



Wonder
Project

Water Challenge

Activity 5.2: Join the journey

Connect all four stages of the journey of wai and put your prototype to the test.

Does your network have what it takes to solve your challenge scenario? Join the collect, clean, connect and care stages of your wai network journey to test the waters.

Step 1

Check the filter layers in your water treatment plant and refresh them if required.

Step 2

Place your water treatment plant on top of your water reservoir.

Step 3

Turn off the tap and check all connections.

Step 4

Add some natural debris and 1 teaspoon of lemon juice into 500ml of wai to make it wai paru.

Step 5

Test the wai for pH and turbidity. Write your results in the clean section of the test tracker.

Step 6

Pour the wai paru into your treatment plant, letting it all flow through into your water reservoir.

Step 7

Open the tap and watch the wai flow!

Step 8

Once the wai has finished its journey through your network, test its pH and turbidity again and record the results in the test tracker.

You'll need:

- Your water treatment plant
- Your improved wai network
- 500ml wai
- Lemon juice
- Natural debris (dirt, bark, grass, leaves)
- Resources to support wai network stability (boxes, tape, bulldog clips)
- 2 x containers that can hold 500ml of wai
- Measuring scoops
- Measuring jug
- pH strips
- Timer
- Torch (optional)

Test tracker

Journey stage		Result	
Collect	How much wai did you add to your network?	500ml	
Clean	Before wai network journey	pH	
		Turbidity	
	After wai network journey	pH	
		Turbidity	
	What observations can you make on the mauri of the wai?		
Connect	Hapori connection point 1	Wai flow time (s)	
		Wai flow rate (ml/s)	
	Hapori connection point 2	Wai flow time (s)	
		Wai flow rate (ml/s)	
Care	Hapori connection point 1	Wai supply (% and ml)	
	Hapori connection point 2	Wai supply (% and ml)	
	Did your network protect the mauri of wai? How?		

Analysis

What did you learn from your test?

Are there any improvements you could make to your prototype before the final challenge?