



Wonder
Project

Water Challenge

Activity 2.3: Collect

Explore the first stage of Aotearoa New Zealand's wai network and collect some water!

What's the most important part of a wai network?
Why, wai, of course! Rōpū, you're going to collect wai
for your network by creating a rain gauge!

Create your gauge

Step 1

Cut off the top
of your bottle.



Step 2

Place the top half of your
bottle upside down inside the
bottom half of your bottle.



You'll need:

- Clear, recycled 1.5/2L bottle
(label and cap removed)
- Tape (masking or washi tape)
- Scissors
- Pen
- Ruler

Step 3

Cut a piece of tape that's
the same length as the
bottom half of the bottle.



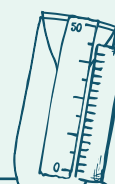
Step 4

Stick the tape straight up
from the bottom to the top.



Step 5

With a ruler, draw a scale on the piece of tape
in millimetres (mm), starting from 0. The 0 line
should start at the flattest part of your bottle,
or around 50 millimetres up from the bottom.



Did you know:
STEM superstars
use rain gauges
to measure
real-life rainfall?
One millimetre
of precipitation is
equivalent to one
litre (L) of rainfall
per square meter.



Step 6

Add some water into your gauge until it just touches the 0 line on your tape.

Step 7

Label the gauge with your rōpū name, then place it in a safe, open area outside. Put your gauge somewhere different from other rōpū to see if you get different results!



Precipitation tracker

Measure precipitation in your rain gauge every day for a week. Make sure you check it at the same time each day, so your results are accurate.

| Day | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|
| Precipitation (mm) | | | | | | | |

Results:

Add the data from each day to get the sum of precipitation.

Sum of precipitation (mm):

Divide the sum of precipitation by 7 to get your average precipitation (mm).

Average precipitation (mm):

Don't waste the wai you collected!

Keep it somewhere safe for later in the challenge.

If you can, keep your rain gauge outside for the duration of the challenge to help you collect wai for your network.