

5 EVIDENCE

Find a piece of information in the text that tells us why Te Waihora is important for birds. Write the exact words or a short part of the sentence.

.....

.....

6 THINK FURTHER

Why do you think places like Te Waihora are important to protect? Give at least one reason from the text and one of your own ideas.

.....

.....

EXPLORE
LEARN
CARE

HE WHENUA ORA
HE TĀNGATA ORA
A BRIGHTER AOTEAROA TOGETHER

EXPLORE MATHS
THINK CRITICALLY
SOLVE PROBLEMS
A BRIGHTER AOTEAROA

NUMBER INVESTIGATOR

BIG NUMBERS. REAL WORLDS. BRIGHTER FUTURES.

Numbers help us understand our world.
Use your maths skills to investigate, compare
and solve problems connected to Aotearoa
and beyond!

Same numbers.
Bigger perspectives.
Let's explore
Aotearoa!

EXPLORE
ANALYSE
SOLVE
PERSIST
GROW

1 READ AND WRITE

Write each number in words, and each number word in digits.

- a) 4,507,392 = _____

- b) 1,268,000 = _____

- c) Nine million, three hundred and fifteen thousand, eight =
- d) Two million, forty-six thousand, seven hundred and twenty =

2 PLACE VALUE

Use the number 7,418,263 to answer the questions.

- a) What is the value of the 7?
- b) What is the value of the 4?
- c) What is the value of the 1?
- d) What is the value of the 8?
- e) Which digit is in the ten thousands place?
- f) Write the number with the digit 1 rounded to the nearest thousand.

3 ORDERING NUMBERS

Put these numbers in order from smallest to largest.

2,408,179 248,701 2,480,917 2,084,791

< < <

Now put these numbers in order from largest to smallest.

5,601,328 5,160,832 506,832 5,016,283

> > >

5 ESTIMATION

Estimate each answer. Then calculate the exact answer.

- a) $4,892 + 2,716$ b) 296×82
Estimate: Exact: Estimate: Exact:
- c) $8,413 - 5,687$ d) $7,208 \div 6$
Estimate: Exact: Estimate: Exact:

6 NUMBER PATTERNS

- a) Continue the pattern.
987,250 987,350 987,450
- b) Each number is 250,000 more than the previous number.
1,250,000 1,500,000
- c) Write a number that fits between these two numbers.
3,650,000 < < 3,700,000

7 REAL-WORLD CHALLENGE: AOTEAROA IN NUMBERS

Aotearoa New Zealand's population is about 5,300,000 people. The population of Tāmaki Makaurau (Auckland) is about 1,680,000 and Te Whanganui-a-Tara (Wellington) is about 545,000.

- a) About how many people live in the rest of Aotearoa (outside of Auckland and Wellington)? Show your working.
- b) Round each population to the nearest 100,000.
Auckland: _____ Wellington: _____ New Zealand: _____
- c) A flight from Auckland to Wellington is about 640 km. A flight from Wellington to Ōtautahi (Christchurch) is about 480 km. About how far is it from Auckland to Christchurch? Estimate first, then calculate the exact distance.
Estimate: _____ Exact: _____

REAL PLACES
REAL NUMBERS
BRIGHTER
AOTEAROA

HE TĀNGATA
HE WHENUA
HE ĀMUA

EVIDENCE DETECTIVE

READ • INVESTIGATE • INFER • EXPLAIN

Good readers look for clues. They use what the text says and what they know to work out what might have happened. Read the story, examine the evidence and answer the questions.

OBSERVE
QUESTION
FIND EVIDENCE
THINK DEEPLY
SHARE IDEAS

1 THE MYSTERY

The Missing Field Journal

The Year 6 rōpū arrived at Te Awa Ngahere Track for their overnight camp. In the morning, Mia realised her field journal was missing. She had left it on the picnic table while the group had morning kai. "It was definitely here before we went to the river," said Mia. "Now it's gone!"

The table was a bit messy. A few kānuka leaves and some sand were on it. Next to the table was a half-eaten snack wrapper and a set of muddy paw prints leading towards the bush. Tahu remembered seeing a curious weka near the camp earlier. "It was hopping around the tables," he said. "Maybe it took it, thinking it was food."

But Aria wasn't convinced. "The weka was on the other side of the camp," she said. "I think someone in our group might have moved it by accident."

They followed the paw prints a short distance, but then the trail disappeared near some ferns. On a low branch, they found a torn page from Mia's journal.

Now the team had to work out what really happened.

4 FACT OR INFERENCE?

Statement	Fact (explicitly stated)	Inference (working it out)
Mia's journal is missing.	☐	☐
A weka was at the camp.	☐	☐
The weka took the journal.	☐	☐
Someone in the group might have moved it.	☐	☐
The torn page came from Mia's journal.	☐	☐
The journal is probably nearby.	☐	☐

5 I THINK ... BECAUSE ...

Write your own inference about what might have happened to the journal. Use evidence from the text to support your idea.

I think

because the text says

2 QUICK CHECK

- What was missing?
- Where was it last seen?
- Who thinks a weka might have taken it?
- What evidence did they find on the branch?
- Where did the paw prints lead?

3 TEXTUAL CLUES

Tick the sentences that are clues from the text.

- ☐ Mia left her journal on the picnic table.
- ☐ There were muddy paw prints.
- ☐ The weka definitely took the journal.
- ☐ A torn page was found on a low branch.
- ☐ Aria saw the weka pick it up.
- ☐ The table was messy with leaves and sand.

7 WRITE A SHORT PARAGRAPH

Use the clues from the text to write a short paragraph (3–5 sentences) explaining what you think happened to the journal and why. Use evidence from the story.

GOOD READERS ...

- ☒ Look for clues
- ☐ Use what the text says
- ☒ Think about what it means
- ☐ Ask questions
- ☒ Make a reasonable conclusion

CURIOSITY
KINDNESS
CONNECTION
BRIGHTER
AOTEAROA

SMALL
ACTIONS
BIG CHANGE

EXPLORE MATHS
THINK CRITICALLY
SOLVE PROBLEMS
A BRIGHTER AOTEAROA

OPERATION MISSION

PLAN • CALCULATE • SOLVE • ACHIEVE

The crew are preparing for a conservation mission in a remote Aotearoa valley. Help them solve the problems so they can get there, do the mahi, and make a positive difference!

Maths helps
turn big plans
into real change!

EXPLORE
ANALYSE
SOLVE
PERSIST
MAKE A
DIFFERENCE

1 TRAVEL TO THE VALLEY

The team travels 218 km from their town to the base camp. They stop after 136 km for a break. How many kilometres are left to travel?

km



2 SUPPLY CHECK

The team packs 8 boxes of supplies. Each box has 24 items.

a) How many items are there in total?

items



b) If 37 items are used during the first day, how many items are left?

items

3 CONSERVATION WORK

The team plants 6 rows of native trees. Each row has 18 trees.

a) How many trees do they plant in total?

trees

b) Later they plant another 25 trees. How many trees have they planted altogether?

trees



4 BOAT TRIP

The team travels by boat to a nearby island. There are 28 seats on the boat. 3 trips are needed to take 78 people (including helpers).

a) How many people go on the first two trips altogether?

people

b) How many people go on the third trip?

people



5 TICKETS AND COSTS

Students fundraise to help pay for the trip. They sell 35 adult tickets at \$18 each and 20 child tickets at \$12 each.

a) How much money do they raise from adult tickets?

\$

b) How much money do they raise from child tickets?

\$

c) What is the total amount raised?

\$



6 CHOOSE YOUR OPERATION

Write the correct operation (+, −, × or ÷) to solve each problem. Then find the answer.

a) A box has 6 kg of seed. There are 9 boxes. How many kilograms of seed in total?

6 9 =

b) There are 84 plants. They are shared equally among 7 schools. How many plants does each school get?

84 7 =

c) A hut has 48 bunk beds. 19 are already booked. How many are still available?

48 19 =

d) Each team member carries 5 litres of water. There are 6 team members. How many litres in total?

5 6 =

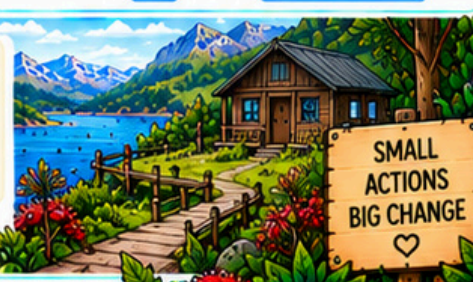
7 FINAL MISSION: PLAN IT ALL

The team needs to get 48 seedlings, 12 bags of soil and 6 tool boxes to the valley. Each backpack can carry 4 items. How many backpacks do they need in total?

Each backpack weighs 3 kg. What is the total weight they will carry?

If they have 2 vehicles and share the backpacks equally, how many backpacks will go in each vehicle?

Working:



HE MĀHERE NĀ TĀTOU
A BRIGHTER AOTEAROA TOGETHER

SPECIES FILES

REAL CREATURES. AMAZING STORIES.

Aotearoa is home to incredible and unique species. In this activity, you will explore a native species, learn about its special features and use your reading and thinking skills to complete the activities.

Unique species make Aotearoa special. Let's look after their homes so they can thrive for generations.

EXPLORE
INVESTIGATE
ANALYSE
WRITE
DISCOVER
CARE

1 MEET THE SPECIES



Conservation status:
Nationally Vulnerable

Average size:
45–55 cm (length)

Average weight:
1.5–3.5 kg

Diet:
Insects, worms, grubs and other invertebrates

Habitat:
Forests, scrub and grassland

Lifespan:
Up to 50 years

TŌKĒ

Southern Brown Kiwi
Apteryx australis

2 READ AND UNDERSTAND

Use the fact file to answer the questions.

- What is the common name and the scientific name of this species?
- What is the average size and weight?
- What does it eat?
- Where does it live?
- What is its conservation status?

3 ADAPTATIONS

How do these features help the kiwi survive?
Match each feature to the correct advantage.

Long, sensitive beak

Helps it find food in soil

Strong legs and claws

Helps it blend into the forest

Night vision

Helps it move through rough terrain

Brown, fluffy feathers

Helps it find food at night

Excellent sense of smell

Helps it detect insects and worms

4 HABITAT AND THREATS

- What features of its habitat make it a good place to live? Give two examples.
 -
 -
- What are two threats to this species?
 -
 -
- Suggest one way people can help protect this species.

5 FACT OR FICTION?

Read each statement. Tick if it is a fact (true) or fiction (false).

Statement	Fact	Fiction
Kiwis can fly.	☐	☐
Kiwis are active at night.	☐	☐
Kiwis eat plants, insects and worms.	☐	☐
Kiwi eggs are very large compared to their body size.	☐	☐
Kiwis live only on islands, not on the mainland.	☐	☐

6 VOCABULARY

Match each word to its meaning.

- | | |
|-----------------|---|
| a) Nocturnal | • A place where an organism lives |
| b) Habitat | • Active at night |
| c) Invertebrate | • An animal without a backbone |
| d) Conservation | • At risk of harm or decline |
| e) Vulnerable | • Protecting and caring for the natural world |

7 EXPLAIN

How does the kiwi survive in its environment?
Use information from the fact file and what you have learned about its adaptations, habitat and diet.
Write a short paragraph (3–5 sentences).

.....

.....

.....

NATIVE SPECIES
BRIGHTER
FUTURES

FRACTION EXPEDITION

SAME PARTS. NEW PERSPECTIVES.

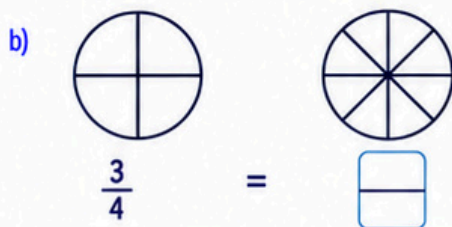
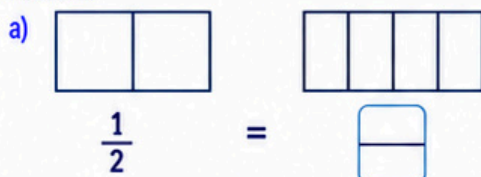
Fractions help us share, compare and solve real-world problems. Use your maths skills to help the crew prepare for their expedition!

Different parts. Same whole. Big ideas take us further! ♥

EXPLORE
ANALYSE
SOLVE
DISCOVER
PERSIST
GROW

1 EQUIVALENT FRACTIONS

Shade the diagrams and complete the equivalent fractions.



2 VISUAL FRACTIONS

Write the fraction of each set that is shaded.



3 COMPARE AND ORDER

a) Use $>$, $<$ or $=$ to compare the fractions.

a) $\frac{3}{8} \bigcirc \frac{5}{8}$ b) $\frac{4}{6} \bigcirc \frac{2}{3}$

c) $\frac{7}{10} \bigcirc \frac{3}{5}$ d) $\frac{1}{4} \bigcirc \frac{2}{8}$

e) Order these fractions from smallest to largest.

$\frac{5}{6}$ $\frac{1}{3}$ $\frac{2}{3}$ $\frac{1}{6}$

$<$ $<$ $<$

4 FRACTION NUMBER LINE

Plot the fractions on the number line. Write the letter in the correct place.

A = $\frac{1}{4}$ B = $\frac{1}{2}$ C = $\frac{3}{4}$



5 EXPEDITION PROBLEMS

a) The crew has a block of 12 muesli bars. They share $\frac{4}{4}$ of them equally among 4 people. How many muesli bars does each person get?

muesli bars each

b) A water tank is $\frac{5}{6}$ full. After using $\frac{2}{6}$, how much is left?

of the tank is left.

c) The team walks $\frac{3}{5}$ of the track on day one and $\frac{1}{5}$ on day two. What fraction of the track have they walked in total?

6 EXPLORER CHALLENGE

The team has a roll of rope that is 1 metre long. They cut it into two pieces. One piece is $\frac{3}{8}$ of a metre. The other piece is longer.

a) What fraction of a metre is the longer piece?

b) Which piece is longer? How do you know?

.....
.....
.....

7 THINK FURTHER

Design your own fraction problem using the expedition setting. It could be about food, water, time, distance or equipment. Write the problem and solve it.

.....
.....
.....
.....

YOUR IDEAS
CAN TAKE US
FURTHER

MĀ TE MĀTAURANGA
KA HAERE MĀORI
FURTHER TOGETHER

EXPLORE MAPS
THINK CRITICALLY
FIND INFORMATION
A BRIGHTER AOTEAROA

MAP READER



EXPLORE • READ • QUESTION • DISCOVER

Maps help us understand places, plan journeys and learn about our environment. Use the map below to answer the questions.

Maps tell stories about people, places and how we care for our whenua.

EXPLORE
ANALYSE
SOLVE
DISCOVER
RESPECT
CARE

TE WAIHORA REGION

A FICTIONAL AOTEAROA MAP



MAP KEY

- Town / Settlement
- Road (main)
- Road (local)
- Track (walking)
- Bridge
- River / Awa
- Lake
- Mountain / Maunga
- Forest / Ngahere
- Beach / Coastline
- Lighthouse
- Campsite
- Lookout
- Ferry route



EXPLORE
OUR PLACES
RESPECT
OUR WHĀNAU
CARE FOR
OUR WHENUA

Scale

0 5 10 15 km

1 FIND AND IDENTIFY



- a) What feature is located at grid/position? (no grid, just map)
 - i) Which town is on the coast?
 - ii) What is the name of the island?
 - iii) What mountain is in the north-west?
 - iv) Which lake is in the south-west?
 - v) What is at Te Rāwhiti Point?

2 DIRECTIONS



- a) You are at Titoki Village. Which direction would you travel to get to Harakeke Town?
- b) You are at Harakeke Town. Which direction would you travel to get to Motukōura Island?
- c) You are at the lighthouse. Which direction would you travel to get to Mānuka Hills?

3 DISTANCES



Use the scale to estimate the distances.

- a) How far is it from Titoki Village to Harakeke Town? km
- b) How far is it from Harakeke Town to Te Rāwhiti Point? km
- c) How far is it from Titoki Village to Pāharakeke Lakes? km

4 MAP INFORMATION



- a) What natural features can you see on this map? (List three)
 1.
 2.
 3.
- b) What human (built) features can you see? (List three)
 1.
 2.
 3.

5 THINKING FURTHER



- a) Why do you think the track to Pāharakeke Lakes is a dashed line instead of a solid road?
- b) If you were planning a day trip, which two places would you visit? Explain why.
- c) How might the people who live in this region use the land and water?

6 MAP CHALLENGE



- a) Add and label a new campsite at a place of your choice. Use the correct symbol from the map key.
- b) Draw a walking track from the campsite to a lookout.
- c) Give your campsite a name:
- d) Write directions for a friend to get from your campsite to Harakeke Town.

DIFFERENT PATHS
BRIGHTER FUTURES

EXPLORE
THINK CRITICALLY
SOLVE PROBLEMS
A BRIGHTER AOTEAROA

COORDINATE CHALLENGE

LOCATE • PLOT • FOLLOW • DISCOVER

Use the coordinate grid to explore the expedition map. Find the locations, plot new ones and follow the instructions to complete the challenges.
Where will your investigation lead?

EXPLORE
ANALYSE
SOLVE
DISCOVER
MAKE A
DIFFERENCE

1 EXPEDITION MAP

Use the grid to find the coordinates of each location.



A FIND THE COORDINATES

Write the coordinates for each location.

	Mountain	(,)
	Native Forest	(,)
	Waterfall	(,)
	Campsite	(,)
	Bridge	(,)
	Research Station	(,)
	Lighthouse	(,)
	Beach	(,)
	Jetty	(,)
	Rocky Outcrop	(,)

2 PLOT NEW LOCATIONS

Plot these locations on the grid. Use a ✕ and write the name.

- Bird Hide (C, 7)
- Water Quality Station (I, 5)
- Lookout Point (F, 9)
- Native Tree (B, 3)

3 FOLLOW THE ROUTE

Start at the Research Station (,). Follow the instructions and write the final coordinate.

- Move 3 squares north.
- Move 4 squares east.
- Move 2 squares south.
- Move 1 square west.

You will arrive at: (,)

4 POSITION PROBLEMS

- Which location is north of the bridge?
.....
- Which location is west of the campsite?
.....
- Which two locations are in the same row (horizontal line)?
.....
- Which two locations are in the same column (vertical line)?
.....

5 HIDDEN LOCATION CHALLENGE

A special taonga is hidden at one of these coordinates. Use the clues to find it.

- It is east of the river.
- It is south of the waterfall.
- It is in column I.
- It is not the jetty.

Where is the hidden taonga? (,)

EXPLORE
THINK DEEPLY
FIND SOLUTIONS
A BRIGHTER
AOTEAROA

6 CREATE YOUR OWN

Write a set of directions for a friend to get from the lighthouse to the mountain. Use coordinates or movement instructions (e.g. north, south, east, west).

CURIOUS
MINDS
BRIGHTER
FUTURES

WEATHER INVESTIGATOR

OBSERVE • RECORD • ANALYSE • PREDICT

Weather affects people, places and the environment.
Look at the weather data below for Tūi Valley
(a fictional Aotearoa town) and answer
the questions.

Same
skies. Brighter
thinkers. ♥

EXPLORE
INVESTIGATE
ANALYSE
SOLVE
DISCOVER
MAKE A
DIFFERENCE

1 THE WEATHER DATA

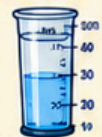
This table shows the weather recorded in Tūi Valley over seven days.

Day	Date	Temperature (°C)	Rainfall (mm)	Wind Speed (km/h)	Conditions
Mon	12 Jan	16	0	12	Sunny
Tue	13 Jan	18	2	18	Mostly cloudy
Wed	14 Jan	15	15	28	Rainy
Thu	15 Jan	13	20	35	Heavy rain
Fri	16 Jan	14	5	22	Cloudy
Sat	17 Jan	17	0	15	Sunny
Sun	18 Jan	19	0	10	Sunny

WEATHER INSTRUMENTS



Thermometer
(measures
temperature)



Rain gauge
(measures
rainfall)



Anemometer
(measures
wind speed)

Scientists collect data
to look for patterns.
What patterns can you see
in this week's weather?

2 LOOK FOR PATTERNS

- Which days had rain?
- Which day had the highest temperature? °C
- Which day had the lowest temperature? °C
- Which day had the strongest wind? km/h
- Describe the pattern in the weather during the week.
What do you notice?

3 COMPARE DAYS

- Compare Wednesday and Saturday.
How are they the same?
How are they different?
- Which day would be best for a picnic? Why?

4 MAKE OBSERVATIONS

- What does the data tell you about the middle of the week
(Wednesday–Friday)?
- What do you notice about the wind speed on rainy days?
- Is there a relationship between rainfall and temperature?
Explain your answer.

5 PREDICT

The next day (Monday 19 Jan) is not shown in the table.
Use the data to make a prediction.

- What do you think the weather will be like on Monday?
(temperature, rainfall, wind and conditions)
- Explain why you made this prediction. Use evidence from the data.

6 THINK FURTHER

- How might this type of weather affect plants, animals or people
in Tūi Valley?
- What other information could you collect to make an even better
prediction?

HE ARA PŪTAIAO
CURIOSITY LEADS TO
A BRIGHTER AOTEAROA

EXPLORE
LEARN
RESPECT
PROTECT

USE DATA
THINK CRITICALLY
FIND THE TRUTH
A BRIGHTER AOTEAROA

DATA DETECTIVE

REAL DATA. REAL ANSWERS. A BRIGHTER AOTEAROA.

Explore the data below about the weather at Rākau Bay over one week. Use the table and graph to answer the questions, look for patterns and be a data detective!

Data helps us understand our environment and make better decisions for a brighter future.

EXPLORE
ANALYSE
THINK
SOLVE
DISCOVER
CARE

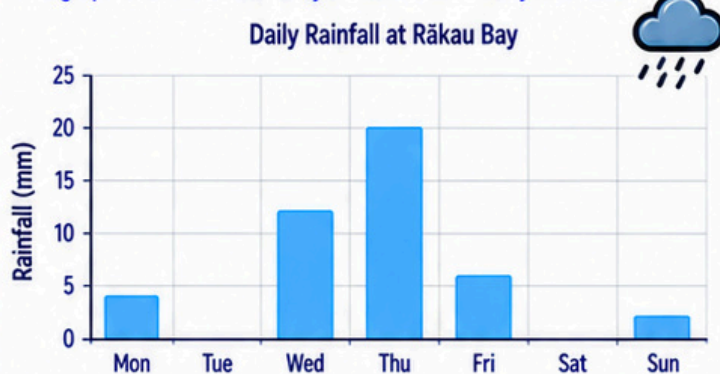
1 THE DATA

The table shows the weather recorded at Rākau Bay last week.

Day	Rainfall (mm)	Highest Temperature (°C)	Lowest Temperature (°C)	Hours of Sunshine
Mon	4	16	9	5
Tue	0	18	10	8
Wed	12	15	8	3
Thu	20	14	7	2
Fri	6	17	9	6
Sat	0	19	11	9
Sun	2	18	10	7

2 RAINFALL GRAPH

This graph shows the total daily rainfall at Rākau Bay last week.



3 EXPLORE THE DATA

- Which day had the most rainfall?
- Which day had no rainfall?
- What was the highest temperature recorded? °C
- What was the lowest temperature recorded? °C
- Calculate the range of the highest temperatures.
Highest: °C Lowest: °C Range: °C
- Calculate the range of the rainfall.
Highest: mm Lowest: mm Range: mm
- On which day was there the most sunshine?
- On which day was there the least sunshine?

4 COMPARE AND ANALYSE

- Which day was warmer: Monday or Friday?
By how many degrees?
- Which day had more rainfall: Wednesday or Sunday?
By how many millimetres?
- Did days with more rainfall tend to have more or less sunshine?
What evidence from the data supports this?
- Write two conclusions you can make from the data.
1.
2.

5 TRUE OR FALSE?

Look at this statement. Use the data to decide if it is true or false.

“Thursday was the coldest day AND it had the most rainfall.”

Is this statement true or false?

Use evidence from the table and/or graph to explain your answer.

6 THINK FURTHER

- If you were planning an outdoor clean-up at Rākau Bay, which day would be best? Why?
- How might this weather data be useful for the local community, rangers or marine scientists?

HEALTHY
ENVIRONMENTS
HEALTHY
PEOPLE

Kaitiaki today
for a brighter
tomorrow

EXPLORE
LEARN
RESPECT
PROTECT

WILD PLACES, BRIGHTER FUTURES

READ • THINK • RESPOND

Aotearoa has some of the most unique and special places in the world. When we understand and care for our environment, we can help protect it for future generations.

Great readers make a difference in the world!

EXPLORE
RESPECT
INVESTIGATE
CREATE
BELONG
A BRIGHTER AOTEAROA

1 READ THE TEXT

Read the article below, then complete the activities.

A Home for the Future

Protecting Aotearoa's Native Wildlife

Aotearoa New Zealand is home to some of the most unique plants and animals in the world. From the cheeky kākā in our forests to the tiny tīeke (saddleback) with its striking red and black feathers, our native species are found nowhere else on Earth.

But many of these taonga are at risk. Introduced predators like rats, stoats and possums can harm native birds, eggs and plants. Habitat loss, climate change and pollution also make it harder for native species to survive.

Across the country, people are taking action. Community groups, schools and iwi are planting native trees, setting traps and restoring habitats. In places like Zealandia in Wellington and Ōrokonui near Dunedin, native wildlife is making a comeback thanks to dedicated conservation work.

Everyone can make a difference. By learning about our environment, making careful choices and showing respect for our natural places, we can help ensure that Aotearoa's native wildlife will still be here for generations to come.

Healthy environments.
Brighter futures.



2 UNDERSTAND

Answer the questions in full sentences.

- What are two native birds mentioned in the text?
- Why are many native species at risk?
- Give one example of how people are helping native wildlife.
- What can you do to help protect Aotearoa's natural places?

3 WORDS IN CONTEXT

Find a word from the text that means the same as:

- a precious treasure
- in danger
- the natural home of plants and animals
- to make a return

4 THINK DEEPER

Choose one of the questions below and write a paragraph.

- Why do you think it is important to protect native species?
- What might Aotearoa look like in 50 years if we take good care of our environment?
- How can communities, schools and individuals work together to make a bigger impact?

5 YOUR TURN

Create a short poster, slogan or social media message to encourage others to care for Aotearoa's native wildlife. You can include a drawing and a catchy sentence.



SMALL
ACTIONS
BIG
CHANGE

KIA MĀIA • KIA MANAAKI
A BRIGHTER AOTEAROA

PEOPLE
PLACES
WILDLIFE
BRIGHTER
FUTURES

REAL-WORLD DATA

EXPLORE • INTERPRET • MAKE MEANING

Data helps us understand our world. It can be shown in different ways, such as bar graphs, line graphs, pie charts and tables. Look at the information below and answer the questions.

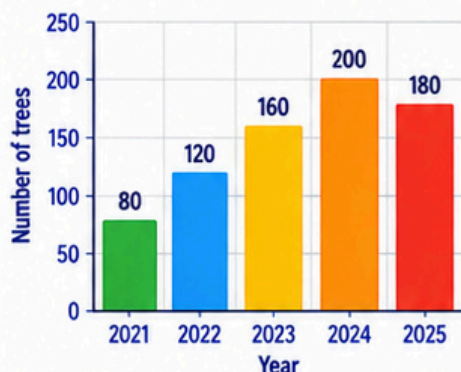


Data tells stories about our world!

EXPLORE
ANALYSE
THINK
SOLVE
REAL DATA
REAL CHANGE
♥

1 BAR GRAPH – NATIVE TREES PLANTED

A local school planted native trees over five years.



- Which year had the most trees planted?
.....
- How many more trees were planted in 2024 than in 2021?
.....
- What do you notice about the trend?
.....

2 LINE GRAPH – AVERAGE TEMPERATURE

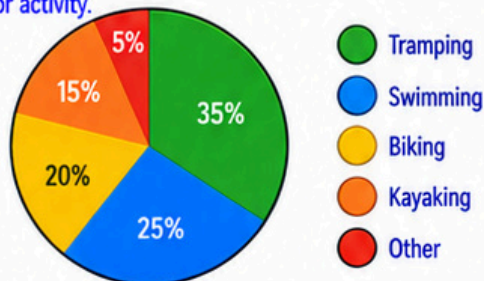
This graph shows the average monthly temperature in a town in Aotearoa.



- What is the warmest month?
- What is the coldest month?
- What is the temperature in June?
- How much warmer is December than July?

3 PIE CHART – FAVOURITE OUTDOOR ACTIVITIES

A group of Year 6 students were asked about their favourite outdoor activity.



- Which activity is the most popular?
- What percentage chose biking?
- What fraction of the students chose swimming?
- Which two activities together make up 40%?



Different graphs can help us see information in different ways!
♥

4 TABLE – WATER USAGE

This table shows the amount of water used at home over one week.

Day	Water used (litres)
Monday	120
Tuesday	150
Wednesday	130
Thursday	160
Friday	140
Saturday	180
Sunday	170

- Which day used the most water?
- Which day used the least water?
- How much water was used in total over the week?
- What is the average amount used per day?

5 COMPARE AND EXPLAIN

Look at at least two of the graphs or the table. Write a short paragraph comparing the information. What do you notice? What might be some reasons for the patterns?



6 REAL-WORLD THINKING

How could this type of data be useful in your school or community? Give one example and explain how it could help make a positive change.

DATA HELPS US
MAKE BETTER
DECISIONS
♥

Curious minds
brighter futures
Aotearoa
♥

FAIR TEST CHALLENGE

Same test. Only one change!

A fair test helps us find out the answer by changing one thing, keeping everything else the same, and measuring carefully.

Curious
Minds
Brighter
Futures

EXPLORE
INVESTIGATE
DISCOVER
LEARN
MAKE A
DIFFERENCE



THE INVESTIGATION

Which material keeps water the coolest for the longest time?

You will investigate which material is the best insulator by wrapping identical cups with different materials and measuring the temperature of the water over time.

1

QUESTION

Write the investigation question in your own words.

2

PREDICTION



What do you think will happen?
Which material do you think will keep the water the coolest? Why?

3

VARIABLES



a) Variable changed
(What will you test?)

b) Variables kept the same
(What will you keep the same?)

4

METHOD



Write the steps you will follow.
Be clear and numbered.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

EXPERIMENT SETUP

Here are the materials you could test.
You can choose these or your own ideas.



No wrap
(control)

Aluminium
foil

Towel

Bubble
wrap

Cardboard

- Same cup
- Same amount of water
- Same starting temperature
- Same place
- Same time

5

MEASUREMENT



How will you measure the temperature?
What tool will you use?
When will you take the measurements?

6

EXPECTED EVIDENCE



What results do you expect to see?
How will you know which material worked best?

7

RECORD YOUR RESULTS

Use a table like this to record your results.

Material	Start Temp (°C)	10 mins (°C)	20 mins (°C)	30 mins (°C)

8

CONCLUSION



Which material kept the water the coolest? Was your prediction correct?
Why do you think this happened?

9

THINK FURTHER



What could you try next time?
How could you make your test even more fair?

Small questions can lead to big solutions for a brighter Aotearoa!

EXPLORE
LEARN
PROTECT
OUR PLACES

HE AKO • HE TIPU • HE ANAMATA
A BRIGHTER AOTEAROA

CURIOUS
MINDS
BRIGHTER
FUTURES

INVESTIGATION REPORT

Ask • Explore • Discover • Explain

Scientists ask questions, test ideas, collect evidence and share what they find. Use this template to write up your own investigation.

Curiosity
today.
A brighter
tomorrow. ♥

EXPLORE
QUESTION
INVESTIGATE
DISCOVER
SHARE
MAKE A
DIFFERENCE ♥

1 QUESTION

What are you trying to find out?



2 PREDICTION

What do you think will happen? Why do you think that?



3 METHOD

What steps did you take? Write a clear list so someone else could repeat your investigation.



1.
2.
3.
4.
5.
6.

4 RESULTS

What did you measure or observe? You can use a table, a list, drawings or a graph.



What I measured/observed	Result

5 WHAT I NOTICED

What patterns, changes or interesting things did you see? Write in full sentences.



.....

.....

.....

.....

6 CONCLUSION

What does your investigation show? Was your prediction correct? Why do you think this happened?



.....

.....

.....

.....

7 WHAT I WOULD CHANGE NEXT TIME

What could you do differently to get even better results? What would you like to investigate next?



.....

.....

.....

.....

SCIENTIFIC WORD BANK



- observe** – look carefully and notice what happens
- measure** – find the size, amount or number using tools
- evidence** – the information you collect
- result** – what you find out
- conclude** – give your final answer based on the evidence

CURIOSITY
CREATES
CHANGE ♥

Kaitiaki today
for a brighter
tomorrow ♥

EXPLORE
LEARN
RESPECT
PROTECT ♥

THE EXPLORER QUEST

- ☒ 1. MISSION BRIEFING
☐ 2. PLAN THE JOURNEY
☐ 3. MAKE THE CALL
EXPLORE • THINK • SOLVE
A BRIGHTER AOTEAROA ♥

THE EXPLORER QUEST MISSION BRIEFING

QUEST 1 OF 3

Your team are young explorers on a mission to help environmental researchers in the Maunga Hikurangi Reserve. You must travel from Te Rākau Base to the research station near the summit, collect important data along the way, and arrive safely.

Plan carefully, look after the environment, and leave no trace!



Amazing
Places
Brighter
Futures ♥

EXPLORE
RESPECT
THINK
SOLVE
PROTECT
AOTEAROA ♥

Real explorers
care for people,
places and
our future.

1 EXPLORE THE MAP

Look at the map of the Maunga Hikurangi Reserve. The team will start at Te Rākau Base and must reach the Research Station near the summit. There are three possible routes.



2 ROUTE INFORMATION

Here are some key details about each route.

Route	Distance	Elevation gain	Estimated time	Key features
Ridge Route	12 km	1,000 m	6 hours	Steep sections, amazing views, exposed ridges
Forest Route	10 km	800 m	5 hours	Shaded forest, streams, native birds
River Route	14 km	600 m	7 hours	Follows the river, crosses bridges, waterfalls, gentler slopes

3 YOUR SUPPLIES

Each team member must carry the following items.



Backpack
(20 L)



Water
(2 litres)



Food
(3,000 calories)



First aid kit
(1 pack)



Map and
compass
(1 set)

Be prepared and pack wisely!

Carry what you need, but try to keep your pack as light as possible.



4 READ AND RESPOND

Use the map and information above to answer the questions.

- Which route is the shortest? (1 mark)
- Which route has the largest elevation gain? (1 mark)
- Which route would take the least time? (1 mark)
- Name two natural features you might see if you take the River Route.
1. 2. (2 marks)
- What do you think might be challenging about the Ridge Route?
.....
..... (1 mark)

5 PLAN AHEAD

The next page will help you plan the journey in more detail. Before you move on, think about:

- What route are you most interested in?
- What extra information would you like to know?
- How will you make sure your team is prepared and safe?

Good planning
today leads to
amazing
adventures
tomorrow.
♥

PROTECT
OUR PLACES
SO FUTURE
GENERATIONS
CAN EXPLORE
THEM TOO
♥

KIA TIAKI
TE TAIAO
♥

Same Learner • Brighter Future
A Cleaner Aotearoa
♥

THE EXPLORER QUEST

- ☐ 1. PLAN THE ROUTE
- ☐ 2. GATHER THE DATA
- ☒ 3. MAKE THE CALL

EXPLORE • THINK • SOLVE
A BRIGHTER AOTEAROA

THE EXPLORER QUEST PLAN THE JOURNEY

QUEST 2 OF 3

The team is preparing for their expedition to the summit of Maunga Hikurangi. They need to plan the best route, take enough supplies and make sure they can complete the journey safely. Use the information below to help them.

Good planning leads to amazing adventures!

EXPLORE
PLAN
SOLVE
PROTECT
A BRIGHTER AOTEAROA

KŌ TĀTOU
ANAMATA
HE MĀRAMA AKE

1 LOOK AT THE MAP

Here is a map of the area. The team will start at Te Rākau Base and travel to the summit of Maunga Hikurangi.



2 ROUTE INFORMATION

Look at the information for each route.

Route	Distance	Estimated time	Difficulty	What to expect
Ridge Route	12 km	6 hours	Hard	Steep climb, exposed ridges, amazing views
Forest Route	10 km	5 hours	Moderate	Shaded tracks, fewer steep sections
River Route	14 km	7 hours	Moderate	Follows the river, river crossings, beautiful waterfalls

Today's weather forecast



Morning:
Fine, 12°C



Afternoon:
Showers likely,
16°C



Wind:
20–30 km/h
(stronger on the ridge)

Think about
how the weather
might affect
each route.

3 PACK THE SUPPLIES

The team will be away for 1 day (about 3,000 calories per person per day). Use the information to work out how much they need.

Item	Amount per person (per day)	Team (3 people)	Total needed
Food (calories)	3,000	× 3	 calories
Water	2 litres	× 3	 litres
Fuel (for cooker)	100 grams	× 3	 grams
First aid items	1 pack	× 3	 packs

The team also wants to take a 20% extra supply of food and water in case they are delayed. How much food and water will they take in total?

Food: calories Water: litres

4 COMPARE THE ROUTES

Use the information to answer the questions.

- Which route is the shortest?
- Which route will take the least time?
- Which route might be the most challenging? Why?
- If the team leaves at 8:00 am and takes the Forest Route (5 hours), what time will they reach the summit?
Answer:
- The team can walk at an average speed of 2.5 km/h. How long will the River Route (14 km) take them?
Working:
Answer: hours

Consider
distance, time,
weather and
safety when
comparing
your options.

There can be
more than one
right answer!
best choice for
your team.

5 CHOOSE A ROUTE

Which route should the team take? Write a short paragraph to explain your choice. Use evidence from the map, tables and weather forecast.

PLAN WELL
GO FURTHER
PROTECT
OUR PLACES

Good
explorers make
informed choices!

SAME LEARNER • BRIGHTER FUTURE
A CLEANER AOTEAROA

THE EXPLORER QUEST

- ☐ 1. PLAN THE ROUTE
- ☐ 2. GATHER THE DATA
- ☒ 3. MAKE THE CALL

EXPLORE • THINK • SOLVE
A BRIGHTER AOTEAROA

THE EXPLORER QUEST

MAKE THE CALL

QUEST 3 OF 3

Just as the team is about to set off on the final leg of their journey, the weather suddenly changes! Use the information below to help your team make the best decision. Analyse the evidence, solve the problems and explain your reasoning.

Looks like the weather's turned!
What should we do?

REAL CHALLENGES
REAL THINKING
BRIGHTER FUTURES

KŌ TĀTOU
ANAMATA
HE MĀRAMA AKE

1 WHAT'S HAPPENING?

Read the situation and look at the information below.

The team is one day away from reaching the summit of Maunga Hikurangi. A storm is moving in faster than expected. They must decide whether to:

- A** Continue to the summit tomorrow (riskier but faster)
- B** Take a lower, safer route (takes longer)
- C** Stay at the hut for another day (wait for the storm to pass)

Good decisions use evidence, logic and care for the team and environment.

WEATHER FORECAST

Time	Conditions	Temperature	Wind
Today (afternoon)		8°C	40 km/h
Tonight		6°C	60 km/h
Tomorrow		4°C	80 km/h
Day after tomorrow		7°C	30 km/h

ROUTE INFORMATION

Summit Route	Lower Route
Distance: 12 km	Distance: 18 km
Time: 6 hours	Time: 8 hours
Elevation gain: 900 m	Elevation gain: 400 m
Difficulty: Hard	Difficulty: Moderate
Exposed ridges in high winds	More shelter and safer in bad weather

2 SOLVE THE PROBLEMS

Use the information above to answer the questions. Show your working.

- a) If the team walks the lower route at an average speed of 2.5 km/h, how many hours will it take?

Working:
Answer: hours (2 marks)

- b) The temperature is 8°C now and will be 4°C tomorrow. How many degrees will it drop?

Working:
Answer: °C (1 mark)

- c) The team has 3 days of food. If they stay at the hut for one extra day, they will need to use 1/3 of their food supplies. What fraction of the food will be left?

Working:
Answer: (1 mark)

- d) The wind is expected to increase from 40 km/h to 80 km/h. By how many km/h will the wind speed increase?

Working:
Answer: km/h (1 mark)

3 ANALYSE THE EVIDENCE

Look at the information and answer the questions.

- a) What risks might the team face if they continue to the summit tomorrow?
..... (1 mark)
- b) What are the benefits of taking the lower route?
..... (1 mark)
- c) What are the advantages and disadvantages of staying at the hut for another day?
..... (2 marks)

4 MAKE YOUR RECOMMENDATION

Write a short paragraph (3–4 sentences) explaining what the team should do. Use evidence from the weather forecast, route information and your answers above.

.....
.....
.....
.....
..... (3 marks)

5 MISSION DECISION

Complete the sentence below to make your final decision.

MISSION DECISION: BECAUSE

There's no single right answer. The best decision is the one you can justify with good reasons!

PEOPLE
PLACES
IDEAS
BRIGHTER
AOTEAROA

Explore today
for a brighter tomorrow.

HE AKO
HE TIPU
HE ANAMATA

REFLECT
CELEBRATE
BE PROUD
SET NEW GOALS
A BRIGHTER AOTEAROA ♥

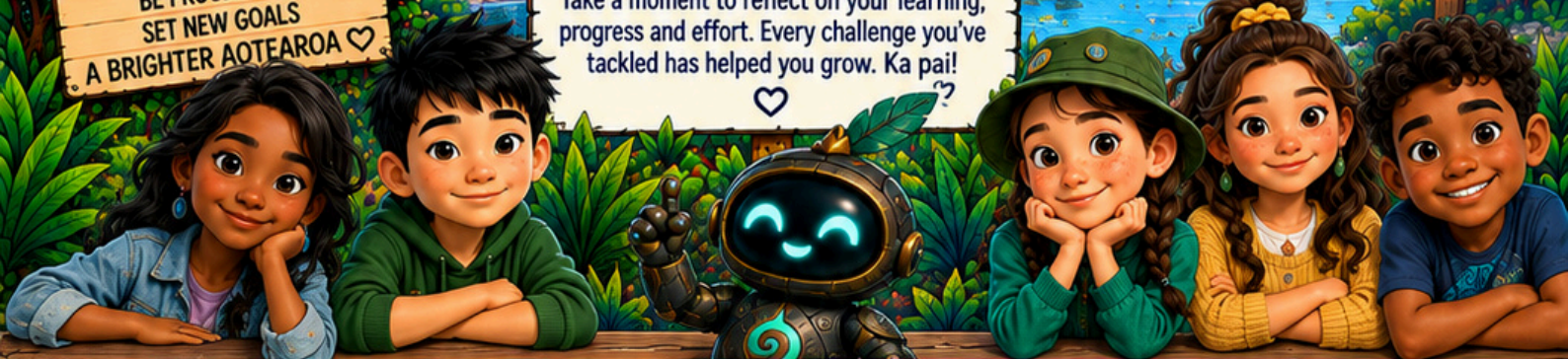
TERM 1: MISSION COMPLETE

Look back. Be proud. Move forward.

You've completed Term 1!
Take a moment to reflect on your learning,
progress and effort. Every challenge you've
tackled has helped you grow. Ka pai!

Same
Learner
Brighter
Future ♥

PLAY
LEARN
GROW
BELONG



1 SOMETHING I UNDERSTAND BETTER NOW...

What's something you found tricky before, but you
understand better now?



2 A CHALLENGE I OVERCAME...

What was challenging for you this term and how did you get
through it?



3 A STRATEGY THAT HELPED ME...

What strategy, tool or habit helped you with your learning?



4 SOMETHING I WANT TO PRACTISE...

What is one thing you want to keep working on next term?



5 TERM 1 MINI-CHALLENGE

Give it a go! Use what you've learned this term.
You can do it! ♥



1 READING

Read the short text and answer
the question.

Kea are curious, intelligent
birds. They live in the
mountains of Aotearoa and
are known for their problem-
solving skills. Kea play an
important role in our
ecosystem.

Why are kea important?
Give one reason from
the text.

(1 mark)

2 MATHS

A pack of 6 notebooks costs
\$15.00. What is the cost of
one notebook?

- A \$2.00
- B \$2.50
- C \$3.00
- D \$3.50

(1 mark)

If you have \$20.00 and
spend \$7.80, how much
money will you have left?

\$

(1 mark)

3 SCIENCE

Which of these is a
renewable source
of energy?

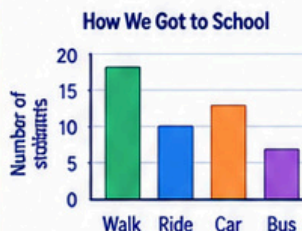
- A Coal
- B Natural gas
- C Wind
- D Petrol

(1 mark)



4 DATA

The graph shows the number
of students who walked, rode,
were driven or took the bus
to school one day.



How many more students
walked than took the bus?

..... students

(1 mark)

5 THINKING

Imagine our school is
planning a rubbish-free
lunch day.

Give one idea that could
help reduce rubbish at
school. Explain why it
would be a good idea.

(2 marks)



SMALL
STEPS
BIG
PROGRESS
♥

HE AKO • HE TIPU • HE ANAMATA
LEARN • GROW • BRIGHTER FUTURES
♥

YOU
GOT THIS
♥

- MONEY, MARKETS & DECISIONS
- ☐ USE NZ DOLLARS AND CENTS
 - ☐ CALCULATE TOTALS
 - ☐ WORK OUT CHANGE
 - ☐ SOLVE MULTI-STEP PROBLEMS
 - ☐ USE DECIMALS
 - ☐ THINK LIKE A SMART SHOPPER
 - ☐ A BRIGHTER AOTEAROA ♥

MONEY MISSION

Real maths for real life.

We use money every day to make choices.
Practise working with dollars and cents,
compare prices and solve problems.
Be a smart shopper!



GOOD
CHOICES
BRIGHTER
TOMORROWS
♥

1 SHOP PRICES

Here are some items from Koa Mart. Look at the prices carefully.



Notebook

NZ\$2.50



Water bottle

NZ\$12.00



Cap

NZ\$28.00



Chips

NZ\$3.50



Lunchbox

NZ\$14.00



Football

NZ\$25.00



Headphones

NZ\$45.00



Māori
Graphic Novel

NZ\$22.00



Hoodie

NZ\$65.00

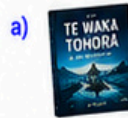


Plant
(small)

NZ\$8.00

3 WORK OUT THE CHANGE

You pay with the amount shown. How much change will you get?



a)

Cost: \$22.00

You pay: \$50.00

Change: \$ _____



b)

Cost: \$45.00

You pay: \$100.00

Change: \$ _____



c)

Cost: \$14.00

You pay: \$20.00

Change: \$ _____



d)

Cost: \$8.00

You pay: \$10.00

Change: \$ _____

Always check
your change so
you know you've
got the right
amount!



5 SHOPPING CHALLENGE

You have \$60.00 to spend. Choose at least three items from Koa Mart.
Stay within budget!

Item	Price
☐ _____	\$ _____
☐ _____	\$ _____
☐ _____	\$ _____
☐ _____	\$ _____

Total cost: \$ _____

Money left: \$ _____



Plan your
purchases.
You might not
be able to buy
everything!
That's part of
real life.

6 REAL-LIFE PROBLEM

It's Coast's birthday and they have \$50.00 to spend.
They want to buy a new game (\$20.00), a cap and a snack.

a) How much will it cost altogether?

\$ _____

b) Do they have enough money? _____

c) If not, how much more do they need?
If yes, how much will they have left?

\$ _____

Think about
what you really
want and what
you can afford.
Make smart
choices!
♥



BETTER
PEOPLE
BRIGHTER
AOTEAROA
♥

EVERYDAY MATHS
REAL SKILLS
REAL OPPORTUNITIES
♥

- MONEY, MARKETS & DECISIONS
- ☐ ANALYSE ADVERTISING
 - ☐ IDENTIFY PERSUASIVE TECHNIQUES
 - ☐ DISTINGUISH FACT FROM OPINION
 - ☐ THINK CRITICALLY
 - ☐ MAKE INFORMED CHOICES
 - ☐ A BRIGHTER AOTEAROA ♥

ADVERTISING DETECTIVE

Look closer. Think deeper. Be a smart consumer.

Advertisements try to get our attention and persuade us to buy, use or believe something. Being an advertising detective helps us make informed choices and see the bigger picture!



QUESTION
EXPLORE
ANALYSE
THINK
MAKE SMART
CHOICES
BRIGHTER
AOTEAROA ♥

DON'T JUST
SEE IT.
DECODE IT.
♥



1 LOOK AT THE ADVERTISEMENT

Read the advertisement below. Then complete the questions on this page.

EXPLORE MORE



**THE KŌURA X1
ALL-TERRAIN BACKPACK**

- TOUGH GEAR FOR REAL ADVENTURES
- WATERPROOF & DURABLE
- MADE WITH RECYCLED MATERIALS
- LIGHTWEIGHT & COMFORTABLE
- TRUSTED BY THOUSANDS OF KIWIS EXPLORERS

ONLY \$99

ADVENTURE STARTS HERE.



More People
Brighter Places ♥

2 WHO IS THE AUDIENCE?

Who do you think this advertisement is aimed at? Tick the best options.

- | | |
|--|---------------------------------------|
| ☐ Young children | ☐ Students |
| ☐ Teenagers | ☐ Families |
| ☐ Adults | ☐ Travellers |
| ☐ Outdoor/exercise lovers | ☐ Other: |

3 WHAT IS THE PURPOSE?

What is the main purpose of this advertisement? Tick one.

- ☐ To inform
- ☐ To persuade people to buy the backpack
- ☐ To entertain
- ☐ To raise awareness about the environment
- ☐ To compare different backpacks

Ads often try to persuade us by using emotions, not just facts!



4 PERSUASIVE WORDS

Find and write down at least four persuasive words or phrases from the advertisement. Explain how each one might influence the reader.

Persuasive word or phrase	How it might influence the reader
1.	
2.	
3.	
4.	

5 FACT OR OPINION?

Decide if each statement from the advertisement is a fact or an opinion. Tick the correct column.

Statement	Fact	Opinion
The backpack costs \$99.	☐	☐
It is waterproof and durable.	☐	☐
It is made with recycled materials.	☐	☐
It is lightweight and comfortable.	☐	☐
It is trusted by thousands of Kiwi explorers.	☐	☐
It will help you explore more.	☐	☐
It is the best backpack you can buy.	☐	☐
Adventure starts here.	☐	☐

6 WHAT'S MISSING?

What important information has the advertiser not told us? Write at least three things you would like to know before buying this backpack.

-
-
-

Being a smart consumer means asking questions and thinking critically!



7 YOUR VERDICT

Would you be likely to buy this backpack? Why or why not? Use evidence from the advertisement to support your answer.

.....

.....

.....



KIA WHAIWHAI
KIA ANGITU ♥

CURIOUS MINDS
BRIGHTER FUTURES ♥

- ☐ PLAN A BUDGET
- ☐ WORK WITH REAL-LIFE SITUATIONS
- ☐ MAKE GOOD CHOICES
- ☐ EXPLAIN YOUR REASONS
- ☐ THINK ABOUT THE FUTURE
- ☐ BUILD A BRIGHTER AOTEAROA

BUILD A BUDGET

Plan today for a brighter tomorrow.

A budget helps us make the most of our money. It helps us pay for the things we need, choose the things we want, and save for our goals. Small choices add up to big opportunities!



PLAN

CALCULATE

CHOOSE

JUSTIFY

SAVE

GROW

SMART CHOICES
BRIGHTER FUTURES

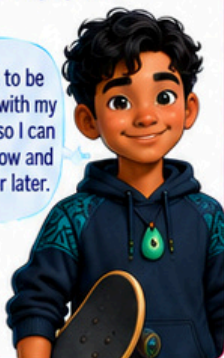
1 MEET COAST

Coast is a Year 6 student who has some money to manage this week. Here is their income and the things they need and want to pay for.

INCOME (money coming in)

Pocket money	\$20.00
Birthday money	\$50.00
Helping at home (extra jobs)	\$15.00
Total income	\$ _____

I want to be careful with my money so I can enjoy now and save for later.



2 SORT THE EXPENSES

Look at the list below. Tick whether each item is a need or a want.

Item	Cost	Need	Want
Lunch at school	\$5.00	☐	☐
Bus fare	\$4.00	☐	☐
New hoodie	\$60.00	☐	☐
Movie with friends	\$18.00	☐	☐
School stationery	\$12.00	☐	☐
Mobile top-up	\$10.00	☐	☐
Sports registration	\$30.00	☐	☐
Savings for a new game	\$20.00	☐	☐
A treat from the café	\$6.00	☐	☐

3 CREATE A WEEKLY BUDGET

Use the items you need and want to complete the budget. You can choose different items if you like.

Category	Item(s)	Amount
Needs	_____	\$ _____
	_____	\$ _____
Wants	_____	\$ _____
	_____	\$ _____
Savings	_____	\$ _____
Total spent		\$ _____

4 CALCULATE THE REMAINDER

Use your total income and total spent to work out how much money Coast will have left.

Total income	\$ _____
Total spent	\$ _____
Money remaining	\$ _____

IT'S OK TO CHOOSE SOME WANTS, BUT DON'T FORGET YOUR GOALS!



5 MAKE A DECISION

Coast really wants the new hoodie, but it will cost \$60. They don't have enough money this week. What could they do? Write your suggestion and explain why it is a good choice.

What's the best choice in the long term?



6 THINK AHEAD

Coast wants to save for a new game that costs \$80. If they can save \$20 each week, how many weeks will it take?

Working out:

Answer: _____ weeks

SAVING TODAY
CREATES
MORE
TOMORROWS

Small steps lead to big dreams!

7 REFLECT

Answer the questions below.

- What did you learn about budgeting from this activity?

- What is one thing you could do with your own money this week?

- How can making a budget help you reach your goals in the future?

KŌ TĀTOU
ANAMATA
HE MĀRAMA AKE

PEOPLE • IDEAS • OPPORTUNITIES
BRIGHTER AOTEAROA

- ☐ EXPLORE REAL-LIFE SITUATIONS
- ☐ THINK ABOUT CONSEQUENCES
- ☐ MAKE GOOD CHOICES
- ☐ SHARE YOUR IDEAS
- ☐ BUILD A BRIGHTER AOTEAROA ♥

WANTS, NEEDS & CHOICES

Think it through. Choose what matters.

We all make choices about how to use money, time and resources. Needs help us survive and stay healthy. Wants are things we would like but can live without. Making thoughtful choices can help us, our whānau and our communities thrive.



LOCAL
SUPPORTS
LOCAL

KIND
THOUGHTFUL
BRAVE CHOICES
STRONGER
PEOPLE
BRIGHTER
AOTEAROA
♥

GOOD
CHOICES
CREATE
BRIGHTER
TOMORROWS
♥

1 WANTS OR NEEDS?

Look at the items below. Tick whether each one is a need or a want.

Item	Need	Want
Healthy food	☐	☐
A warm jacket	☐	☐
Latest smartphone	☐	☐
School stationery	☐	☐
A new game	☐	☐
A place to live	☐	☐
Concert tickets	☐	☐
Medical care	☐	☐
A bike	☐	☐
Clean drinking water	☐	☐

Needs
help us
survive.

Wants
make life
more fun.

Both are
part of life,
but we need
to make
choices!



2 REAL-LIFE SCENARIO

Coast (Year 6) has \$60 saved from helping their whānau with some jobs and birthday money. They are thinking about how to spend it.



I've got \$60!
There are so many
things I could buy.
What should I do?

Here are some options:

New football	\$45
Headphones	\$50
A new hoodie	\$70
Books	\$25
Save for a trip	\$60
Give a koha to a cause	\$20
Art supplies	\$30
Movie ticket	\$18

There can
be more
than one
good choice.
It's about
what matters
to you and
your goals.



a) Which two or three options are you most interested in? Why?

b) What will you do with the \$60? Explain your choice.

3 CONSEQUENCES

Think about the possible consequences of each choice. Complete the table.

Choice	Positive consequences	Possible challenges
Buy the football	e.g. keeps me active, fun with friends	e.g. not much money left for other things
Buy the headphones		
Save the money		
Give a koha		

4 GIVE ADVICE

A friend wants to spend all of their money on a new game, but they also need new school shoes. Write some advice for your friend. Use reasons to support your ideas.



What
would you
tell a friend
in this
situation?

Dear friend,

From,

5 YOUR FINANCIAL GOALS

Think about something you would like to save for (big or small).

My goal is to save for:

How much will it cost? \$

How could you save? (e.g. part of pocket money, birthday money, helping at home, do extra jobs)

How will it feel when you reach your goal?

SMALL
STEPS
ADD UP
TO BIG
THINGS
♥

6 REFLECT

Answer the questions below.

a) What have you learned about wants, needs and making choices with money?

b) How can making thoughtful choices help you, your whānau or your community?

c) What is one thing you will keep in mind next time you have a choice to make?

Good
choices
today can
lead to a
brighter
tomorrow!



KŌ TĀTOU
ANAMATA
HE MĀRAMA AKE
♥

PEOPLE
PLACES
IDEAS
BRIGHTER
AOTEAROA
♥

- ☐ PRACTISE FRACTIONS
- ☐ SOLVE PROBLEMS
- ☐ THINK CRITICALLY
- ☐ SHOW YOUR WORKING
- ☐ BUILD CONFIDENCE
- ☐ A BRIGHTER AOTEAROA ♥

FRACTION WORKSHOP

Parts, wholes and bigger possibilities!

Fractions help us share, compare and solve real problems. Use the diagrams, show your working and give your answers in the simplest form where possible.

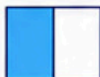
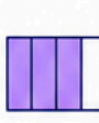
You've got this! ♥

PRACTISE
EXPLORE
SOLVE
IMPROVE
GROW
TOGETHER
♥

SMALL
STEPS
BIGGER
FUTURES

1 EQUIVALENT FRACTIONS

Complete the equivalent fractions. Use the diagrams to help.

- a)  $\frac{1}{2} = \frac{\quad}{14}$ b)  $\frac{2}{3} = \frac{\quad}{6}$
- c)  $\frac{3}{4} = \frac{\quad}{8}$ d)  $\frac{4}{5} = \frac{\quad}{10}$

2 ADD AND SUBTRACT

Solve the fraction problems. Give your answers in the simplest form where possible.

- a) $\frac{2}{5} + \frac{1}{5} = \frac{\quad}{\quad}$ b) $\frac{3}{8} + \frac{3}{8} = \frac{\quad}{\quad}$
- c) $\frac{7}{9} - \frac{2}{9} = \frac{\quad}{\quad}$ d) $\frac{5}{6} - \frac{1}{6} = \frac{\quad}{\quad}$
- e) $\frac{3}{4} + \frac{1}{8} = \frac{\quad}{\quad}$ f) $\frac{5}{8} - \frac{1}{4} = \frac{\quad}{\quad}$

3 FRACTIONS OF A QUANTITY

Find the fraction of each quantity.

- a) $\frac{1}{2}$ of 24 = $\frac{\quad}{\quad}$
- b) $\frac{1}{3}$ of 21 = $\frac{\quad}{\quad}$
- c) $\frac{3}{4}$ of 36 = $\frac{\quad}{\quad}$
- d) $\frac{2}{5}$ of 40 = $\frac{\quad}{\quad}$
- e) $\frac{5}{8}$ of 32 = $\frac{\quad}{\quad}$ f) $\frac{4}{7}$ of 28 = $\frac{\quad}{\quad}$

FRACTIONS
ARE A WAY
TO SEE
MORE
POSSIBILITIES
♥

4 WORD PROBLEMS

Read each problem. Show your working and write your answer.

- a) At a school event, $\frac{3}{4}$ of the 32 cupcakes were sold.
How many cupcakes were sold?

Answer: _____ cupcakes

- b) A tank is $\frac{5}{8}$ full. It holds 56 litres when full.
How many litres of water are in the tank?

Answer: _____ litres

- c) Tane read $\frac{4}{6}$ of a book that has 180 pages.
How many pages has he read?

Answer: _____ pages

- d) Mere has $\frac{3}{5}$ of \$50. How much money does she have?

Answer: \$ _____

5 COMPARE FRACTIONS

Use $>$, $<$ or $=$ to compare the fractions.

- a) $\frac{2}{3}$ ○ $\frac{3}{4}$ c) $\frac{7}{2}$ ○ $\frac{3}{8}$
- b) $\frac{5}{8}$ ○ $\frac{3}{5}$ d) $\frac{3}{6}$ ○ $\frac{4}{6}$
- e) $\frac{1}{10}$ ○ $\frac{5}{6}$ f) $\frac{9}{12}$ ○ $\frac{3}{4}$

You can use
fraction walls,
number lines
or diagrams
to help!



6 MIXED CHALLENGE

Solve these problems. Show your working.

- a) What is $\frac{3}{4} + \frac{1}{6}$? b) What is $\frac{5}{6} - \frac{1}{3}$?
- c) A recipe needs $\frac{2}{3}$ of a cup of flour. You have $1\frac{1}{3}$ cups.
How much flour will be left?
- d) A length of ribbon is $\frac{7}{8}$ of a metre. You cut off $\frac{3}{8}$ of a metre.
How much ribbon is left?

SHOW
YOUR
WORKING
IT HELPS
YOU THINK
♥

7 REFLECT

- a) What strategy helps you the most with fractions?

- b) Where could you use fractions in real life?

- c) What is one goal you have for your next maths challenge?

Mistakes
help us
learn and
grow!
♥

MĀ TE MĀTAURANGA
KA HANGĀ HE AHUATANGA
BRIGHTER FUTURES TOGETHER
♥

PRACTISE
PROBLEM SOLVE
PERSIST
PROGRESS
♥

- ☐ PLAN YOUR WRITING
- ☐ USE SEQUENCING WORDS
- ☐ EXPLAIN THE PROCESS
- ☐ USE CAUSAL LANGUAGE
- ☐ CHECK FOR CLARITY
- ☐ SOLVE REAL-LIFE PROBLEMS
- ☐ A BRIGHTER AOTEAROA ♥

EXPLAIN IT CLEARLY

Share the steps. Make it make sense.

Explanatory writing helps people understand how something works or how to do something.

Use clear steps, join your ideas with causal language, and write for your reader.

Good explanations are easy to follow!



PLAN
WRITE
EXPLAIN
IMPROVE
SHARE
REAL-WORLD
SKILLS
A BRIGHTER
AOTEAROA ♥

CLEAR
IDEAS
HELP
BRIGHTER
FUTURES ♥



1 CHOOSE A TOPIC

Choose one of the topics below or your own idea. You will write an explanation text.

- ☐ How to make a simple, healthy snack
- ☐ How to plant and grow a seed
- ☐ How to look after a pet
- ☐ How to set up a tent for camping
- ☐ How to recycle at home or school
- ☐ How to make a paper airplane
- ☐ How to keep yourself safe online
- ☐ How to play a game (e.g. rippa, netball, chess)
- ☐ Your own idea:



GOOD
EXPLANATIONS
HELP
PEOPLE
LEARN ♥

2 PLAN IT

Complete your plan before you start writing.

Title:

Who is it for?

(e.g. younger students, friends, whānau)

What is the goal?

What will the reader be able to do after reading your explanation?

3 LANGUAGE BANK

Use these words and phrases in your writing.

because	(to give a reason)
therefore	(to show a result)
first	(to show the beginning)
next	(to show the next step)
then	(to show what happens after)
as a result	(to show the effect)
finally	(to show the last step)

Other useful words and phrases:

for example	in order to	make sure
you will need	this means	to begin with
an important step	after that	so that

4 WRITE YOUR EXPLANATION

Use your plan to write your explanation. Include an introduction, a clear series of steps, causal language and a conclusion.

Title

Introduction

Steps (in order)

1.
2.
3.
4.
5.

Conclusion

5 CHECK YOUR WORK

Use the checklist to make sure your explanation is clear.

- ☐ I have a clear title.
- ☐ I have an introduction that explains what the text is about.
- ☐ My steps are in the correct order.
- ☐ I have used at least three words from the language bank.
- ☐ My writing is clear and easy to follow.
- ☐ I have a conclusion.
- ☐ I have checked my spelling and punctuation.



6 IMPROVE IT

Read your work again. Can you make it even clearer? Tick the ideas you could improve.

- ☐ Add more detail to a step.
- ☐ Use better causal language (e.g. because, therefore).
- ☐ Include a helpful diagram or labelled drawing.
- ☐ Make your instructions shorter and clearer.
- ☐ Check if a younger reader would understand.
- ☐ Add a tip or warning.



SMALL
CHANGES
MAKE A
BIG
DIFFERENCE ♥

7 SHARE OR ILLUSTRATE

You can:

- Add a labelled diagram or drawing.
- Share your explanation with a partner and see if they can follow it.
- Try out your instructions with someone and get feedback.
- Make a final, neat copy.



Clear
instructions
help people
and build
stronger
communities! ♥

REAL-WORLD THINKING

- a) How could clear instructions help in your home, school or community?
.....
- b) What might happen if instructions are confusing or missing steps?
.....
- c) Where else do you see explanation texts in real life?
.....

MONEY, MARKETS & DECISIONS

- ☐ EXPLORE HOW MARKETS WORK
- ☐ UNDERSTAND TRADE & EXCHANGE
- ☐ IDENTIFY GOODS & SERVICES
- ☐ THINK ABOUT PRODUCERS AND CONSUMERS
- ☐ SOLVE REAL-LIFE PROBLEMS
- ☐ A BRIGHTER AOTEAROA ♥

TRADE & EXCHANGE

Different people. Different needs.
Stronger communities.

People trade because we all need different things.
Some people grow food, some make products
and some provide services. When we exchange
goods or services, everyone benefits!



LOCAL PEOPLE
LOCAL MARKETS
STRONGER COMMUNITIES
A BRIGHTER AOTEAROA ♥

SUPPORT LOCAL
SHOP LOCAL
KŌ TĀTOU
KŌ AKE ♥

1 GOODS OR SERVICES?

Look at the items below. Tick whether each one is a good or a service.



Apples

☐ Good ☐ Service



Haircut

☐ Good ☐ Service



Shoes

☐ Good ☐ Service



Bus ride

☐ Good ☐ Service



Book

☐ Good ☐ Service



Teaching

☐ Good ☐ Service



Bread

☐ Good ☐ Service

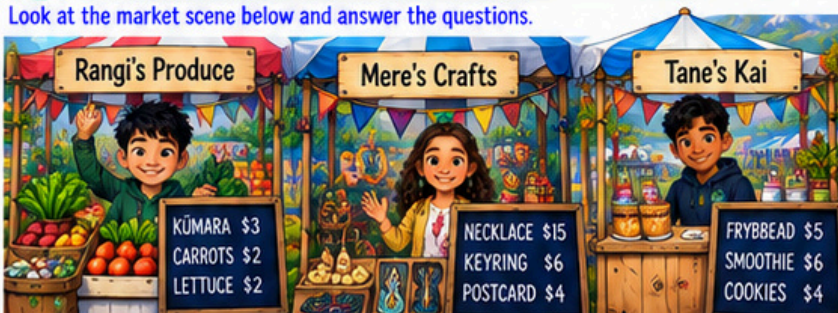


Car repair

☐ Good ☐ Service

3 AT THE COMMUNITY MARKET

Look at the market scene below and answer the questions.



- a) What goods are being sold at the market?
- b) What services might also be at a community market? (Think of ideas that aren't shown.)
- c) Choose one stall. Who is the producer and who might be the consumers?
- d) How do the different stalls depend on each other and the people in the community?

5 REAL-WORLD THINKING

- a) What might happen if people in a community stopped trading?
How would it affect people's lives?
- b) How can fair trade and buying local help create a stronger Aotearoa?
- c) Think of a good or service you could provide in your community.
How would it help others?



2 PRODUCER OR CONSUMER?

Decide if each person is mainly a producer (makes or provides something)
or a consumer (buys and uses something).

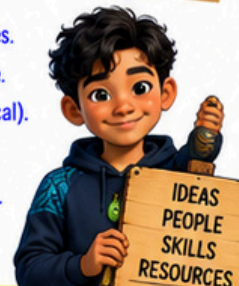
Person	Producer	Consumer
A farmer growing vegetables	☐	☐
A student buying a notebook	☐	☐
A baker making bread	☐	☐
A tourist buying a souvenir	☐	☐
A carpenter building a table	☐	☐
A family buying groceries	☐	☐
A designer making clothing	☐	☐
A customer at a café	☐	☐

4 WHY DO PEOPLE TRADE?

People trade for many reasons. Tick the reasons you think are important.
You can choose more than one.

- ☐ To get things we don't have.
- ☐ To share skills and knowledge.
- ☐ To make life easier.
- ☐ To support our local community.
- ☐ To earn money.
- ☐ To get better quality or different choices.
- ☐ To build relationships with other people.
- ☐ To help the environment (e.g. buying local).
- ☐ To keep culture and traditions alive.
- ☐ Other:

TRADE
BRINGS
PEOPLE
TOGETHER ♥



6 CHALLENGE

Plan a small market event for your school or community.
List at least three different stalls (goods or services).
Explain why each one would be useful and who your target
customers might be.

Stall idea (good or service)	Why it's useful	Who might buy it?

STRONGER
TOGETHER
BRIGHTER
TOMORROW ♥

LOCAL IDEAS
BRIGHTER FUTURES ♥

MARKETPLACE MATHS

Real numbers. Real choices. Real life.

Use the market stalls below to answer the questions. Show your working where needed. Read carefully, think logically, and don't forget to check your answers! ♥

SUPPORT
LOCAL
PEOPLE
BRIGHTER
AOTEAROA
♥

1 MARKET STALLS

Look at the market stalls below. Use the prices to answer Questions 2–6.



Kūmara	\$2.50 kg
Carrots	\$1.80 kg
Tomatoes	\$3.00 kg
Lettuce	\$2.00 each



Muffins	\$3.00 each
Cookies (pack of 4)	\$5.00
Slice	\$4.00 each
Scones (pack of 3)	\$6.00



Keyring	\$4.00 each
Bracelet	\$6.00 each
Necklace	\$8.00 each
Postcard (pack of 5)	\$10.00



Reusable bottle	\$12.00
Shopping bag	\$5.00
Beeswax wrap (pack of 3)	\$9.00
Seed pack	\$4.00



Honey (250 g)	\$7.00
Honey (500 g)	\$12.00
Honey (1 kg)	\$20.00
Lip balm	\$4.00

2 CALCULATE TOTALS

Find the total cost for each purchase.

- 3 kg of kūmara \$
- 2 muffins and 1 slice \$
- 4 bracelets \$
- 1 reusable bottle and 2 seed packs \$
- 1 kg of honey and 1 lip balm \$

3 WORK OUT CHANGE

You pay with the amount shown. How much change will you get?

- 1 necklace (\$8.00). You pay with \$20.00. \$
- 2 packets of cookies (\$5.00 each). You pay with \$20.00. \$
- 1 reusable bottle (\$12.00). You pay with \$50.00. \$

4 MULTIPLY AND DIVIDE

a) How much will 6 tomatoes cost? \$

b) If a pack of 4 cookies costs \$5.00, what is the cost of 12 cookies? \$

c) A 1 kg jar of honey costs \$20.00. What is the cost per 100 g? \$

d) You have \$36.00 to spend on seed packs (\$4.00 each). How many can you buy?
..... packs

5 COMPARE AND CHOOSE

Use the prices to answer the questions.

- Which is better value: 3 scones for \$6.00 or 1 muffin for \$3.00? Explain your reasoning.
.....
- You have \$15.00. Which two different items could you buy and what would be the total cost?
.....
- You want to buy a gift for a friend. Compare the keyring, bracelet and necklace. Which would you choose and why?
.....

6 MARKET ORDER CHALLENGE

A school group is preparing for a community event. Use the stall prices to work out the total cost.

- 5 kg of kūmara
- 3 packets of 4 cookies
- 2 reusable bottles
- 4 seed packs
- 1 kg of honey

What is the total cost of the order? \$

If they have \$150.00 to spend, how much money will be left over? \$

Show your working here:

(you can use the space below or a separate page if needed)

7 REAL-WORLD THINKING

- What else might the stallholders need to think about when setting their prices?
- How does shopping at local markets help your community?
- If you ran a market stall, what would you sell and why?

GOOD MATHS
HELPS STRONGER
COMMUNITIES
♥

LOCAL
IDEAS
BRIGHTER
FUTURES
♥

HE ITI TE KAHIKATEA
KA TŪ TE RĀKAU NUI
♥

- ☒ USE TECHNOLOGY
- ☒ SOLVE REAL PROBLEMS
- ☒ THINK CREATIVELY
- ☒ PLAN A DESIGN
- ☒ COMMUNICATE YOUR IDEAS
- ☒ A BRIGHTER AOTEAROA ♥

DESIGN SOMETHING BETTER

Real problems. Creative solutions.

Designers look for problems and create solutions that make life better. Use your creativity, problem-solving and planning skills to design something new or improved.

Small changes can make a big difference! ♥

PROBLEM
IDEAS
INNOVATION
BETTER
PEOPLE
BRIGHTER
AOTEAROA ♥

GOOD
IDEAS
STRONGER
COMMUNITIES
♥

1 THE PROBLEM

Read the scenario below. Think about who it affects and what the main problem is.

At our local community market, people often use single-use plastic bags for their groceries. The bags rip easily, end up in landfill, and aren't good for the environment. The stallholders want a better option for their customers.



a) Who is affected by this problem?

b) What is the main need?

c) Why is it important to solve this problem?

2 DESIGN REQUIREMENTS

List at least 4 important requirements your solution should meet. Think about what it needs to do, who it needs to work for and any constraints (e.g. cost, materials, size).

My design must:

1.
2.
3.
4.
5.

- ☒ THINK USER NEED
- ☒ MATERIALS
- ☒ COST
- ☒ ENVIRONMENT
- ☒ LOOKS
- ☒ PRACTICAL

3 BRAINSTORM SOLUTIONS

Come up with three different ways you could solve this problem. They can be real or imaginative ideas!



Idea 1



Idea 2



Idea 3

Quick sketch:

Quick sketch:

Quick sketch:

4 MY PREFERRED DESIGN

Choose the best idea from your brainstorm and draw a detailed labeled diagram of your design. Include a name for your product.

DRAW LABEL
BE CREATIVE
MAKE IT REAL
♥

Name of my design:

5 EXPLAIN YOUR DESIGN

Explain how your design works and how it meets the design requirements. Why is it better than the current option?

Tell us why your design is a great solution!
♥

6 REAL-WORLD THINKING

a) How could your design make a positive difference in your community?

b) What challenges might you face when making it?

c) What could you do next to turn your idea into a real product?

KŌ TĀTOU
ANAMATA
HE MĀRAMA AKE
♥

IDEAS TODAY
A BRIGHTER TOMORROW ♥

PEOPLE
PLACES
IDEAS
BRIGHTER
AOTEAROA
♥

- ☒ USE MEASUREMENT
- ☒ SOLVE REAL PROBLEMS
- ☒ THINK CREATIVELY
- ☒ PLAN A SPACE
- ☒ WORK WITH SCALE
- ☒ A BRIGHTER AOTEAROA

MEASURE IT

Plan it. Measure it. Make it real.

You are designing a market stall for a school or community market. You will use your knowledge of length, perimeter, area and scale to plan your space.

Measure carefully, show your working, and think like a designer! ❤️

PEOPLE
PLACES
IDEAS
STRONGER
COMMUNITIES

MEASURE
PLAN
CREATE
BELONG

1 LENGTH

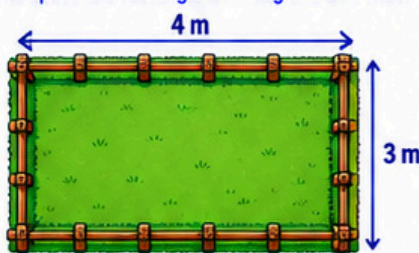
Look at the market stall below. Use the measurements to answer the questions.



- How long is the front of the stall? _____ m
- How deep is the stall? _____ m
- How tall is the stall? _____ m
- What is the total length around the top (front + back + sides)? _____ m

2 PERIMETER

You are adding a fence around your stall space. The space is a rectangle 4 m long and 3 m wide.



- What is the perimeter of the space?

- If fencing costs \$6 per metre, how much will it cost to fence the space?
\$ _____

3 AREA

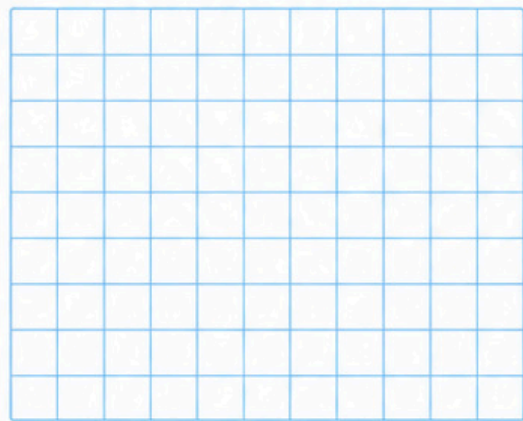
Each square on the grid represents 1 m². Use the grid to find the area of the stall space.



- What is the area of the space? _____ m²
- If each table takes up 1 m², how many tables could fit in this space? _____ tables

4 DESIGN YOUR OWN STALL

Use the grid to design your own market stall or community space. Each square represents 1 m². Include tables, display areas, seating or anything else you need.



My stall will be:

- ☐ Rectangular
- ☐ Square
- ☐ Other: _____

Dimensions:

Length: _____ m

Width: _____ m

Area: _____ m²

Perimeter: _____ m

5 SCALE

This is a small scale drawing of a market stall. The scale is 1 square = 0.5 m.



Use the scale to find the real size.

- What is the real length of the stall? _____ m
- What is the real depth of the stall? _____ m
- What is the real area of the stall? _____ m²

6 REAL-WORLD THINKING

- Why is it important to measure carefully when designing a stall?

- What other measurements might you need to think about? (e.g. height, space for people, roof, signage)



GOOD
PLANNING
BUILDS
GREAT
IDEAS

7 CHALLENGE

You have 12 m of fencing to make a rectangular stall space. What different lengths and widths could you use? Find at least two possibilities.

Option 1: Length _____ m Width _____ m

Option 2: Length _____ m Width _____ m

SAME
PERIMETER
DIFFERENT
SHAPES!

8 REFLECT

What did you find easy? What was challenging?
How could measurement help in real life (e.g. building, designing, shopping, events)?



MĀ TE MĀTAURANGA
KA HANGĀ HE
ĀHUA ATU ANO

MEASURE TODAY
BUILD TOMORROW

LOCAL
IDEAS
BRIGHTER
AOTEAROA

- ☒ USE PERSUASIVE LANGUAGE
- ☒ PLAN A VISUAL LAYOUT
- ☒ CONSIDER YOUR AUDIENCE
- ☒ COMMUNICATE A KEY MESSAGE
- ☒ SOLVE REAL PROBLEMS
- ☒ A BRIGHTER AOTEAROA ♥

CREATE AN ADVERTISEMENT

Big ideas. Bright ideas.

Advertisements try to get people's attention, give them a reason to buy or take action, and make them feel good about it. Use this page to plan and create your own advertisement for a product or service.

Be creative. Be persuasive. Make it stand out! ♥

THINK
CREATE
PERSUADE
CONNECT
MAKE A
DIFFERENCE

PEOPLE
IDEAS
OPPORTUNITIES
A BRIGHTER
AOTEAROA
♥

1 YOUR PRODUCT OR SERVICE

What are you advertising? (It could be a product, service, event or idea.)



2 TARGET AUDIENCE

Who is your advertisement for?
(e.g. children, teenagers, families, locals, tourists)



3 HEADLINE

Write a short, catchy headline to grab attention.



4 KEY BENEFIT

What is the main benefit?
Why should people buy, use or support it?



5 PERSUASIVE LANGUAGE

Write some persuasive words or phrases you could use. (e.g. amazing, limited time, healthier, better, join now, don't miss out!)



6 EVIDENCE / REASON

What evidence or reasons will you include to make it more believable? (e.g. facts, reviews, statistics, examples)

8 CHECKLIST



Tick (✓) when you have included each part in your advertisement.

- | | |
|--|---|
| ☐ Product or service is clear | ☐ Evidence or reasons |
| ☐ Target audience is clear | ☐ Interesting images or design |
| ☐ Catchy headline | ☐ Looks neat and creative |
| ☐ Key benefit is easy to understand | ☐ Would attract my target audience |
| ☐ Persuasive language | ☐ I am proud of my work! |

9 REFLECT



- What do you think is the strongest part of your advertisement?
- How do you think people will feel when they see it?
- What could you improve if you had more time?

YOUR
TURN!

Make it
look amazing! ♥

SMALL
IDEAS CAN
MAKE A BIG
DIFFERENCE
♥

KŌ TĀTOU ANAMATA
HE MĀRAMA AKE
♥

PLAY
LEARN
GROW
TOGETHER
♥

- ☒ UNDERSTAND COSTS
- ☒ CALCULATE REVENUE
- ☒ FIND PROFIT
- ☒ SOLVE REAL PROBLEMS
- ☒ THINK LIKE AN ENTREPRENEUR
- ☒ A BRIGHTER AOTEAROA ♥

PROFIT CHALLENGE

Buy smart. Make smart. Sell smart.

Every business has costs, sells products, and hopes to make a profit. Use your maths skills to help our market stall make a success!

Small ideas can make a big difference! ♥

LOCAL IDEAS
LOCAL PEOPLE
BRIGHTER
AOTEAROA

GOOD
FOOD
GOOD
PEOPLE
GOOD
FUTURES
♥

1 COST TO MAKE

Our stall sells homemade muffins. Here are the ingredients and costs.

Ingredient	Amount needed	Cost
 FLOUR	2 cups	\$0.80
 BUTTER	100 g	\$1.20
 SUGAR	½ cup	\$0.50
 EGGS	2 eggs	\$0.60
 BLUEBERRIES	1 cup	\$1.00
 MUFFIN TIN	6 cases	\$0.30

a) What is the total cost to make 6 muffins?

\$

b) What is the cost to make 1 muffin?

\$

2 SELLING PRICE

We decide to sell each muffin for \$3.00.

a) How much money will we get if we sell:

1 muffin \$

6 muffins \$

12 muffins \$

Selling price × number
sold = revenue
Revenue is the total
amount of money you
receive from sales.



3 CALCULATE THE PROFIT

Profit is the money left over after you have paid for the costs.
Use your answers from Questions 1 and 2.

a) What is the profit if we sell 6 muffins?

\$

b) What is the profit if we sell 12 muffins?

\$

Profit = Revenue – Cost

If the answer is positive,
you've made a profit!
If it's negative, you've
made a loss.

4 TRY A DIFFERENT PRODUCT

Our stall also sells friendship bracelets.



Each bracelet costs \$1.50
to make and we sell them
for \$4.00 each.

a) What is the profit per bracelet?

\$

b) What would be the profit if we sell 10 bracelets?

\$

THINK
CALCULATE
EXPLAIN

5 SOLVE THE CHALLENGE

You have \$20 to spend on ingredients to make muffins.
Each muffin costs \$0.60 to make and you will sell them for \$3.00 each.

a) How many muffins can you make with \$20?

..... muffins

b) If you sell all of them, how much revenue will you get?

\$

c) What will be your profit?

\$

Show your working
here:

6 REAL-WORLD THINKING

a) What could you do to increase your profit?
Give at least two ideas.

-
-

b) What other costs might you need to think about if you
were running a real market stall?

-
-

c) Why is it important to know your costs and profit
before you start selling?

-
-



SMART
DECISIONS
BRIGHTER
FUTURES
♥

LOCAL
SOLUTIONS
FOR A BRIGHTER
AOTEAROA
♥

MĀ TE MĀTAURANGA
KA WHAKATIPU A MŌPŌPŌ
♥

- ☒ THINK CRITICALLY
- ☒ QUESTION CLAIMS
- ☒ FIND EVIDENCE
- ☒ SPOT ADVERTISING
- ☒ MAKE SAFE CHOICES
- ☒ A BRIGHTER AOTEAROA ♥

CAN YOU TRUST IT?

Look. Think. Check. Decide.

We see information everywhere – online, on TV, in posters and in social media. But not everything we see is true. Before you believe or share a claim, it's important to think.

Be curious. Ask questions. Look for evidence. Make informed choices. ♥

A BRIGHTER
AOTEAROA
TOGETHER

LISTEN
QUESTION
EXPLORE
THINK
CHOOSE
TOGETHER

KŌWHIRI
MĀTAU
KŌWHIRI
ATAMAI ♥

1 WHAT TYPE OF CLAIM?

Read each claim. Tick the best description.

Claim	Fact (something that is true and can be proven)	Opinion (someone's belief or feeling)	Evidence (shows proof such as data, research or expert views)	Advertising (trying to persuade you to buy or do something)
a) Drinking water helps you stay healthy.	☐	☐	☐	☐
b) This is the best lunchbox in NZ!	☐	☐	☐	☐
c) 8 out of 10 students at our school prefer Miharo Muesli.	☐	☐	☐	☐
d) I think online learning is more fun than school.	☐	☐	☐	☐
e) Buy now! Limited time offer – 50% off!	☐	☐	☐	☐

3 FIND THE EVIDENCE

Read the claim and decide what evidence you would need to check if it is true. Write down at least two things you could look for.

a) "Eating breakfast helps you do better at school."

-
-

b) "This phone is made from recycled materials."

-
-

c) "Our school is the most eco-friendly in the region."

-
-

5 MAKE A SAFE CHOICE

You see a post online that says:
"Share this now or you will have bad luck for a year!"

- a) Would you share it? ☐ Yes ☐ No
- b) Why or why not?
.....

c) What could you do instead?
.....

STOP
THINK
CHECK
SHARE
♥

2 IS IT TRUSTWORTHY?

Look at each post or advertisement. Decide if it is trustworthy. Tick Yes or No and give a reason.

a)



Aotearoa Adventures

Sponsored -

Discover the most beautiful beaches in NZ! Our tours are the best way to see hidden spots. Book today!

Trustworthy?

☐ Yes ☐ No

Why?
.....

b)



NEWS TODAY



Sharks spotted at popular Waikato beach

Scientists say it's very unlikely, but more research is needed.

Trustworthy?

☐ Yes ☐ No

Why?
.....

c)



KiaFitNZ
2 days ago

These energy drinks will give you more focus, better grades and more energy! I drink them every day and they're amazing!

#focus #bettergrades #gamechanger

Trustworthy?

☐ Yes ☐ No

Why?
.....

4 ASK THE RIGHT QUESTIONS

Before you believe or share a claim, it's good to ask questions. Match each question to what it helps you find out.

Who created this? ☐

What is their purpose? ☐

Is there evidence? ☐

Are there other views? ☐

When was it made? ☐

Is it trying to sell something? ☐

☐ Checks if it is an advertisement

☐ Helps you know if it is up to date

☐ Shows if it might be biased

☐ Helps you find proof

☐ Tells you the reason behind the message

☐ Helps you see different perspectives

6 CREATE YOUR OWN

Write your own online post or poster. It can be a real fact, an opinion or an advertisement. Then ask a friend to decide what type of claim it is and if it is trustworthy.

My friend's answer:

Type of claim:

Trustworthy? ☐ Yes ☐ No

Why?

HE PĀTAI PAI
HE WHAKATAU ATAMAI
♥

INFORMATION SHAPES OUR WORLD.
CHOOSE WISELY. ♥

- ☐ COMPARE PRICES
- ☐ CALCULATE VALUE
- ☐ SHOW YOUR THINKING
- ☒ SOLVE REAL PROBLEMS
- ☐ MAKE SMART CHOICES
- ☐ A BRIGHTER AOTEAROA

SUPPORT
LOCAL

BEST DEAL CHALLENGE

Same products. Different deals.
Which one is the best value?

In real life, prices come in different sizes
and packages. The cheapest price isn't always
the best deal. Compare, calculate and explain
your reasoning. Show your working!

THINK
COMPARE
CALCULATE
CHOOSE
EXPLAIN

GOOD
CHOICES
STRONGER
COMMUNITIES

KĀTOA
KA PAI

1 SNACK ATTACK

Which package is the best value? Explain your answer.

A



250 g
\$4.00

B



500 g
\$7.00

C



1 kg
\$12.00

PROVE IT – Show your working here (e.g. cost per 100 g).

Best value: ☐ A ☐ B ☐ C

Reason: _____

2 DRINKS FOR A DAY OUT

You are buying drinks for your group. Which option is better value?
Explain your answer.

A

6-pack



\$6.00

6 bottles (600 mL each)

B

24-pack



\$20.00

24 bottles (600 mL each)

THINK ABOUT:

- What is the cost per bottle?
- How much would 12 bottles cost with each option?
- Which one gives better value in the long run?
- Why might someone still choose the other option?

PROVE IT – Show your working here (e.g. cost per bottle and cost for 12 bottles).

Best value: ☐ A ☐ B

Reason: _____

3 BUY MORE OR BUY LESS?

A shop sells pencils in different sized packs. Which option is better value?
Explain your answer.

A

4 pencils
\$2.40



B

10 pencils
\$5.50



C

20 pencils
\$10.00



PROVE IT – Show your working here (e.g. cost per pencil).

Best value: ☐ A ☐ B ☐ C

Reason: _____

4 MIX AND MATCH

You need to buy lunch for a trip. There are two shops with different deals.
Which shop will give you the better value for your money? Explain your answer.

Shop A – Lunch Combo



\$6.50

1 filled roll + 1 fruit + 1 juice

Shop B – Build Your Own

Filled roll	\$4.00
Fruit	\$1.50
Juice	\$2.00

THINK ABOUT:

- If you buy the same items from Shop B, how much will it cost?
- Which is better value?
- Are there other things to consider (e.g. choice, variety, extras)?

PROVE IT – Show your working here.

Best value: ☐ Shop A ☐ Shop B

Reason: _____

5 REAL-LIFE THINKING

Sometimes a bigger pack costs more, but saves money in the long run.
Give an example of a product (food, sport item, household item, etc.)
where buying a larger size is better value. Explain why.



6 CHALLENGE

Create your own comparison problem for a friend to solve. It could be
about food, sports gear, technology or anything else!
Write the question and the options below.

Be a
problem
creator!



BETTER
CHOICES
BRIGHTER
AOTEAROA

NGĀ KŌWHIRINGA
PĀNUI, HE ANAMATA
MĀRAMA

MONEY, MARKETS & DECISIONS

- ☒ PLAN A BUSINESS IDEA
- ☐ CONSIDER YOUR CUSTOMER
- ☒ WORK OUT MATERIALS & COSTS
- ☒ THINK CREATIVELY
- ☒ SOLVE REAL PROBLEMS
- ☒ A BRIGHTER AOTEAROA ♥

MARKET DAY QUEST: BUILD YOUR IDEA

Big ideas start with a plan!

You're setting up a stall at the school market! Choose a product (or invent your own), decide who your customers are, and work out what materials you will need and how much it will cost to get started.

Be creative. Be thoughtful. Be a problem solver! ♥



PEOPLE
IDEAS
OPPORTUNITIES
A BRIGHTER
AOTEAROA ♥

1 CHOOSE A PRODUCT

Choose one of the ideas below or invent your own!

Homemade
Cookies



Delicious cookies
with fun flavours.

Fruit
Smoothies



Fresh and healthy
drinks.

Friendship
Bracelets



Colourful bracelets
with positive messages.

Recycled
Planters



Plant pots made from
recycled materials.

Handmade
Bookmarks



Creative bookmarks
with cool designs.

Your Own Idea!



Have another idea?
Write it in!

2 WHO ARE YOUR CUSTOMERS?

Think about who will buy your product. Tick one or more groups. You can also add your own idea.

- ☐ Students at school
- ☐ Teachers
- ☐ Whānau (family)
- ☐ Younger children
- ☐ Older students
- ☐ People in the local community
- ☐ Other:

Why do you think your chosen
customers will like your product?

.....

.....

.....

3 MATERIALS AND COSTS

List the materials you will need to make your product. Estimate the cost of each item and the total initial cost.

Material	Where will you get it?	Cost (approx.)

Total initial cost:

\$

4 PLAN YOUR PRODUCT

Give your product a name and describe it.

Product name:

What will it look like? Describe or draw a picture.

.....

.....

.....

.....

.....

What makes your product special?
(Why will people choose it?)

.....

.....

.....

How will you make it?
(Briefly describe the steps.)

.....

.....

.....

5 QUICK CHECK

Tick (✓) each box when you've completed it.

- ☐ I have chosen a product or created my own idea.
- ☐ I know who my customers are.
- ☐ I have listed the materials I need.
- ☐ I have estimated the initial cost.
- ☐ I have given my product a name and described it.
- ☐ I am ready for Quest 2 – Open for Business!

6 THINK LIKE AN ENTREPRENEUR

Answer the questions below.

a) What might be a challenge when making your product?

.....

.....

b) How could you solve this challenge?

.....

.....

c) What have you learned so far about running a small business?

.....

.....

KŌ TE
MĀTAURANGA
HE MANA
♥

SMALL IDEAS CAN
CREATE BIG CHANGE. ♥

MARKET DAY QUEST: OPEN FOR BUSINESS

Plan it. Make it. Sell it. Succeed!

It's market day! You've made your products and now it's time to set up your stall, work out prices, respond to customer demand and see how much money you can make.

Be creative, be helpful and be a smart seller! ♥

LOCAL
PEOPLE
BRIGHTER
AOTEAROA
TOGETHER

GOOD
IDEAS
GREAT
PEOPLE
♥

1 PRODUCTS AND PRICES

Here are the products you are selling at your market stall.

Product	Cost to make each	You plan to sell for	How many you have
 Muffin	\$0.80	\$2.00	30
 Cookie	\$0.50	\$1.50	40
 Lemonade	\$0.40	\$2.00	25
 Friendship Bracelet	\$0.60	\$3.00	20

2 CALCULATE POTENTIAL REVENUE

Complete the table to show how much money you could make if you sell all of your products.

Product	Number you have	Selling price each	Potential revenue (if you sell all)
Muffin	30	\$2.00	\$
Cookie	40	\$1.50	\$
Lemonade	25	\$2.00	\$
Friendship Bracelet	20	\$3.00	\$
Total potential revenue:			\$

3 CUSTOMER DEMAND

Some customers arrive at your stall. Read what they want and work out how many items you will sell and how much money you will make.



I would like to buy 3 muffins and 1 lemonade please.

Total cost: \$



Can I have 5 cookies please?

Total cost: \$



I'll take 2 bracelets for me and 2 for my friends.

Total cost: \$



I would like 1 muffin, 1 cookie and 1 lemonade please.

Total cost: \$

How much money did you make from these customers? \$

4 SOLVE THE CHALLENGE

During the day, you run out of muffins! You still have ingredients to make 10 more. Each muffin costs \$0.80 to make and you sell them for \$2.00 each.

- How much will it cost to make 10 more muffins? \$
- How much money will you make if you sell all 10? \$
- Do you think it is a good idea to make more muffins? Why?
.....

5 CREATE AN ADVERTISEMENT

Design a small advertisement for your market stall. It could be a poster, a social media post or a sign for your stall. Include:

- a catchy name
- at least one product
- the price
- a slogan (short and catchy)
- a picture

6 REFLECT

- What went well at your market stall?
.....
- What was challenging?
.....
- What would you do differently next time?
.....
- How did using maths help you make good decisions?
.....

Small ideas can make a big difference. ♥

MARKETS
CONNECT PEOPLE
CREATE OPPORTUNITIES
BUILD BRIGHTER
AOTEAROA
♥

- ☒ ADAPT TO CHANGE
- ☒ SOLVE PROBLEMS
- ☒ MAKE DECISIONS
- ☒ THINK AHEAD
- ☒ REAL-WORLD SKILLS
- ☒ A BRIGHTER AOTEAROA ♥

MARKET DAY QUEST: SURPRISE!

Plans can change... can you adapt?

You're running your market stall, but today brings some surprises! Read each event, recalculate if needed, make a decision and explain your reasoning.

Be flexible. Be smart. Be a positive changer! ♥

LOCAL
MARNCER
COMMUNITIES

PEOPLE
IDEAS
OPPORTUNITIES
A BRIGHTER
AOTEAROA ♥

1 STARTING POINT

You are selling homemade muffins at the local market.
Here are your original plans:

Selling price: \$4.00 each

Cost to make: \$1.50 each

You planned to make: 20 muffins

Expected to sell: all 20



- How much would you spend to make 20 muffins?
- If you sell all 20, how much money will you earn?
- What is your expected profit?

2 EVENT CARDS

Choose TWO event cards. Read the information and complete the questions.
You may choose any two different cards.

A

**MATERIAL COST
INCREASE**



The price of flour has increased by 25%.

B

RAINY WEATHER



It starts raining and there are 40% fewer customers than expected.

C

**EXTRA
CUSTOMERS**



A local sports team arrives and 10 extra customers want to buy muffins.

D

DAMAGED STOCK



5 of your muffins get damaged and can't be sold.

3 DO THE MATHS

For each event you chose, work out the new numbers. Show your working.

Event 1: _____

Event 2: _____

New cost (if changed): \$ _____

New cost (if changed): \$ _____

Number you can sell:

Number you can sell:

Expected income: \$ _____

Expected income: \$ _____

Expected profit: \$ _____

Expected profit: \$ _____

4 MAKE A DECISION

After considering your two events, what will you do?
Tick one option and explain why.

☐

Keep the same price and plan.

☐

Change the price (e.g. make it more or less).

☐

Change the amount you make (e.g. make more or fewer).

Explain your decision:

.....

.....

.....

THINK
CALCULATE
CHOOSE
EXPLAIN

5 REFLECT



- What was the biggest challenge?
- How did you use maths to help you make your decision?
- What did you learn about running a business from this activity?
- How might real businesses prepare for unexpected events?

6 TAKE IT FURTHER



Create your own event card! It could be something like a new competitor, a social media post that makes you popular, a delivery that is late, or a change in demand.

My Event Card:

How would this affect your business?
What would you do?

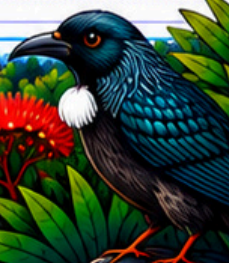
.....

.....

.....

CHALLENGES
HELP US GROW
KA RAWHE! ♥

Change happens.
You can handle it. ♥



MONEY, MARKETS & DECISIONS

MISSION COMPLETE ✓

MONEY, MARKETS & DECISIONS

- ☐ SET GOALS
- ☐ SOLVED PROBLEMS
- ☐ BUILT KNOWLEDGE
- ☐ MADE GOOD CHOICES
- ☐ SHOWED RESILIENCE
- ☐ I'M PROUD! ♥

You've explored how money works,
how markets connect people, and how
the choices we make can make a difference.
Ka rawe! ♥

PEOPLE
IDEAS
OPPORTUNITIES
A BRIGHTER
AOTEAROA

Play
Learn
Grow ♥

1 MY REFLECTION

Think about your learning this term. Write a short answer for each question.

What did you enjoy
learning the most?
Why?

What was the most
challenging part?
How did you overcome it?

What is one new thing
you can do now?

How can what you learned
this term help you in real life?

3 REAL-WORLD SCENARIO

You have \$50 to spend. You want to buy a new pair of shoes.
At two different stores you see these prices:

Store A



\$48

20% off next week!

Store B



\$55

Free socks with purchase!

- a) Which store would you choose? Why?
- b) If you waited for the 20% off at Store A, what would the shoes cost?
Show your working.
- c) Is it a good idea to wait? Give a reason for your answer.

5 SET A GOAL

Think about next term. What is one learning goal you want to set for yourself?
Write it below and one action you will take to achieve it.

My goal:

One action I will take:

2 MIXED-SKILLS CHALLENGE

Give each question a go. Use the space provided.

- a) A notebook costs \$4.50. You have \$20. How many can you buy?
Show your working.
- b) Round 3,642 to the nearest 100.
- c) What is 0.75 as a fraction and as a percentage?
- d) Write one sentence using a causal conjunction (because, so, since)
to explain why people might choose to shop at local markets.
- e) List two pros and two cons of buying something online.
Pros:
Cons:
- f) If you saved \$5 each week for 8 weeks, how much would you have?
Would that be enough to buy a \$40 game? Explain your answer.

4 TRUE OR FALSE?

Tick (✓) the correct answer.

Statement	True	False
1. Needs are things we must have to live.	☐	☐
2. A budget helps you plan how to use your money.	☐	☐
3. All online information about products is trustworthy.	☐	☐
4. Interest is the extra money you earn or pay on a loan or savings.	☐	☐
5. Consumers have no impact on the environment.	☐	☐

6 MISSION COMPLETE

That's a wrap for Term 2!

What are you most proud of? Write a few sentences to yourself.
You've got this!

Small
steps
create
big change.
♥

KŌ TĀTOU ANAMATA, HE MĀRAMA ake ♥

THE FUTURE AOTEAROA QUEST

QUESTION → HYPOTHESIS

- OBSERVATIONS
- QUESTIONS
- TESTABLE PREDICTIONS
- REASONING
- REAL-WORLD SCIENCE
- THINK LIKE A SCIENTIST

QUESTION → HYPOTHESIS

Good questions lead to great discoveries.

Scientists notice things, ask questions, make a prediction (hypothesis), then test it. A hypothesis is a testable idea about what might happen and why. Let's turn our curiosity into questions and predictions!

Curious today.
Brighter Aotearoa tomorrow. ♥

Big questions start with small observations. ♥

OBSERVE
QUESTION
PREDICT
INVESTIGATE
DISCOVER
GROW ♥

1 WHAT'S THE DIFFERENCE?

Read the descriptions below and match each one to the correct term.

A A possible answer to a question that can be tested.

B A question about something you want to find out.

C Something you notice using your senses (see, hear, feel etc).

Word bank: observation question hypothesis

2 EXAMPLE

Look at the example below. It shows how an observation can lead to a question and a hypothesis.



3 YOUR TURN

Write an observation for each picture. Then turn it into a question and a hypothesis. The first one is done for you.

Picture	Observation (What do you notice?)	Question (What do you want to find out?)	Hypothesis (What do you think will happen and why?)
	The ice cube is getting smaller.	Does a warmer room make ice melt faster?	If the room is warmer, then the ice will melt faster because heat gives the particles more energy.
			
			
			

4 IS IT A GOOD QUESTION?

Tick (✓) if the question is investigable (can be tested with a fair test), or not investigable. Explain your answer.

Question	Investigable?	Why?
Does music help plants grow faster?	☐ Yes ☐ No	
What is the best ice cream flavour?	☐ Yes ☐ No	
Does the type of surface affect how far a toy car rolls?	☐ Yes ☐ No	
How many stars are in the universe?	☐ Yes ☐ No	
Does exercise make your heart beat faster?	☐ Yes ☐ No	

5 IMPROVE THE QUESTION

These questions are not very good for a fair test. Rewrite each one so it is investigable.

a) What is the strongest animal?

b) Does a big breakfast give you more energy?

c) Which brand of phone is the best?

d) Does sunlight help plants grow?

6 CHALLENGE

Choose one of your questions from above and write a detailed hypothesis. Include what you will change (independent variable), what you will measure (dependent variable) and what you will keep the same (control variables).

My question:

My hypothesis:

I will change (independent variable):

I will measure (dependent variable):

I will keep the same (control variables):

QUESTIONS
TODAY
SOLUTIONS
TOMORROW ♥

Kia whakamiharo
te ao āpōpō. ♥

THE FUTURE AOTEAROA QUEST

SCIENCE WORD POWER

- USE KEY SCIENCE WORDS
- UNDERSTAND MEANINGS
- SEE THEM IN ACTION
- SOLVE REAL PROBLEMS
- THINK LIKE A SCIENTIST

SCIENCE WORD POWER

Words help us make discoveries.

Scientists use special words to ask questions, plan investigations, collect information and explain what they find. Let's explore some important science words and see them in action!

Better questions.
Brighter futures. ♥

Science words help us look closer, think deeper and make a brighter Aotearoa! ♥

1 MATCH THE WORDS

Match each science word to the best meaning. Draw a line to connect them.

- | | | |
|-------------|---|---|
| hypothesis | • | Information collected from what you see, hear or notice. |
| variable | • | A possible answer to a question. |
| evidence | • | A repeating trend or regularity in data. |
| observation | • | Something you can change, measure or keep the same in an investigation. |
| measurement | • | The final idea you have after looking at your results. |
| result | • | Information that helps to support your idea. |
| conclusion | • | The number and unit used to describe a quantity. |
| pattern | • | What you find out at the end of an investigation. |

2 IN CONTEXT

Read the short investigation below. Fill in the blanks using the words in the box. You may need to use some words more than once.

hypothesis	variable	evidence	observation
measurement	result	conclusion	pattern

Mere wants to find out if sunlight helps plants grow.

She makes a: "Plants that get more sunlight will grow taller."

She keeps the same type of plant and soil, and changes one (the amount of sunlight).

Each week she makes an of the height and takes a in centimetres.

After 4 weeks, the show that the plant in full sun is the tallest. This supports her hypothesis.

Her is that sunlight helps plants grow, and she notices a: the more sunlight, the taller the plant.



3 WHICH WORD WOULD YOU USE?

Choose the most appropriate science word for each situation.

- You notice that the sky looks darker and the wind is stronger.
- You measure the temperature of some water as 60 °C.
- You think that ice will melt faster in warm water.
- You find out that the plant grew 5 cm taller.
- You see that the same type of bird visits your garden every day.
- You decide to change the type of surface to test how far a toy car travels.
- You use photos and notes to support your idea.
- You explain what the results mean.



5 LOOK AT THE DATA

The table shows the height of a plant over 4 weeks.



Week	1	2	3	4
Height (cm)	2	4	6	8

- What is the pattern in the data?
- Predict the height at week 5. cm
- What might be a conclusion based on this data?



4 PLAN AN INVESTIGATION

Choose one of the questions below and plan a simple investigation. Use the scaffolding to write your ideas.

- Which surface lets a toy car travel the furthest?
- Does the temperature of water affect how fast sugar dissolves?
- Do different types of paper affect how much water they can absorb?

?	My question:	
💡	My hypothesis:	
⚙️	My variables:	
📏	My measurements:	
🔍	My evidence (what I will observe/record):	
📊	My predicted result:	

6 THINK LIKE A SCIENTIST

Answer the questions below.

- Why is it important to use the correct science words when writing about an investigation?
- How can using words like variable, observation and evidence help you be more accurate and convincing in your explanation?



KŌ TE
MĀTAURANGA
HE MANA

Knowledge today
brighter tomorrows. ♥

THE FUTURE AOTEAROA QUEST

FORCES IN ACTION

- PUSHES AND PULLS
- GRAVITY
- FRICTION
- EVERYDAY EXAMPLES
- PREDICT WHAT HAPPENS
- THINK LIKE A SCIENTIST

FORCES IN ACTION

Forces make things happen.

Forces can start, stop, speed up, slow down or change the direction of an object. They act all around us, every day. Let's explore how forces work in Aotearoa and in our everyday lives!

Notice. Think. Explain.
A brighter Aotearoa. ♥

Forces are all around us – they help shape our amazing Aotearoa! ♥

1 PUSH OR PULL?

Look at the pictures below. Tick (✓) whether the main force is a push or a pull.



Push ☐ Pull ☐



Push ☐ Pull ☐



Push ☐ Pull ☐



Push ☐ Pull ☐



Push ☐ Pull ☐



Push ☐ Pull ☐

3 WHAT HAPPENS?

Look at each situation. Predict what will happen. Choose from:

speed up slow down start moving stop change direction

A ball is kicked.



The brakes are applied.



A person pushes off on a skateboard.



A rock rolls off a cliff.



A car turns a corner.



A car turns a corner.

A parachute opens.



2 IDENTIFY THE FORCE

Choose the best word from the box to complete each sentence.

push pull gravity friction

- A rock falls to the ground because of
- Brakes on a bike use to slow it down.
- You a door open to go inside.
- You a kite string to fly the kite.
- A slide is slippery because there is less
- A magnet can a metal paperclip.

4 FORCES AROUND US

Identify the main force in each situation. Choose from:

push pull gravity friction



A skier moves down a hill.



A person pushes a rock.



A book slides and stops.



An apple falls from a tree.

5 REAL-WORLD THINKING

- How does friction help keep us safe? Give one example.
.....
- Find one example of a push and one example of a pull in your home or at school.
.....
- Why do you think objects fall to the ground on Earth but float in space?
.....

6 CHALLENGE

Design a simple investigation to explore friction.

- What will you do? (e.g. slide an object on different surfaces)
.....
- What do you think will happen?
.....
- How will you keep it fair? (What will you keep the same?)
.....

SCIENCE HELPS US UNDERSTAND OUR WORLD ♥

Curiosity moves us forward.
A brighter Aotearoa. ♥

THE FUTURE AOTEAROA QUEST

MEASURE THE MOTION

- DISTANCE AND TIME
- CALCULATE DIFFERENCES
- INTERPRET DATA
- FORCES IN ACTION
- REAL-WORLD PROBLEMS
- THINK LIKE A SCIENTIST

MEASURE THE MOTION

Forces move our world.

When a force is applied, objects can start moving, speed up, slow down or change direction. In this activity you will use distance and time measurements to investigate motion, read data, solve problems and make conclusions.

Measure. Calculate. Discover.
A brighter Aotearoa.

Data helps us see the story behind the motion!

1 TOY CAR EXPERIMENT

Four toy cars were pushed with the same force and their distance over a set time was measured. The table shows the results.

Car	Time (seconds)	Distance (metres)
Kea	5	8.0
Tūi	5	6.5
Kiwi	5	7.2
Pīwakawaka	5	9.0

- Which car travelled the furthest?
- Which car travelled the shortest distance?
- How much further did Pīwakawaka travel than Tūi?
- What might be one reason for the difference in distance?

2 SAME CAR, DIFFERENT FORCES

The same toy car was pushed with different forces. Its distance was measured over 5 seconds each time.

Push strength	Distance (metres)
Gentle push	3.2
Medium push	6.8
Strong push	10.5

- How does the distance change as the push gets stronger?
- How much further does the car travel with a strong push compared to a gentle push?
- Write a conclusion about the relationship between the force applied and the distance travelled.

3 CALCULATE THE SPEED

Use the formula: speed = distance ÷ time.

Object	Distance (metres)	Time (seconds)	Speed (m/s)
Runner	100	20	
Cyclist	300	60	
Skateboard	45	9	
Toy car	8	5	

- Which object is the fastest?
- Which object is the slowest?

4 DISTANCE OVER TIME

A scooter was pushed and its distance was measured every 2 seconds.

Time (seconds)	0	2	4	6	8	10
Distance (metres)	0	2.4	4.6	6.8	8.9	11.0

- How far did the scooter travel between 0 and 2 seconds?
- How far did it travel between 2 and 4 seconds?
- Did the scooter travel the same distance each 2 seconds? How can you tell?
- What does this tell you about the scooter's motion?

5 REAL-WORLD CHALLENGE

A student walks 1.2 km to school in 15 minutes.

- Convert 1.2 km to metres.
- Convert 15 minutes to seconds.
- Calculate the student's average speed in metres per second (m/s).
- If the student walked 20% faster, how long might the journey take? Show your working or explain your reasoning.

6 THINK FURTHER

- What other factors (besides force) might affect how far or how fast an object moves? (Think about surface, friction, mass, shape, etc.)
- How could you design a fair test to find out which surface (e.g. carpet, tiles, grass, gravel) lets a toy car travel the furthest?

SMALL IDEAS LEAD TO BIG DISCOVERIES

Curious minds build a brighter Aotearoa.

THE FUTURE AOTEAROA QUEST

STATES OF MATTER

- SOLIDS, LIQUIDS AND GASES
- PARTICLE MODELS
- CHANGING STATES
- REAL-WORLD EXAMPLES
- CLASSIFY AND EXPLAIN
- THINK LIKE A SCIENTIST

STATES OF MATTER

Same stuff. Different form.

Everything around us is made of matter. Matter can be a solid, a liquid or a gas. It can also change from one state to another when it is heated or cooled. Let's explore how particles behave and how this affects the properties of materials.

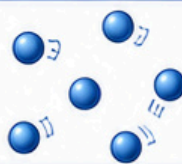
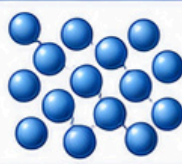
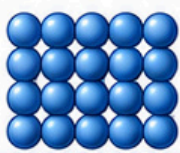
Explore. Question. Discover.
A brighter Aotearoa.

Different states. Same amazing world!
Science helps us see the invisible!

OBSERVE
INVESTIGATE
EXPLAIN
THINK
SOLVE
GROW

1 PARTICLE MODELS

Look at the diagrams below. The dots represent particles in a solid, liquid and gas. Use the word bank to label each state and complete the sentences.



- Particles are
- They are close together and only vibrate.
- Solids keep their shape.

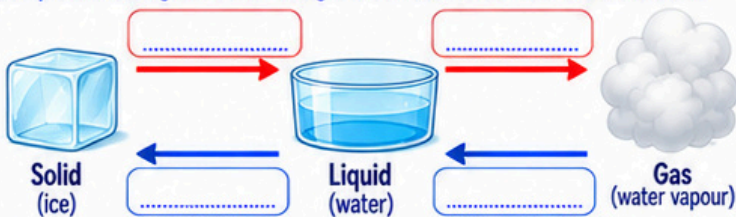
- Particles are than in solids.
- They can move past each other.
- Liquids take the shape of their container.

- Particles are and far apart.
- They move quickly in all directions.
- Gases fill the container.

Word bank: solid liquid gas close together further apart
free to move tightly packed

3 CHANGING STATES

Complete the diagram below using the correct words from the word bank.



Word bank: melting freezing evaporation condensation

5 EXPLAIN IT

- Why do you think particles in a gas move faster than in a solid?
- What is happening to the particles when ice melts?
- Give one example from everyday life where a change of state is useful.

2 PROPERTIES

Tick (✓) the correct column(s) for each property.

Property	Solid	Liquid	Gas
Keeps its shape	☐	☐	☐
Takes the shape of its container	☐	☐	☐
Has a fixed volume	☐	☐	☐
Can be compressed easily	☐	☐	☐
Flows	☐	☐	☐
Particles move quickly	☐	☐	☐
Particles are close together	☐	☐	☐

4 REAL-WORLD EXAMPLES

Sort the items into the correct state of matter. Some might fit more than one if you think carefully.

ice cube	water	steam	rock	air
milk	wood	carbon dioxide	honey	balloon (air)
Solid	Liquid	Gas		

6 THINK LIKE A SCIENTIST

- Water can be a solid, a liquid or a gas. How might temperature affect which state it is in?
- How could you investigate which materials can be compressed?

CURIOSITY
FUELS
BRIGHTER
TOMORROWS

Science today.
Stronger Aotearoa tomorrow.

THE FUTURE AOTEAROA QUEST

MEASUREMENT LAB

- CAPACITY
- MASS
- TEMPERATURE
- CHOOSE UNITS
- READ SCALES
- SOLVE PROBLEMS
- REAL-WORLD MATHS

MEASUREMENT LAB

Measure for a brighter tomorrow.

We use measurement every day – in science, cooking, building, sport and looking after our environment. Choose the right units, read the scales carefully, estimate, and solve the problems.

Real skills.
Real life. A brighter Aotearoa. ♥

Small measurements make a big difference! ♥

MEASURE
ESTIMATE
SOLVE
CREATE
A BRIGHTER
TOMORROW ♥

1 CHOOSE THE BEST UNIT

Choose the most appropriate unit (mL, L, g, kg, °C) for each item.

- A bottle of water
- A bag of apples
- A can of soup
- A swimming pool
- A paperclip
- A person's body temperature
- A truck
- A cup of flour

Units:
mL
L
g
kg
°C

2 READ THE SCALES

What is the measurement? Write your answer with the correct unit.



a)



b)



c)

3 ESTIMATE THEN MEASURE

Estimate the mass or capacity of each item, then write the actual measurement. (If you don't have the items, give a reasonable estimate.)

Item	Estimate	Actual measurement
A mug of water		
A bag of rice		
A teaspoon of sugar		
Your school bag		

4 SOLVE THE PROBLEMS

Show your working or explain your thinking.

- A recipe needs 250 mL of milk. You have 1 L of milk. How much will be left?
- A box of eggs has a mass of 600 g. You add it to a bowl that already has 1.4 kg of ingredients. What is the total mass?
- The temperature at 8 am is 6 °C. By midday it is 18 °C. How much did the temperature increase?
- A water tank holds 2,000 L. It already has 750 L of water. How much more water can it hold?

Use the right units and show your working. You've got this! ♥

5 REAL-WORLD CHALLENGE



Your whānau is collecting rainwater. The tank holds 5,000 L. After a week, it has 3,750 L.

- How much more water is needed to fill the tank?
- If the tank collects 250 L each day, how many more days will it take to be full?



6 THINK FURTHER

Choose one question to answer.

- Why is it important to use the correct units when measuring? Give an example.
- How could measuring temperature, rainfall or water levels help protect the environment in Aotearoa?



Today's skills
build a brighter tomorrow. ♥

MEASURE
PLAN
SOLVE
LOOK AFTER
AOTEAROA ♥

PEOPLE
IDEAS
MEASUREMENT
BRIGHTER
PLACES ♥

THE FUTURE AOTEAROA QUEST

ECOSYSTEM CONNECTIONS

- IDENTIFY PRODUCERS AND CONSUMERS
- BUILD FOOD CHAINS AND FOOD WEBS
- EXPLAIN IMPACTS
- THINK LIKE A KAITIAKI

ECOSYSTEM CONNECTIONS

Everything is connected.

Plants, animals, fungi and the environment all depend on each other. In Aotearoa's ecosystems, every organism has a role to play. When one part changes, it can affect many other parts.

Healthy ecosystems.
Stronger together.

Nature works as a team – let's explore how everything connects!



1 EXPLORE THE ECOSYSTEM

Look at the Aotearoa ecosystem below. Find and name as many living things as you can. Think about plants, animals and fungi.



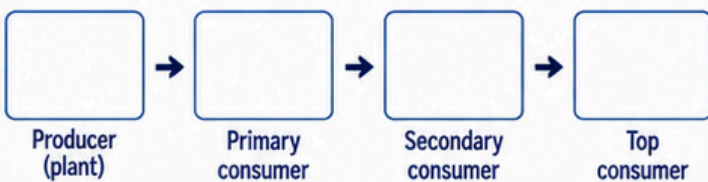
2 PRODUCERS, CONSUMERS AND DECOMPOSERS

Choose three living things from the picture and decide if they are a producer, consumer or decomposer. Give a reason for each one.

	Living thing	Producer, consumer or decomposer?	Reason
1			
2			
3			

3 BUILD A FOOD CHAIN

Choose organisms from the picture to complete the food chain. Draw or write the names.



4 MAKE A FOOD WEB

Choose at least five different organisms from the picture and create a food web. Draw arrows to show the flow of energy (from what is eaten to what eats it).

5 THINK ABOUT CHANGE

What might happen if there were fewer fish in the river? Explain how this could affect at least two other organisms in the ecosystem.

.....

.....

.....

6 BE A KAITIAKI

How can we look after ecosystems in Aotearoa? Write two ideas.

1.

2.

Healthy habitats help all living things thrive.

SMALL ACTIONS MAKE A BIG DIFFERENCE

Thriving ecosystems.
Brighter tomorrows.

THE FUTURE AOTEAROA QUEST

ECOSYSTEM DATA

- READ GRAPHS
- LOOK FOR PATTERNS
- COMPARE DATA
- MAKE CONCLUSIONS
- USE EVIDENCE

ECOSYSTEM DATA

Real data. Real decisions.

Scientists collect data to understand ecosystems and help protect them. In this activity you will explore a set of animal observation data from a fictional Aotearoa native reserve and use graphs to find patterns, answer questions and make conclusions.

Better data.
Brighter tomorrows.

Data helps us care for Aotearoa's amazing wildlife.



1 THE DATA

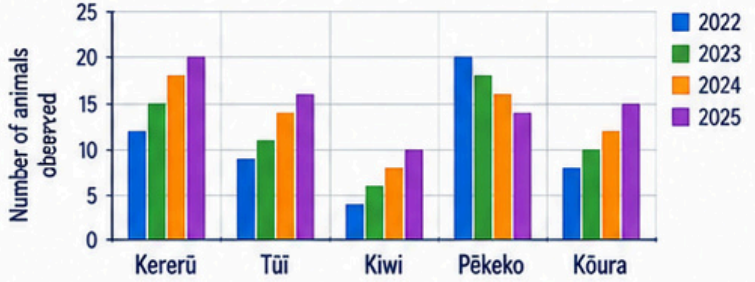
The table shows the number of animals observed in a native reserve over four years.

Animal	2022	2023	2024	2025
Kererū	12	15	18	20
Tūi	9	11	14	16
Kiwi	4	6	8	10
Pēkeko	20	18	16	14
Kōura (freshwater crayfish)	8	10	12	15

2 INTERPRET THE GRAPH

The bar graph shows the same data.

Animal Observations in the Reserve (2022 – 2025)



- Which animal had the highest number of observations in 2025?
- Which animal had the lowest number of observations in 2022?
- How many more Kererū were observed in 2025 than in 2022?
- Which animal shows a decrease in the number of observations?

3 FIND THE PATTERNS

- Which animals show an increase over the four years?
- Which animal shows a decrease?
- Which animal stayed the same or changed only a little?
- What pattern do you notice about the Kiwi?
- Suggest one possible reason for the change you see in the Pēkeko numbers.

4 MAKE A CONCLUSION

Use the data to help you. Write a short paragraph to answer: What might this data tell us about the health of the reserve?

.....

.....

.....

.....

Use evidence from the data to support your ideas.

5 THINK LIKE A SCIENTIST

- What other information might be useful to collect? (Think about plants, weather, habitat or human activity.)
- What questions would you like to investigate next?

6 CHALLENGE

Choose one animal from the data. Predict how many might be observed in 2026. Explain your reasoning using the pattern in the graph and table.

Animal: My prediction:

Why?

.....

.....

CURIOSITY LEADS TO CONNECTION. A BRIGHTER AOTEAROA

Healthy ecosystems.
Thriving Aotearoa.



THE FUTURE AOTEAROA QUEST

CHANGING EARTH

- WEATHERING
- EROSION
- DEPOSITION
- SEQUENCE CHANGES
- EXPLAIN CAUSES
- OUR AMAZING PLANET

CHANGING EARTH

Natural forces. Real change.

The Earth is always changing! Rocks can break, move and build up in new places. Weathering, erosion and deposition shape our mountains, rivers, beaches and coastlines here in Aotearoa and around the world.

Same processes.
Amazing places. ♥

Nature never stops working! Small changes over time make a big difference. ♥

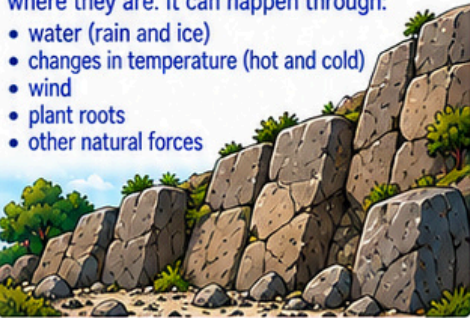
EXPLORE
QUESTION
DISCOVER

1 WEATHERING

Rocks break down in place.

Weathering is the breaking down of rocks where they are. It can happen through:

- water (rain and ice)
- changes in temperature (hot and cold)
- wind
- plant roots
- other natural forces



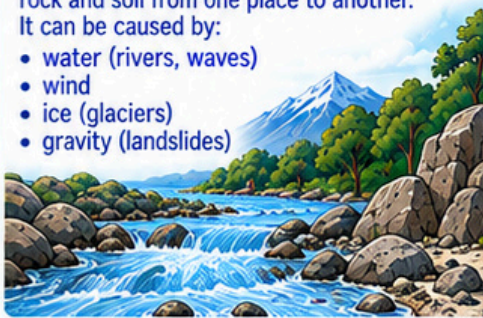
Give one example of weathering from the picture.

2 EROSION

Rocks and other material move.

Erosion is the movement of weathered rock and soil from one place to another. It can be caused by:

- water (rivers, waves)
- wind
- ice (glaciers)
- gravity (landslides)



What is causing the erosion in this picture?

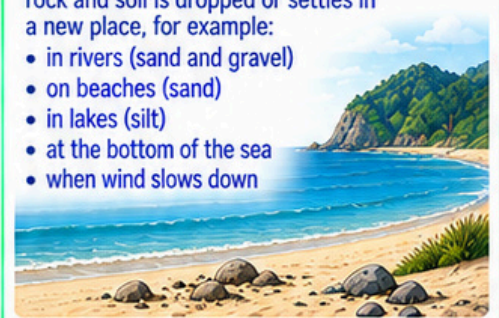
Where might the moved material go?

3 DEPOSITION

Moved material is dropped in a new place.

Deposition happens when the moved rock and soil is dropped or settles in a new place, for example:

- in rivers (sand and gravel)
- on beaches (sand)
- in lakes (silt)
- at the bottom of the sea
- when wind slows down

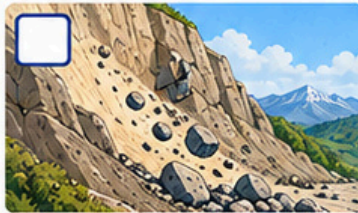
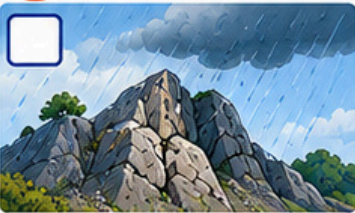


What has been deposited in this picture?

How do you know?

4 SEQUENCE THE CHANGES

Look at the pictures. Put them in the correct order from 1 to 4. Write a short caption for each stage.



5 EXPLAIN IT

Choose one of the processes (weathering, erosion or deposition) and explain how it helps to shape Aotearoa New Zealand. Use examples from places you know or from the pictures.

6 THINK FURTHER

- How do you think these processes might change this place in 100 years?
- Why do you think it's important to understand how Earth's processes work?

LAND
RIVERS
MOUNTAINS
OCEAN
A BRIGHTER
AOTEAROA

Caring for our environment
today, for tomorrow. ♥

THE FUTURE AOTEAROA QUEST

EXPLAIN A NATURAL PROCESS

- LABEL A DIAGRAM
- ORGANISE IDEAS
- USE KEY VOCABULARY
- WRITE A CLEAR EXPLANATION
- EDIT AND IMPROVE

EXPLAIN A NATURAL PROCESS

Find out. Put it in order. Explain it clearly.

Natural processes happen all around us. In this activity you will use what you learned on the previous page to write a clear explanation about the water cycle. Good explanations tell what happens, in what order, and why it happens.

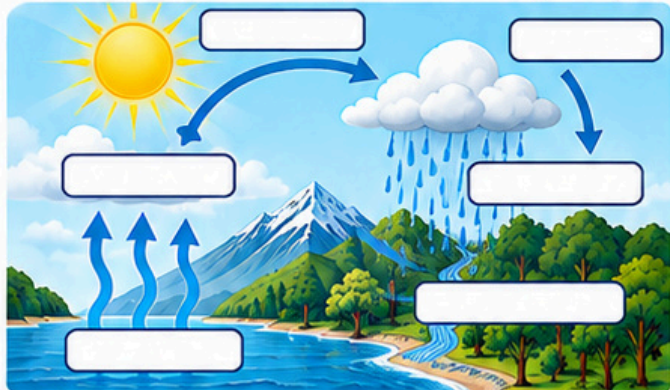
Clear explanations help us understand our world.

Nature has amazing systems. Let's share how they work!



1 LABEL THE DIAGRAM

Use the word bank to label the parts of the water cycle diagram.



Word bank:
evaporation
condensation
precipitation
collection
transpiration

2 PUT IT IN ORDER

Write the steps of the water cycle in the correct order. Use the words from the word bank.

- 1
- 2
- 3
- 4
- 5

3 USE KEY VOCABULARY

Write a short meaning for each word.

- 1 evaporation -
- 2 condensation -
- 3 precipitation -
- 4 collection -
- 5 transpiration -

4 PLAN YOUR EXPLANATION

Use the boxes to plan what you will write. Include what happens and why it happens.

Introduction

What is the water cycle?

.....

.....

.....

Main steps

What happens in order?
Why does it happen?

.....

.....

.....

Conclusion

Why is the water cycle important?

.....

.....

.....

5 WRITE YOUR EXPLANATION

Use your plan to write a clear explanation of the water cycle. Try to use some of the key vocabulary words.

.....

.....

.....

.....

.....

.....

.....

6 CHECK AND IMPROVE

Read your explanation. Use the checklist.

- ☐ I have a clear introduction.
- ☐ I have explained the steps in the correct order.
- ☐ I have used key vocabulary words.
- ☐ I have included why the process happens.
- ☐ My writing makes sense and is easy to follow.
- ☐ I have checked my spelling and punctuation.
- ☐ I can make one more improvement:

LEARN
EXPLORE
EXPLAIN
PROTECT
AOTEAROA

Understanding today.
A brighter tomorrow.

THE FUTURE AOTEAROA QUEST

ALGORITHM CHALLENGE

- FOLLOW INSTRUCTIONS.
- FIND ERRORS
- DEBUG
- WRITE AN ALGORITHM
- THINK LIKE A CODER

ALGORITHM CHALLENGE

Small steps. Big adventures.

An algorithm is a set of clear instructions that tells someone (or something) what to do, step by step. In this challenge you will follow, check, fix and write algorithms to help our companion reach its destination.

Clear instructions create brighter futures.

Good algorithms help us solve problems in the real world!

1 FOLLOW THE ALGORITHM

Start at the companion. Follow the instructions to find out where it ends up. Colour the square it finishes on.

	A	B	C	D	E
1			Tree		
2					Mountain
3	Companion				
4				Rock	
5					Star

Instructions:

- Move right 2
- Move up 1
- Move right 1
- Move down 2
- Move right 1

It finishes at:

2 FIND THE ERROR

Follow the instructions. There is one mistake. The robot ends up in the wrong place! Cross out the incorrect step and write the correct instruction.

	A	B	C	D	E
1		Tree			Star
2				House	
3					
4	Companion				
5			Rock		

Instructions:

- Move up 2
- Move right 3
- Move up 1
- Move left 1
- Move up 1

Step 4 is the mistake.

Correct instruction:

It should finish at:

3 WRITE YOUR OWN ALGORITHM

Write a clear set of instructions to move the companion from the start to the star.

	A	B	C	D	E
1	Companion				
2					Mountain
3		Water			
4			Tree		
5					Star

My instructions:

-
-
-
-
-
-

5 CHALLENGE: OBSTACLES

Write an algorithm to get from the start to the star without landing on the rocks (Rock) or water (Water).

	A	B	C	D	E
1	Companion				
2			Rock		
3		Water	Water		Water
4				Rock	
5					Star

My algorithm:

-
-
-
-
-
-

4 DEBUG AND IMPROVE

This algorithm is hard to follow. Rewrite it to make it clearer and more efficient (fewer steps).

Original algorithm:

- Move right 1
- Move right 1
- Move up 1
- Move right 1
- Move right 1
- Move up 1
- Move right 1

My improved algorithm:

-
-
-
-

Can you use bigger steps or a repeat to make it shorter?

6 THINK LIKE A CODER

Answer the questions.

a) Why is it important to be precise when writing instructions?

b) What strategies can help you find and fix errors in an algorithm?

c) Where might algorithms be used in real life? Give two examples.

-
-

Algorithms are all around us - in games, apps, robots and in everyday life!

CURIOSITY
LOGIC
PERSISTENCE
BRIGHTER
AOTEAROA

BIG
THINKERS
CREATE
A BRIGHTER
TOMORROW

THE FUTURE AOTEAROA QUEST

PATTERN & ALGEBRA LAB

- FIND PATTERNS
- DESCRIBE RULES
- SOLVE MISSING VALUES
- USE UNKNOWNNS
- PREDICT
- THINK LIKE A MATHEMATICIAN

PATTERN & ALGEBRA LAB

Look for the pattern.
Find the rule. What comes next?

Patterns are all around us – in nature, in buildings, in numbers and in everyday life. In this lab you'll explore number patterns, shape patterns and simple algebra to solve problems and make predictions.

Same patterns.
Brighter futures. ♥

Patterns help us make sense of the world – and create new possibilities! ♥

SPOT THE PATTERN
FIND THE RULE
SOLVE IT
YOU GOT THIS ♥

1 NUMBER PATTERNS

Look at the number patterns. Fill in the missing numbers and write the rule in words.

a) 3, 6, 9, 12, __, __, __

Rule: _____

b) 100, 95, 90, 85, __, __, __

Rule: _____

c) 2, 5, 8, 11, __, __, __

Rule: _____

d) 1, 4, 9, 16, 25, __, __

Rule: _____

2 SHAPE PATTERNS

Look at the growing pattern. Draw the next two shapes and describe the rule in words.



Rule: _____



Rule: _____



Rule: _____

3 FIND THE MISSING VALUE

Use the pattern rule to find the missing number.

a) 7, 14, 21, __, 35 (Add 7 each time)

b) 50, 45, 40, __, 30 (Subtract 5 each time)

c) 2, 4, 8, 16, __, 64 (Double each time)

d) 1, 1, 2, 3, 5, 8, __ (Each number is the sum of the previous two)

4 USE A RULE

Use the rule to complete the table.

a) Rule: $n + 4$

n	Output
1	
3	
5	
10	

b) Rule: $5n$

n	Output
1	
2	
4	
10	

5 SOLVE FOR THE UNKNOWN

Find the value of the unknown. Show your working or explain your thinking.

a) $x + 6 = 14 \rightarrow x =$ _____

b) $5 \times n = 30 \rightarrow n =$ _____

c) $y - 7 = 18 \rightarrow y =$ _____

d) $3 \times a + 2 = 20 \rightarrow a =$ _____

6 THINK AHEAD

Use the pattern rule to predict later terms.

a) A pattern increases by 6 each time. The first term is 8. What are the 8th and 10th terms?

8th term = _____ 10th term = _____

b) A pattern follows the rule $2n + 1$. What is the 20th term?

c) Create your own number or shape pattern. Write the rule and the next three terms.

EXPLORE PATTERNS
SOLVE PROBLEMS
CREATE BRIGHTER AOTEAROA ♥

BIG THINKING STARTS WITH A PATTERN ♥

THE FUTURE AOTEAROA QUEST

SOLVE THE PROBLEM

- ASK
- IMAGINE
- PLAN
- CREATE
- TEST
- IMPROVE

SOLVE THE PROBLEM

Turn ideas into real solutions.

Designers, engineers and creators use a process to solve problems. You can use the same steps to help plan, make and test your own solutions!

Small ideas can make a big difference. ♥

Same process. Brighter futures. ♥

IDEAS
PLAN
CREATE
TEST
IMPROVE
A BRIGHTER
AOTEAROA ♥



DESIGN CHALLENGE

Our local reserve needs more bins, but they need to be strong, easy to use and keep rubbish dry. Your challenge is to design a simple rubbish bin for outdoor use using recycled materials.

THINK ABOUT:

- What materials could you use?
- How will it stay dry?
- How can you make it easy to use?
- How will it look in the environment?
- Can it be made from recycled materials?



Design for real people, real places, real impact. ♥

1 ASK

What is the problem?

Write a short description of the problem.

.....

.....

Who is it for?

- ☐ our school ☐ the local reserve
- ☐ the community ☐ other:

What are the requirements? (What must it do?)

•

•

2 IMAGINE

Generate ideas!

Think of as many ideas as you can. There are no bad ideas at this stage.

•

•

•

•

•

•

3 PLAN

Choose your best idea and plan it.

Draw a labelled sketch of your design.

.....

.....

.....

.....

Materials needed:

How will it work?

4 CREATE

Make your design!

Use recycled or safe materials to build a prototype. You can draw a picture or take a photo.

.....

.....

.....

.....

5 TEST

Does it work?

Test your design. What worked well?
What didn't work?

Results:

.....

.....

What could be better?

.....

.....

6 IMPROVE

Make it even better!

What changes will you make to improve your design?

.....

.....

How will your improved design be better?

.....

.....

Final thoughts:

.....

.....

LESS
RUBBISH
BRIGHTER
AOTEAROA ♥

Ideas today. Cleaner tomorrows. ♥

THE FUTURE AOTEAROA QUEST

MATHS IN ACTION

- MEASURE ANGLES
- DRAW SHAPES
- FIND SYMMETRY
- USE TRANSFORMATIONS
- THINK SPATIALLY
- DESIGN & CREATE

GEOMETRY FOR DESIGNERS

Shapes build ideas. Geometry turns ideas into amazing places.

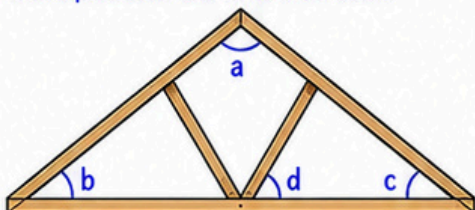
Designers and architects use geometry every day. Angles, shapes, symmetry and transformations help them create buildings that are strong, beautiful and connected to their environment.

Great designers see geometry everywhere! What will you design?

SHAPES
ANGLES
SYMMETRY
BALANCE
CREATIVITY

1 ANGLES IN ARCHITECTURE

Look at the roof truss below. Measure the marked angles with a protractor and write them down.



a = _____
b = _____
c = _____
d = _____

Think: In any triangle, the three angles add up to 180° . Does your drawing follow this rule?

2 2D SHAPES IN BUILDINGS

Identify each shape in the building design below and write how many of each shape you can find.



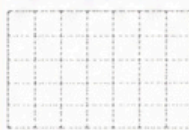
Triangles = _____
Squares = _____
Rectangles = _____
Circles = _____
Hexagons = _____
Other shapes = _____

3 SYMMETRY SPOTTER

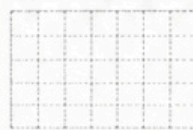
Which of these designs have line symmetry? Tick yes or no. If yes, draw the line(s) of symmetry.



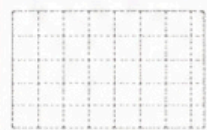
Yes ☐ No ☐
Draw line(s) below:



Yes ☐ No ☐
Draw line(s) below:



Yes ☐ No ☐
Draw line(s) below:



4 TRANSFORMATIONS

The shape on the left is moved (translated), turned (rotated) and flipped (reflected). Draw the result in each grid.

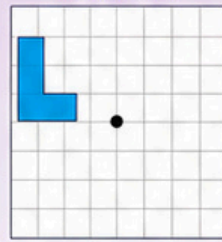
Translate

Move the shape 4 squares right and 2 squares up.



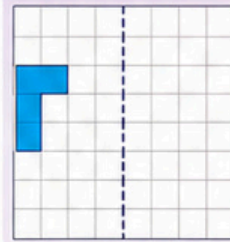
Rotate

Rotate the shape 90° clockwise about the dot.



Reflect

Reflect the shape in the vertical line.



5 SPATIAL REASONING

Look at the 3D building below.

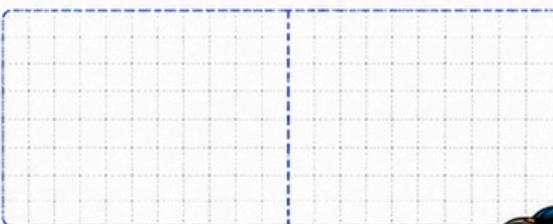


- How many faces does the building have? _____
- How many edges? _____
- How many vertices (corners)? _____
- From the front, what 2D shape do you mostly see? _____
- From the side, what 2D shape do you mostly see? _____

6 DESIGN CHALLENGE

Design your own where (meeting house) front. Use at least:

- 2 different types of triangles
- 1 line of symmetry
- 1 circle or hexagon
- Pattern or transformation (repeat, rotate or reflect)



Be creative! Label the shapes and angles you use.

MATHS + CREATIVITY = SOLUTIONS FOR AOTEAROA

THE FUTURE AOTEAROA QUEST

QUEST 1 THE RESCUE LAB: WHAT HAPPENED?

- OBSERVE
- INVESTIGATE
- ASK QUESTIONS
- LOOK FOR EVIDENCE
- THINK SCIENTIFICALLY
- CARE FOR AOTEAROA

THE RESCUE LAB

WHAT HAPPENED?

Something isn't right at the stream ...

Our local awa (stream) is an important place for people, plants and animals. But lately, there have been signs that something is wrong. Your team has been asked to investigate. Look at the information below and see what you can find out!

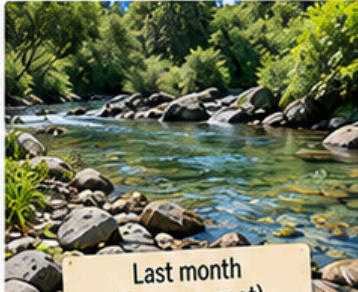
Healthy places.
Brighter futures.

Curious minds notice more. Small clues can lead to big solutions.



1 THE SITUATION

Last weekend, after heavy rain, people noticed changes at Mangatahi Stream, a popular spot in our community.



Last month
(the same spot)



This week
(after heavy rain)

2 OBSERVATIONS

Look at the images and information. What do you notice? Write down as many observations as you can.

- ☐ The water looks muddier than usual.
- ☐ There is rubbish near the water.
- ☐ Some plants near the bank look damaged.
- ☐ There are fewer insects in the water.
- ☐ A strange smell was reported.
- ☐ Tracks from vehicles were seen near the bank.
- ☐ Other:
- ☐ Other:

Use your senses!
What can you see, hear, smell or notice?

3 INITIAL EVIDENCE

Our team collected some quick data. This is just the beginning!

Test	Upstream (further up)	Near the park (affected area)	Downstream (further down)
Water clarity (Secchi tube, cm)	85	25	40
pH (acidity)	7.2	6.4	6.8
Nitrate level (mg/L)	0.3	1.8	1.1
Number of insect larvae (in 1 min)	18	4	7

4 POSSIBLE CAUSES

Here are some ideas from our initial investigation. Which do you think could explain what's happening? Tick the ones that might be possible. You can choose more than one.

- ☐ Rubbish left by visitors
- ☐ Runoff from farms (e.g. fertiliser)
- ☐ Sediment from recent construction
- ☐ A burst stormwater pipe
- ☐ Natural causes (e.g. heavy rain)
- ☐ Vehicles driving near the stream
- ☐ Something else:

There might be more than one cause!
What evidence would help you find out?

5 WHAT DO WE KNOW?

Write a short summary of what you know so far about the situation at Mangatahi Stream.

.....

.....

.....

.....

.....

6 WHAT DO WE NEED TO INVESTIGATE?

What questions do we still need to answer? Write at least three questions to guide your next steps.

-
-
-
-
-

Investigate today
for a cleaner tomorrow.

HEALTHY
WATER
THRIVING LIFE
BRIGHTER
AOTEAROA

THE FUTURE AOTEAROA QUEST

QUEST 2 THE RESCUE LAB: ANALYSE THE EVIDENCE.

- INVESTIGATE
- ANALYSE
- COMPARE
- THINK CRITICALLY
- USE EVIDENCE
- FIND THE TRUTH

THE RESCUE LAB

ANALYSE THE EVIDENCE

Look closer. What does the evidence tell us?

Our local river isn't as healthy as it used to be. The Rescue Lab team collected some data to find out what might be causing the problem. Your job is to analyse the evidence, look for patterns and decide which explanations are most likely.

Real data. Real thinking.
Brighter solutions.

Data helps us see what's really happening so we can make better choices.

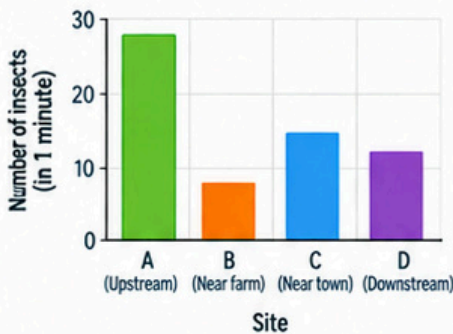
1 WATER TEST RESULTS

The team tested the river at four different sites. Healthy rivers usually have clear water, low nitrate levels and lots of insect life.

Site	Water clarity (cm) ↑ (higher is clearer)	Nitrate level (mg/L) ↓ (lower is better)	Insect life (count in 1 minute) ↑ (higher is healthier)
A – Upstream (Forest area)	92	0.4	28
B – Near farm	45	2.8	8
C – Near town	60	1.9	14
D – Downstream (Coast)	55	1.5	12

3 INSECT LIFE GRAPH

This graph shows the number of aquatic insects found at each site.



a) Which site had the most insect life?

b) Which site had the least insect life?

c) What pattern do you notice?

2 RUBBISH COUNTS

The team collected and sorted rubbish from a 100 metre section of river at two locations.

Type of rubbish	Near farm (count)	Near town (count)
Plastic bottles	8	15
Food wrappers	5	12
Fishing line	2	4
Building materials	1	6
Other	4	8

a) Which location had more rubbish overall?

b) What type of rubbish was most common?

4 POSSIBLE EXPLANATIONS

Here are some ideas about what might be causing the problems in the river. Use the evidence to decide if each one is supported or not supported.

Possible explanation	Supported by evidence (✓)	Not supported by evidence (✗)
Farm runoff (fertiliser) is adding nitrates to the river.		
Most of the rubbish comes from the town.		
The river is equally healthy at all sites.		
People are littering near the town.		
Something else might also be causing the problem.		

5 THINK CRITICALLY

a) Which explanation do you think is most likely? Use evidence from the tables or graph to support your answer.

b) Which explanation is least likely? Why?

c) What other information would you like to find out?

6 YOUR CONCLUSION

Write a short paragraph to explain what the evidence tells us about the river and what should happen next.

Evidence today.
A healthier tomorrow.

THE FUTURE AOTEAROA QUEST

QUEST 3 THE RESCUE LAB: DESIGN THE SOLUTION.

- INVESTIGATE
- DESIGN
- EXPLAIN
- EVALUATE
- MAKE A DIFFERENCE

THE RESCUE LAB

DESIGN THE SOLUTION

Real problems. Bright ideas.

A local river has become polluted after a storm, and native wildlife is at risk. Your challenge is to design a solution that could help clean up the water and protect the environment.

Kō tātou te huringa!
We are the change!

Think like a scientist. Create like an innovator. Care like a kaitiaki. ♥



1 UNDERSTAND THE PROBLEM

After a heavy storm, a nearby river has become polluted. Rubbish, soil and other harmful materials have washed into the water. Fish and other native species are at risk.



How might this pollution affect:

- the water quality?
- native plants and animals?
- the local community?

Write your ideas:

.....

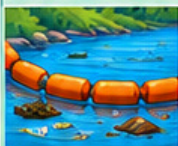
.....

.....

2 EXPLORE IDEAS

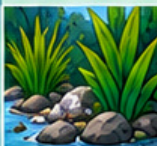
Here are some possible ways to help. You can also think of your own idea!

Floating Barrier



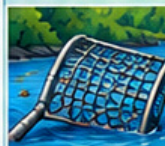
A barrier that catches rubbish before it flows further downstream.

Natural Filter



Plants, rocks and gravels that help filter the water.

Rubbish Collector



A device that collects floating rubbish.

Awareness Campaign



Educate people to reduce rubbish and keep our rivers clean.

Which idea will you choose or will you design a new one?

Why do you think it could work?

.....

3 DESIGN YOUR SOLUTION

Draw a labelled diagram of your solution. Include key parts and how it will work.

.....

Label the important parts:

-
-
-
-

4 EXPLAIN THE SCIENCE

Explain how your solution will help. Use scientific ideas such as forces, materials, pollution, water flow, plants, or living things.

My solution works because:

.....

.....

.....

The science behind it is:

.....

.....

.....

Use these words (if helpful):

- filter
- float / sink
- attract
- separate
- absorb
- biodegradable
- reduce
- habitat
- ecosystem

5 THINK ABOUT THE CONSEQUENCES

Every solution has positives and possible challenges.



Good things (benefits)

-
-
-



Possible challenges

-
-
-

How could you improve your design to make it even better?

.....

.....

6 PRESENT YOUR SOLUTION

Write a short paragraph or create a poster to explain your solution to others (e.g. your class, whānau or community). Include:

- ☐ the problem
- ☐ your solution
- ☐ how it works (scientific reasoning)
- ☐ the benefits
- ☐ any challenges
- ☐ a strong closing sentence (e.g. a call to action)

Small ideas can make a big difference! ♥

CLEAN PLACES
HEALTHY PEOPLE
BRIGHTER
AOTEAROA

THE FUTURE AOTEAROA QUEST

TERM 3 REFLECTION

- SCIENCE
- SYSTEMS
- SOLUTIONS
- REFLECT
- CELEBRATE
- PLAN AHEAD



TERM 3 REFLECTION

SCIENCE, SYSTEMS & SOLUTIONS MISSION COMPLETE

You've explored, investigated and problem-solved this term. Now it's time to reflect on what you've learned, celebrate your progress and think about what's next!

Reflect
Learn
Be proud
Keep going
You've got this!



SAME
CURIOSITY
BRIGHTER
SOLUTIONS
A BRIGHTER
AOTEAROA

1 MY LEARNING JOURNEY

Look back at Term 3. What are three new things you learned? They could be from science, maths, English, social sciences or something else.

-
-
-

2 I CAN ...

Tick the skills you feel more confident with now.

- | | |
|---|---|
| ☐ Ask questions | ☐ Think about different perspectives |
| ☐ Plan an investigation | ☐ Be creative |
| ☐ Use data and evidence | ☐ Keep going when it's hard |
| ☐ Solve problems | ☐ Make connections between ideas |
| ☐ Work with others | ☐ Other: |
| ☐ Explain my ideas clearly | |

3 BIG IDEAS

Choose one topic from Term 3 (e.g. ecosystems, forces, materials, tech solutions, communities).

- What did you learn?
.....
- Why is it important?
.....
- How might it help make a better Aotearoa?
.....

4 CHALLENGE: PUT IT TOGETHER

Use what you have learned to solve this mini challenge.

"Your school wants to reduce waste. Design a simple solution."

You could:

- draw a design
- write a plan
- explain how it would work
- list the materials needed
- include the benefits for your school and community

My solution:

.....



5 SELF REFLECTION

Finish these sentences.

- I am proud of
- I found challenging
- I am getting better at
- Next term I want to
- One way I can help others is

6 MISSION COMPLETE

Colour in the badges to celebrate your Term 3 journey!



KEPT
EXPLORING



SOLVED
PROBLEMS



WORKED
TOGETHER



THOUGHT
ABOUT A BRIGHTER
AOTEAROA

"Curious minds create brighter futures." ♥

PEOPLE
IDEAS
PLACES
BRIGHTER
AOTEAROA

EXPLORE
SOLVE
CREATE
BELONG

THE FUTURE AOTEAROA QUEST

EVIDENCE FROM THE PAST

- EXPLORE
- INVESTIGATE
- THINK CRITICALLY
- FIND EVIDENCE
- LEARN FROM THE PAST

EVIDENCE FROM THE PAST

Different clues. Bigger understanding.

Historians use different types of sources to learn about the past. Each source can tell us something, but each also has limitations. In this activity you will look at four fictional sources about the same event and think about what they can and cannot tell us.

Objects, images, words and stories all help us understand the past. ♥



1 PHOTOGRAPH (RECREATION)



Workers building a bridge across the Wharekawa River, 1952.

- What can this source tell us about the past?
- What can't it tell us?
- What questions would you like to ask about this photo?

2 DIARY EXCERPT (FICTIONAL)



14 September 1952

Today we worked on the new bridge again. It was hard work but we made good progress. The weather was cold and muddy, and my hands are sore! I'm proud to be part of something that will help our town. I hope it's finished before summer.

- J. T.

- What can this source tell us about the past?
- What can't it tell us?
- How might the writer's feelings influence what they wrote?

3 OBJECT (RECREATION)



Hammer found near the old bridge site. It has the initials "R.K." on the handle.

- What can this source tell us about the past?
- What can't it tell us?
- What might this object have been used for?
- What other information would you need to know?

4 NEWSPAPER EXTRACT (FICTIONAL)



The Wharekawa Chronicle

15 SEPTEMBER 1952

New Bridge Brings Community Closer

Work on the Wharekawa River bridge is well underway, with local workers and volunteers helping to make the project a reality.

The bridge is expected to improve travel, support local businesses and make it easier for families to visit each other.

- What can this source tell us about the past?
- What can't it tell us?
- What is the purpose of this newspaper article?
- Might this source be biased? Why or why not?

5 COMPARE THE SOURCES



- Which source gives the most detail about people's feelings?
- Which source would be most useful to find out what the bridge looked like?
- Which source would be most useful to find out why the bridge was built?
- How do the sources support each other? Give an example.
- Are there any differences between the sources? What might explain this?

6 THINK ABOUT IT



Historians often use many different sources to build a clearer picture of the past.

- Why do you think it's important to look at more than one source?
- What have you learned from this activity about how we find out about the past?
- Imagine you found a new source about this event. What might it be? How could it help us?

SMALL CLUES BIG STORIES

PEOPLE PLACES IDEAS BRIGHTER AOTEAROA

THE FUTURE AOTEAROA QUEST

WHOSE STORY?

READ
COMPARE
ANALYSE
LOOK CLOSER
THINK CRITICALLY
RESPECT
DIFFERENT VIEWS

WHOSE STORY?

Same event.
Different perspectives.

People can experience the same event in different ways. In this activity you will read two accounts of the same event, compare the language and information included, and think about point of view.

Different stories.
Different views.
A stronger Aotearoa. ♥

LISTEN
THINK
RESPECT
LEARN
GROW

A TAMA'S STORY

I was just trying to help ...

On Friday, our school held a community clean-up day at the river. I was excited because I love being outside and doing something good for our town.

Our group was collecting rubbish near the old bridge. I saw a big piece of metal partly in the water, so I climbed down to get a better look. It was heavier than I thought and slipped out of my hands, making a big splash. Suddenly everyone was worried that I had fallen in, but I was fine. I just got a bit wet!

After that, our teacher reminded us to stay on the path and not go down the bank. I felt a bit embarrassed, but I also felt proud that we still collected a lot of rubbish. It was a good day and I learned to be more careful, even when I'm trying to help.

B MIA'S STORY

It was a stressful moment ...

On Friday, our school held a community clean-up day at the river. I was in the same group as Tama.

Things were going well until Tama climbed down the bank near the old bridge. I was worried because it was slippery and the water looked deep. Then the metal he was holding fell into the river with a loud splash. For a moment I thought he had fallen in! I felt really scared and called out to the teacher.

Luckily he was alright, just wet, but it could have been much worse.

I think we need clearer rules and maybe an adult with each small group. The clean-up was a good idea and it's important work, but safety should come first.

3 COMPARE THE STORIES

Complete the table to show how the two stories are different. Give examples from the text.

Feature	Tama's Story	Mia's Story
How the event is described		
Feelings and emotions		
What information is included		
Tone of the writing (e.g. positive, worried)		
Words or phrases that stand out		

5 YOUR POINT OF VIEW

Write a short paragraph from a third perspective. Choose one:

- the teacher
- a parent
- another student
- a member of the community

4 THINK MORE DEEPLY

a) Why do you think Tama and Mia remember the event differently?

b) Which story do you think gives more detail? Give an example.

c) Is one of the stories more convincing? Why?

d) What might a teacher's perspective of this event include?

6 KEY IDEAS

What have you learned from this activity? Tick the ideas that you agree with.

- ☐ People can experience the same event in different ways.
- ☐ The words a person uses can show their feelings and attitude.
- ☐ It's important to listen to different perspectives.
- ☐ Understanding different points of view can help us make fair decisions.
- ☐ Comparing sources helps us be better critical thinkers.
- ☐ I can use what I have learned in other situations.

CURIOSITY
KINDNESS
BETTER
SOLUTIONS

PEOPLE
IDEAS
PLACES
BRIGHTER
AOTEAROA

THE FUTURE AOTEAROA QUEST

MAPS IN ACTION

- READ MAPS
- FIND INFORMATION
- MEASURE DISTANCES
- SOLVE PROBLEMS
- EXPLORE PLACES
- PLAN ROUTES

MAPS AROUND US

Maps help us explore, plan
and make better choices.

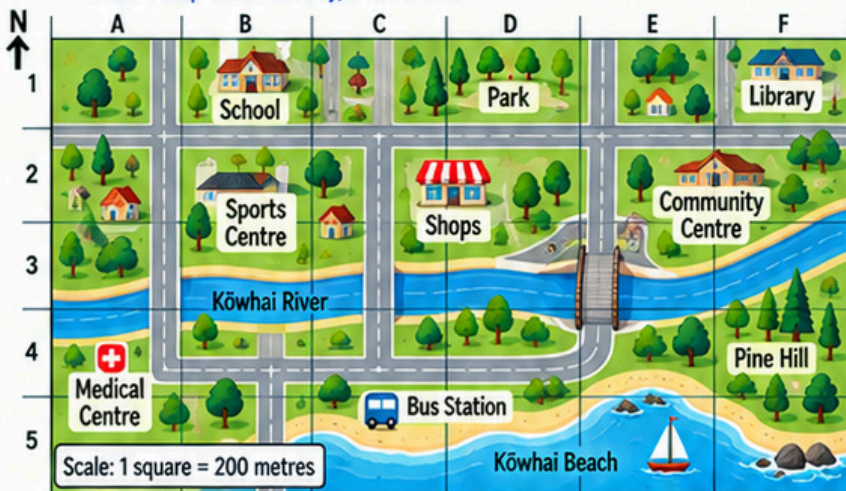
In this activity you will use a map of a fictional town
to find places, measure distances, plan a route and
answer questions. Maps are useful in everyday life!

Same
places.
New
perspectives.
A brighter
Aotearoa.



1 OUR TOWN MAP

Here is a map of Kōwhai Bay, a fictional town.



2 FIND THE PLACES

Use the map to answer the questions.

- What grid reference is the Library?
.....
- What grid reference is the Bus Station?
.....
- Which place is at C2?
.....
- Which two places are next to each other at E3?
.....
- Which place is south of the Shops?
.....

3 MEASURE THE DISTANCES

Use the scale (1 square = 200 metres) to estimate the distances.

- How far is it from the School to the Library?
.....
- How far is it from the Bus Station to the Sports Centre?
.....
- How far is it from the Medical Centre to the Community Centre?
.....
- Which two places are about 400 metres apart?
.....

4 PLAN A ROUTE

Tama needs to get from the School to the Beach.

- Write the directions he could follow.
.....
.....
.....
- About how far will he travel?
- Name one other route he could take. Would it be shorter or longer? Explain your answer.
.....
.....

5 THINK ABOUT IT

- Why might a map be useful for new people visiting Kōwhai Bay?
.....
.....
- How could maps help our community make better decisions?
.....
.....
- What other information could be added to this map?
.....
.....

6 CHALLENGE

Design a new map symbol for something important in your community (e.g. recycling centre, marae, playground, bike track). Draw your symbol and write what it means.

My symbol represents:
.....

It is important because:
.....
.....

KŌWHAI BAY
STRONGER
PEOPLE
BRIGHTER PLACES
BRIGHTER
AOTEAROA

EXPLORE
RESPECT
CARE
BELONG

THE FUTURE AOTEAROA QUEST

MATHEMATICS IN ACTION

- EXPLORE
- ANALYSE
- SOLVE
- THINK
- APPLY

POPULATION DATA

Numbers tell stories.
People build brighter communities.

In this activity you will explore population data for five fictional towns over time. You will compare, calculate changes and write evidence-based observations.

Data can help us plan for a brighter Aotearoa. ♥

1 POPULATION TABLE

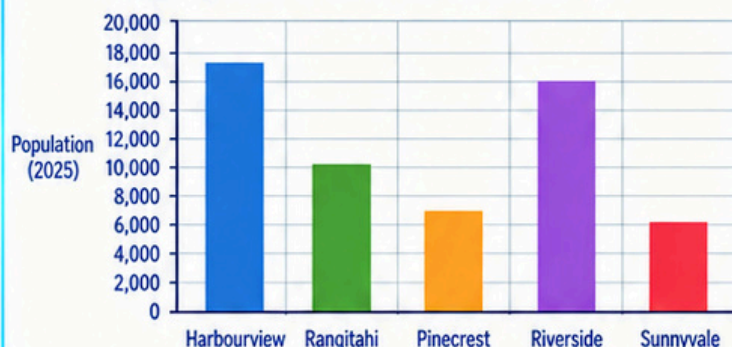
The table below shows the population of five fictional towns from 2010, 2015, 2020 and 2025.

Town	2010	2015	2020	2025
Harbourview	12,400	13,800	15,200	16,900
Rangitahi	8,500	9,100	9,800	10,600
Pinecrest	5,200	5,600	6,100	6,800
Riverside	18,000	17,500	16,900	16,200
Sunnyvale	3,800	4,200	5,000	6,100

Note: This data is fictional and created for learning purposes.

2 BAR GRAPH

Use the data from the table to complete the bar graph below. The 2025 population for each town has been started for you.



3 CALCULATE THE CHANGES

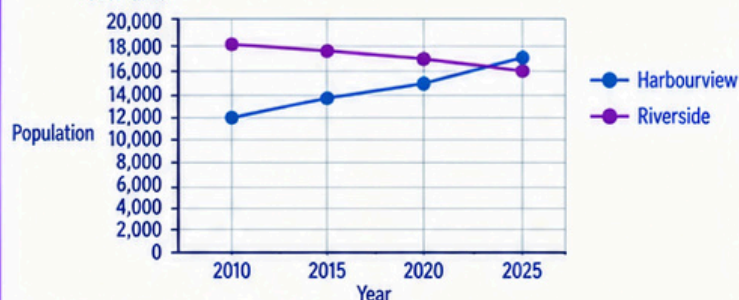
- a) How much did the population increase or decrease from 2010 to 2025 for each town?

Town	Change (2010 to 2025)
Harbourview	
Rangitahi	
Pinecrest	
Riverside	
Sunnyvale	

- b) Which town had the greatest increase?
.....
- c) Which town had a decrease? How many people did it lose?
.....

4 LINE GRAPH

The graph below shows the population of Harbourview and Riverside over time.



- a) What trend do you notice for each town?
.....
- b) What might be some reasons for these trends?
.....

5 THINK ABOUT IT

- a) Which town do you think will have the largest population in 2030? Explain your reasoning using the data.
.....
- b) Which town might need more school places? Why?
.....
- c) How could population data help a town plan for the future?
.....

6 CHALLENGE

Choose one town and write a short paragraph explaining what the population change might mean for the town. Use evidence from the data to support your ideas.

.....

.....

.....

.....

PEOPLE
PLACES
IDEAS
BRIGHTER
AOTEAROA

THE FUTURE AOTEAROA QUEST

SOCIAL SCIENCES
IN ACTION

PEOPLE
IDEAS
DECISIONS
FAIRNESS
STRONGER
COMMUNITIES:



HOW DECISIONS GET MADE

Our voices. Our communities.
A brighter Aotearoa.

Lots of decisions affect our lives – at school, in our local community and across Aotearoa New Zealand. Learning about how decisions are made helps us be informed, get involved and make fairer choices for everyone.

Different people.
Different ideas.
Brighter solutions. ♥



1 WHY DO WE HAVE VOTING?



In Aotearoa New Zealand, people aged 18 and over can vote in elections. We vote to help choose people to represent us and make decisions on important issues.

Tick the statements that are true.

- ☐ Voting gives people a say in who makes decisions.
- ☐ Everyone in New Zealand can vote, no matter their age.
- ☐ The people we vote for are called representatives.
- ☐ Voting helps make sure different ideas are included.
- ☐ We should always listen to others, even if we disagree.
- ☐ Voting is the only way to make a difference.

2 DIFFERENT WAYS DECISIONS ARE MADE



There are different ways to make decisions. Each has advantages and disadvantages.

Match each method to its description.

Voting

A small group decides

Everyone agrees (consensus)

Random selection (a lottery)

Asking for feedback (consultation)

- A A chance for many people to have a say.
- B People work together until everyone is happy.
- C People choose by majority (e.g. most votes).
- D A few people make the decision (e.g. a principal or council).
- E People are chosen randomly (from a group).

3 SCENARIO: OUR SCHOOL SPACES



Your school has \$10,000 to spend on one improvement. Options include:

- a new playground
- a covered outdoor learning area
- more trees and gardens
- upgraded sports equipment
- a creative arts space

How should the school decide? What method would be fairest? Explain your choice.

4 RIGHTS AND RESPONSIBILITIES



We all have rights and responsibilities in a democratic society. This helps keep our communities fair, safe and respectful.

Some of our rights include:

- a say in decisions (e.g. through voting)
- being treated fairly
- freedom to share our ideas
- access to information
- respect for our culture, identity and language

Some of our responsibilities include:

- listening to others
- treating people with respect
- being informed before making decisions
- contributing to our community
- caring for our environment
- speaking up for what is fair and right

5 THINK ABOUT IT

- a) What are the advantages of letting everyone vote on the school decision?
.....
.....
- b) What are the disadvantages?
.....
.....
- c) How might we make sure all voices are heard, including people who are quiet or hard to reach?
.....
.....
- d) What would happen if only a small group made the decision? Would that be fair? Why or why not?
.....
.....

6 TAKE ACTION



Choose one thing you could do to make a positive difference in your school or local community. It could be big or small!

My idea:

How will it help?

What's the first step?

PEOPLE
IDEAS
PLACES
BRIGHTER
AOTEAROA



"He iti te kōpara e taea e te pūtāhiti."
Small actions can make a big difference.



STRONGER
COMMUNITIES
BRIGHTER
FUTURES



THE FUTURE AOTEAROA QUEST

MATHEMATICS IN ACTION

EXPLORE
CALCULATE
ANALYSE
SOLVE
APPLY

ELECTION MATHS

Numbers today.
Stronger communities tomorrow.

Elections help communities make decisions. In this activity you will use real maths skills to explore a fictional town election and what the results mean.

Different ideas.
Stronger Aotearoa. ♥

COMMUNITIES THRIVE WHEN PEOPLE GET INVOLVED ♥

1 THE RESULTS

Here are the results from the Rivermouth Town Council election.
A total of 2,400 people voted.

Community Group	Votes	Percentage
Harbour Helpers	720	
Green Spaces	600	
Safer Streets	480	
Youth Voice	360	
Local Businesses	240	

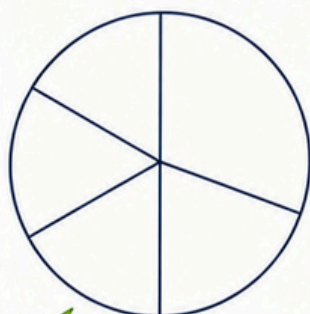
- Complete the percentage for each group.
(Round to the nearest whole percent.)
- Which group received the most votes?

3 COMPARE

- How many more votes did Harbour Helpers get than Local Businesses?
.....
- How many fewer votes did Youth Voice get than Green Spaces?
.....
- What is the difference between the highest and lowest number of votes?
.....
- Put the groups in order from most votes to least votes.
1. 2. 3. 4. 5.

5 PIE CHART

Complete the pie chart to show the election results.
Use a protractor if needed.



Harbour Helpers
Green Spaces
Safer Streets
Youth Voice
Local Businesses

Maths helps us see the bigger picture and make fair choices for our communities. ♥

2 GRAPH IT

Use the data to complete the bar graph.



4 FRACTIONS & PROPORTIONS

- What fraction of the total votes did Safer Streets receive?
Give your answer in simplest form.
- What fraction of the total votes did Green Spaces and Youth Voice receive together?
.....
- What percentage of votes did the remaining groups (Harbour Helpers, Safer Streets and Local Businesses) receive together?
.....
- If 1 out of every 6 people who voted chose Local Businesses, is this true? Show your working.
.....

6 THINK ABOUT IT

- What do the results tell you about the priorities of people in Rivermouth?
.....
- If you were on the council, what would you do to make sure all groups are heard?
.....
- How can data and graphs help people make informed decisions?
.....

PEOPLE IDEAS PLACES BRIGHTER AOTEAROA ♥

THE FUTURE AOTEAROA QUEST

ENGLISH IN ACTION

EXPRESS
INFORM
PERSUADE
CREATE CHANGE
A STRONGER
AOTEAROA

PERSUASIVE SPEECH

Your voice can make a difference.

A persuasive speech is a short talk that shares your ideas, builds a strong case and encourages others to take action. Use this page to plan your speech.

Strong voices build stronger communities.

1 OPENING HOOK

Start with something that grabs your audience's attention.

- A surprising fact
- A question
- A short story or example
- A powerful statement

2 YOUR POSITION

Clearly state what you believe and what you want to happen.

I believe
because

PERSUASIVE LANGUAGE BANK

Show your opinion

- I believe ...
- I strongly think ...
- In my view ...
- I am convinced ...
- It is clear that ...

Give reasons

- Firstly ...
- Another reason is ...
- Also ...
- Furthermore ...
- Most importantly ...

Use evidence

- For example ...
- Research shows ...
- In our community ...
- A recent survey found ...
- The data tells us ...

Connect with your audience

- We all ...
- Imagine if ...
- This affects us because ...
- Together we can ...
- Our community ...

End strongly

- So let's ...
- It's time to ...
- We can make a difference ...
- A better future is possible ...
- Let's make it happen!

3 YOUR REASONS

Write 2–3 main reasons to support your position.

1.
2.
3.

4 YOUR EVIDENCE

Add facts, examples or real-life experiences to support your reasons.

1.
2.
3.

5 AUDIENCE CONNECTION

Show why this matters to your audience. How will it benefit them, your community or Aotearoa?

.....
.....
.....

6 STRONG ENDING

Finish with a clear call to action or a message that people will remember.

Let's
.....
.....

7 CHECK YOUR SPEECH

Use this checklist before you write or present your speech.

- | | |
|--|---|
| ☐ I have a strong opening that grabs attention. | ☐ I connected with my audience. |
| ☐ I clearly stated my position. | ☐ I finished with a strong ending. |
| ☐ I gave 2–3 strong reasons. | ☐ I used persuasive language. |
| ☐ I used facts, examples or real-life evidence. | ☐ My speech is clear, respectful and positive. |

BETTER
PEOPLE
BRIGHTER PLACES
BRIGHTER
AOTEAROA

THE FUTURE AOTEAROA QUEST

ENGLISH IN ACTION

THINK
SPEAK
LISTEN
RESPECT
SHARE IDEAS
MAKE A DIFFERENCE!



DEBATE CHALLENGE

Different ideas. Brighter solutions.

A debate is a respectful discussion where people share different opinions and give reasons. It helps us think deeply, listen to others and find better solutions for our communities.

Be curious.
Be kind.
Be open to
different ideas. ♥



GOOD
IDEAS BUILD
BRIGHTER
AOTEAROA
♥

What do you think?
Is this a good idea?
Or not?
It's time to make
your case! ♥

THIS WEEK'S
DEBATE
PROPOSITION:



**"Our town should spend more money
on outdoor spaces (like parks, walking tracks
and bike paths) than on new buildings."**

1 MY POSITION



State your opinion. Do you agree or disagree with the proposition. Write a short statement to explain your position.

I with the proposition.

My position is:

2 MY EVIDENCE



Give at least three reasons to support your position. Use facts, examples or real-life experiences.

1

2

3

3 THE OTHER SIDE MAY SAY ...



What might someone who disagrees with you say? Think about their reasons. Write at least two points.

1

2

4 MY RESPONSE



Explain how you would respond to their points. Be respectful and use clear reasons.

1

2

5 MY STRONGEST POINT



What is your most important reason? Why is it the strongest? Try to make it memorable!

Strong ideas
can lead to
real change. ♥



PEOPLE
IDEAS
PLACES
A BRIGHTER
AOTEAROA
♥

THE FUTURE AOTEAROA QUEST

HEALTH IN ACTION

KAHA TINANA
KAHA HINENGARO
KAHA WHANAU
BRIGHTER ME
BRIGHTER AOTEAROA

MY WELLBEING TOOLKIT

Small steps. Big difference.

Looking after your wellbeing helps you feel good, do your best and be there for the people and things that matter to you. Use this page to create your own wellbeing toolkit.

A brighter me helps create a brighter Aotearoa. ♥



1

KAHA TINANA PHYSICAL WELLBEING



Things that help my body feel good and give me energy.

- ☐ Get enough sleep
- ☐ Eat good kai (healthy food)
- ☐ Move my body (e.g. sport, walking, dancing)
- ☐ Spend time outside in nature
- ☐ Drink water
- ☐ Take breaks from screens
- ☐ Other:

My top 3 ideas:

1.
2.
3.

2

KAHA HINENGARO EMOTIONAL & MENTAL WELLBEING



Things that help me feel calm, positive and focused.

- ☐ Take deep breaths
- ☐ Do something creative (e.g. drawing, music)
- ☐ Have quiet time or mindfulness
- ☐ Set small goals
- ☐ Try to think kindly about myself
- ☐ Do something I enjoy
- ☐ Other:

My top 3 ideas:

1.
2.
3.

3

KAHA WHANAU SOCIAL & RELATIONAL WELLBEING



Things that help me feel connected and supported.

- ☐ Spend time with whānau
- ☐ Catch up with friends
- ☐ Be kind and show respect to others
- ☐ Join a club or community group
- ☐ Talk to someone I trust
- ☐ Help others
- ☐ Other:

My top 3 ideas:

1.
2.
3.

4

REST & RECHARGE



We all need time to rest. This helps us have more energy, a better mood and a clearer mind.

- ☐ Get enough sleep
- ☐ Have screen-free time
- ☐ Do something relaxing
- ☐ Take breaks when I need to
- ☐ Find a quiet space
- ☐ Other:

My top 3 ideas:

1.
2.
3.

5

PEOPLE I CAN TALK TO



It's okay to ask for support. Write the names of people you can talk to if you're feeling worried, stressed or just need someone to listen.

1.
2.
3.
4.
5.



You are not alone. There are people who care. ♥

6

MY WELLBEING PLAN



Choose at least 5 things from above and write a plan for how you will include them in your everyday life.

What I will do	When?	How it will help

7

REFLECT



Answer the questions.

- 1 What is one thing you already do well to look after your wellbeing?
.....
- 2 What is one new thing you want to try?
.....
- 3 How will your wellbeing toolkit help you now and in the future?
.....

He iti te kōpara e taea e te pūtahiti. Small actions can make a big difference. ♥



A BRIGHTER ME

Complete these sentences.

I feel my best when

I can make a difference by

I am looking forward to



THE FUTURE AOTEAROA QUEST

MATHEMATICS IN ACTION

PLAN
MANAGE
SOLVE
BALANCE
ACHIEVE

TIME & PLANNING CHALLENGE

Make the most of your time to make a bigger difference.

Real life often means juggling lots of things. In this challenge you will read timetables, calculate times and plan a busy day.

Good planning today, brighter tomorrows.



1 READ THE TIMETABLE



Here is a bus timetable for travel between places in our region.

From	To	Departure	Arrival	Travel time
Taumarunui	Te Kuiti	8:00 am	9:15 am	1 h 15 min
Taumarunui	Hamilton	10:30 am	1:00 pm	2 h 30 min
Te Kuiti	Hamilton	9:40 am	11:10 am	1 h 30 min
Taumarunui	National Park	7:30 am	8:20 am	50 min
National Park	Taumarunui	4:10 pm	5:00 pm	50 min

2 CALCULATE ELAPSED TIME



Work out the answers. You can use a number line, a timeline or a calculator.

- The bus leaves Taumarunui at 8:00 am and arrives in Te Kuiti at 9:15 am. How long is the journey?
- The bus leaves Te Kuiti at 9:40 am and arrives in Hamilton at 11:10 am. How long is the journey?
- You arrive in Hamilton at 1:00 pm. You have a meeting at 1:45 pm. How much time do you have?
- You leave National Park at 4:10 pm and arrive in Taumarunui at 5:00 pm. How long is the journey?

3 A BUSY DAY



Here is part of Alex's Saturday. Use the information to complete the schedule.

Time	Activity	Location
8:00 am	Bus to Te Kuiti	Taumarunui → Te Kuiti
9:30 am	Community clean-up	Te Kuiti River Park
11:00 am	Bus to Hamilton	Te Kuiti → Hamilton
1:45 pm	Volunteer meeting	Hamilton Community Centre
3:30 pm	Sport training	Hamilton Sports Park
5:30 pm	Bus home	Hamilton → Taumarunui
7:00 pm	Dinner at home	Taumarunui

4 FIND AND SOLVE THE CONFLICT



Alex also wants to go to a friends birthday from 3:00 pm – 4:00 pm in Hamilton. This clashes with sport training (3:30 pm).

- What is the conflict?
- Suggest two possible solutions. (Think about changing times, travelling earlier/later, or choosing a different option.)
a)
b)
- Which solution do you think is the best? Explain your reasoning.

Sometimes we have to make choices. That's part of planning!

5 CREATE YOUR OWN SCHEDULE



Plan your own busy day. Include at least 5 different activities (e.g. school, sport, whānau time, homework, travel, hobbies).

Time	Activity	Location / Notes

Plan it.
Do it.
Feel proud!

6 REFLECT



Answer the questions.

- What is one thing you found challenging about planning your day?
- What is one strategy that helps you manage your time?
- How can good planning help you achieve your goals and make a positive difference in your community?



BETTER PEOPLE
BRIGHTER PLACES
BRIGHTER AOTEAROA

THE FUTURE AOTEAROA QUEST SCIENCE IN ACTION

EXPLORE

INVESTIGATE

THINK

TAKE ACTION

KŌ TĀTOU ANAMATA



KAITIAKITANGA CHALLENGE

Small actions. Big change.

Our environment is taonga. In this challenge, you will explore a real-life scenario, think about the different impacts and come up with solutions. How can we be kaitiaki and create a healthier, brighter Aotearoa?

Mā te katoa,
mō te anamata
For us all,
for the future
♥



1 THE SITUATION

A local awa (river) that flows through your town has become polluted. There is more rubbish, dirty water and fewer native plants. The water is not as healthy as it used to be.



Healthy
awa, healthy
people.
Mauri ora!
♥

2 LOOK AT THE EVIDENCE

Here is some information collected by local students.

	Water quality	70% of samples showed high levels of pollution.
	Native fish	Fish numbers have decreased by 60% in the last 5 years.
	Native plants	Only 30% of the riverbanks have native plants left (compared to 80% 10 years ago).
	Rubbish	An average of 50 pieces of rubbish were collected from a 1 km stretch last month.

3 THINK ABOUT THE IMPACT

How does this problem affect different people and the environment? Write your ideas.



Te taiao
(the environment)



People in
your community



Native animals
and plants



Now and in
the future

4 FIND THE CAUSES

What do you think is causing the problem?
Tick the possible causes (you can tick more than one).

- ☐ Rubbish not being put in bins
- ☐ Litter washing into the awa from stormwater
- ☐ Farming or building near the river
- ☐ Lack of native plants on the riverbanks
- ☐ People not knowing how their actions affect the awa
- ☐ Other (write your idea):

5 FIND THE SOLUTIONS

What could be done to help? Think about short-term and long-term solutions. Write or draw your ideas.

Short-term actions
(what could happen soon?)

Long-term actions
(what could make a bigger
difference?)

- | | |
|---------|---------|
| • | • |
| • | • |
| • | • |
| • | • |

He iti
te kōpara
e taea e te pūtahiti.
Many hands
make light work.
♥

6 YOUR CHALLENGE

Choose one solution you think would make the biggest difference.
Explain why it is a good idea and how it could help your community and the environment.

.....

.....

.....



Kaitiaki
today,
brighter
tomorrows.
♥

THE FUTURE AOTEAROA QUEST

ENGLISH IN ACTION

- IDEAS
- PEOPLE
- POSITIVE CHANGE
- BRIGHTER
- COMMUNITIES

WRITE FOR CHANGE

Use your voice to make
a brighter Aotearoa.

Words can make a difference! Write a persuasive letter or proposal
to a real person, group or organisation about an environmental
or community issue in your area.

Speak up
for what
matters. ♥



1 CHOOSE YOUR ISSUE

What environmental or community problem will you
write about? Why is it important to you?



2 PLAN YOUR IDEAS

Use the questions to help you plan your letter.



Recipient	Who are you writing to? (e.g. mayor, council, principal, local business, community group)
Purpose	What do you want to achieve? (e.g. change, support, more information)
Evidence	What facts or examples show why this matters? (You can use data from earlier pages.)
Proposed action	What would you like them to do? (Be clear and realistic.)

3 USE PERSUASIVE LANGUAGE

Tick the strategies you will try to include.



- ☐ A strong opening that grabs the reader's attention
- ☐ Facts and evidence
- ☐ Emotive or powerful language (e.g. for a better, healthier, safer community)
- ☐ Clear and realistic suggestions
- ☐ A respectful and positive tone
- ☐ A strong closing that leaves a lasting impression

4 CHECK YOUR WORK

Have you:

- ☐ Answered the purpose clearly?
- ☐ Included evidence?
- ☐ Explained your proposed action?
- ☐ Used persuasive language?
- ☐ Checked your spelling and punctuation?

Clear ideas.
Kind words.
Real change. ♥

5 WRITE YOUR LETTER OR PROPOSAL

Use your plan to write your draft here. You can use the letter layout below.



Your address

Date:

Recipient's name
Title / Organisation
Address

Dear

Opening – introduce the issue and why you are writing.

Middle – provide evidence and explain the problem.

Proposed action – what would you like them to do?

Closing – thank them and end with a positive message.

Yours sincerely / Ngā mihi nui,

BETTER
PEOPLE
BRIGHTER PLACES
BRIGHTER
AOTEAROA
♥

**THE FUTURE
AOTEAROA
QUEST**
TECHNOLOGY IN ACTION.

IDEAS
PEOPLE
SOLUTIONS
BRIGHTER
COMMUNITIES

DESIGN THE FUTURE

Spot a need. Imagine a solution.
A brighter Aotearoa.

Think about your community and something that could be improved. It could be a real idea or a creative, imaginative idea. Use this page to explore, plan and sketch your concept.

Cool ideas today.
Brighter communities tomorrow. ♥



1 SPOT A NEED

What is something in your community that could be better? It could be a problem, a need or an opportunity.

.....

.....

.....

2 WHO ARE THE USERS?

Who would use your solution?
Think about people in your community (e.g. students, whānau, elderly, visitors, local businesses, the environment).

.....

.....

.....

3 WHAT DO THEY NEED?

What do these people need?
What would make their lives easier, safer, healthier or more enjoyable?

.....

.....

.....

4 BRAINSTORM SOLUTIONS

Write or draw as many ideas as you can. Be creative! Don't worry about whether they are possible yet.

-
-
-
-
-
-

5 CHOOSE AND IMPROVE

Which idea do you think is the best? Why?
How could you make it even better?

.....

.....

.....

.....

6 MY CONCEPT DESIGN

Draw and label your idea. Include key features. You can add notes, arrows and a title.

7 HOW WILL IT HELP?

Explain how your idea will make a positive difference for your users and your community.

.....

.....

.....

8 REAL OR IMAGINATIVE?

Is your idea something that could realistically happen in the next few years, or is it a more imaginative, long-term idea? Explain.

☐ Realistic (could happen in the next few years)

☐ Imaginative (a future idea)

.....

.....

Draw it.
Label it.
Bring it to life! ♥

9 MY VISION

Give your idea a title and write a short summary. Imagine how it could help create a brighter Aotearoa.

Title:

Summary:

.....

.....

.....

Ideas today.
A brighter Aotearoa tomorrow. ♥



PAGE 71

THE FUTURE AOTEAROA QUEST

PART 1 OF 3

YOUR MISSION

YOUR COMMUNITY HAS \$10,000 TO MAKE ONE THING BETTER.

Look at the evidence, think about what's important, and choose the issue you think will make the biggest positive difference.

Different perspectives.
Brighter communities.

Real data.
Real people.
Real change.
You can help shape a brighter Aotearoa! ♥

BIGGER
BRIGHTER
STRONGER
TOGETHER
♥

1 CLEANER & GREENER SPACES



Our parks and beaches are loved by our community, but they need more care and protection.



68%
of local residents say there is too much litter in public spaces.



Only 42%
feel our green spaces are well maintained.

2 SAFER ROADS AND PATHWAYS



More people are walking, biking and scootering, but some areas are still unsafe.



3 in 10
students say they don't feel safe travelling to school.



There were 12 minor crashes
in our area last year involving cyclists or pedestrians.

3 A STRONGER, HEALTHIER COMMUNITY



Our community needs more opportunities for people to be active, connected and supported.



56%
of rangatahi (young people) say they want more activities and spaces to hang out.



1 in 4
people feel lonely or disconnected in our community.

4 BETTER LEARNING AND DIGITAL SPACES



Our library and learning spaces need upgrades so everyone can access modern resources.



48%
of students say they need better access to technology and study spaces.



Only 1 in 3
people think our current facilities meet the needs of our community.

5 ANALYSE THE EVIDENCE

Look at the information above and answer the questions.

1 Which issue affects the most people? Why do you think that?

.....

2 Which issue would make the biggest positive difference? Explain your thinking.

.....

3 Are there any other things you think we should consider?

.....

6 CHOOSE A PRIORITY

Which issue do you think the \$10,000 should be used for? Tick one and write a short reason.

☐

Cleaner & Greener Spaces

☐

Safer Roads and Pathways

☐

A Stronger, Healthier Community

☐

Better Learning and Digital Spaces

My reason:

.....

There's no one right answer. Choose what you believe will make the biggest positive impact! ♥

7 THINK AHEAD

What do you hope your chosen idea could achieve in the future? Write 2-3 goals.

1

2

3

Small ideas can create big change. ♥

STRONGER
PEOPLE
BRIGHTER PLACES
KINDER FUTURES
♥

BUILD YOUR SOLUTION

Ideas into action for a brighter tomorrow

Plan well.
Spend wisely.
Make a difference.

Big change starts with a plan! ♥

You have \$10,000 to bring your idea to life! Choose what you need, work out the costs and create a plan for your solution.

1 CHOOSE YOUR RESOURCES

Here are some examples. You can choose these or add your own.

Resource / Item	Description	Cost (NZ\$)	Tick
Materials	e.g. timber, plants, equipment	\$500	☐
Technology	e.g. sensors, laptops, software	\$1,000	☐
People	e.g. experts, leaders, volunteers	\$500	☐
Transport	e.g. delivery, travel, fuel	\$300	☐
Marketing	e.g. posters, website, signs	\$400	☐
Training	e.g. workshops, instructions	\$600	☐
Maintenance	e.g. ongoing costs for 1 year	\$700	☐
Other	Write your own:	\$	☐
Other	Write your own:	\$	☐

2 YOUR BUDGET

Fill in the items you will use and calculate the total cost.

Item / Resource	Cost (NZ\$)
TOTAL COST	\$

You have \$10,000. Is your plan within budget? ☐ Yes ☐ No

If no, what could you change?

3 CREATE YOUR CONCEPT

Draw and label a design or plan for your solution. Include key features and use a scale if needed (e.g. 1 cm = 1 m).

Design it.
Show it.
Make it real! ♥

4 ENVIRONMENTAL CONSIDERATIONS

- How does your solution help the environment?
.....
- Are there any possible negative impacts? How will you reduce these?
.....

5 COMMUNITY CONSIDERATIONS

- Who will benefit from your solution?
.....
- How will your solution make your community a better place?
.....
- How could you include different people or groups?
.....

6 CHECK AND REFLECT

- ☐ My plan fits within the \$10,000 budget.
- ☐ I have included important resources.
- ☐ My design is clear and labelled.
- ☐ I have considered the environment.
- ☐ I have considered my community.
- ☐ I am ready to present my final pitch!

Small solutions can create a brighter tomorrow. ♥

7 NEXT STEP

Now it's time to present your final proposal on the next page. Explain your plan and convince your community to support it!

A BRIGHTER AOTEAROA IS POSSIBLE ♥

MY YEAR 6 REFLECTION

Look back. Be proud. Look forward.

Same learner.
Bigger possibilities. ♥



EXPLORE
SOLVE
CREATE
BELONG
GROW
♥

KIND PEOPLE
BRIGHT IDEAS
AMAZING FUTURES
♥



My proudest achievement this year:



My biggest challenge and how I overcame it:



My strongest skill is:



A skill I have improved this year is:



A strategy that really helped me was:



My favourite quest or activity was:



My goal for Year 7 is:

YOU'VE
GOT THIS!
♥

Curiosity today.
A brighter tomorrow. ♥



NEXT STOP:
YEAR 7 →

NEW CHALLENGES
NEW SKILLS
MORE AMAZING YOU! ♥

PLAY • LEARN • GROW

SAME
LEARNER.
BIGGER
POSSIBILITIES. ♥

STUCK? TRY THIS.

Small
steps
lead to
big
progress! ♥

Different strategies can help you see
things in a new way!



READING

UNDERSTAND THE TEXT

- 1 Reread**
Read it again slowly. What does it mean?
- 2 Find key words**
Look for important words or phrases.
- 3 Use context**
Think about clues in the text to help work out the meaning.
- 4 Find evidence**
Where in the text can you see the answer?
- 5 Summarise**
Put the main idea into your own words.



Good
readers ask
questions! ♥



WRITING

PLAN • WRITE • IMPROVE

- 1 Plan**
Think about your purpose, audience and main ideas.
- 2 Draft**
Write your ideas. Don't worry about perfection yet!
- 3 Reread**
Check your writing. Does it make sense?
- 4 Improve**
Add more detail. Use better words. Check your sentences.
- 5 Check**
Look for spelling, punctuation and make sure you've answered the question.

Good
writing
takes time! ♥



MATHS

THINK IT THROUGH

- 1 Draw it**
Use a picture, diagram or number line.
- 2 Estimate**
Make a smart guess to get started.
- 3 Break it apart**
Look for smaller steps.
- 4 Choose an operation**
Add, subtract, multiply or divide?
- 5 Try another strategy**
If one way doesn't work, try a different way.
- 6 Check your answer**
Does it make sense? Is it reasonable?

THINK
PLAN
DO
CHECK



PROBLEM SOLVING

BE A THINKER

- 1 What do I know?**
Write down the important information.
- 2 What do I need?**
What am I trying to find out or solve?
- 3 What could I try?**
 - Can I use a drawing or diagram?
 - Have I seen a similar problem before?
 - What strategy might work?
- 4 Try it**
Give it a go!
- 5 Check and reflect**
Does it make sense? What else could I do?

Mistakes
help me
learn! ♥



Keep going. You've got this! ♥

KIND EFFORTS
BRIGHT IDEAS
BIG FUTURES ♥

PLAY • LEARN • GROW

SMALL
STEPS
BIG
PROGRESS

ICONIC GAMES
HOMEWORK CLUB

Curious
Learners
Brighter
Tomorrows

MY YEAR 6 PROGRESS

This is my own reflection on my learning.

PROGRESS
LOOKS
DIFFERENT
FOR
EVERYONE

LEARNING AREA	BEGINNING I am just getting started.				BUILDING I am making good progress.				CONFIDENT I can do this well.				READY FOR MORE I am ready for bigger challenges.			
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
Reading	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Writing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Number	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fractions & Decimals	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Measurement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Geometry	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Statistics	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Social Sciences	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Technology	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Problem Solving	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

MY PROUDEST
ACHIEVEMENT THIS YEAR:

SOMETHING I WANT
TO IMPROVE NEXT YEAR:

I AM LOOKING FORWARD
TO IN YEAR 7:

SAME
LEARNER.
BIGGER
POSSIBILITIES.

PLAY • LEARN • GROW

You've
got this

CURIOUS
LEARNERS
BRIGHTER
TOMORROWS
♡

ICONIC GAMES
HOMEWORK CLUB

Same
learner.
Bigger
possibilities.
♡



YEAR 6
HOMEWORK CLUB

CERTIFICATE OF COMPLETION

WELL
DONE!
★

This certificate is awarded to

.....
for your hard work, curiosity, problem solving
and perseverance in completing the Year 6 Homework Club.
You've explored new ideas, built your skills and challenged yourself.
We're proud of what you've achieved!

Date:

Signed:

PLAY • LEARN • GROW

A BRIGHTER
FUTURE
AWAITS...

Ngā mea nui
e tika ana ♡

KEEP
GOING
♡

BIG
IDEAS
START
HERE...

MY IDEAS & DOODLES

Same
learner.
Bigger
possibilities.

A space for your thoughts, sketches, plans and anything else!

Sketch
it

Plan
it

There
are no
wrong
ideas!

Invent
it

Solve
it

Write
it

Curiosity today.
A brighter tomorrow.

GOOD
IDEAS
LIVE
HERE

YOU DID IT.

You've explored, solved, investigated,
created and challenged yourself.

You've put in the effort, grown your skills, and taken on challenges
all year. Be proud of what you've achieved — this is a big step!

SAME
LEARNER.
BIGGER
POSSIBILITIES.

YEAR 6 COMPLETE

CURIOSITY • EFFORT • PROBLEM SOLVING
CREATIVITY • RESILIENCE • YOU!

YEAR 7 →

NEW CHALLENGES

NEW SKILLS

BRIGHTER IDEAS

A BRIGHTER YOU

One thing I want to take with me into Year 7:

.....

.....

NEXT LEVEL: YEAR 7 →

PLAY • LEARN • GROW

EXPLORE
SOLVE
CREATE
BELONG

BRIGHTER
THINGS
AHEAD