Wonder Project
Water Challenge

Activity 4.2: First flow

Send some wai on its first journey through your pipe prototype.

Let's see whether your prototype has what it takes to solve your challenge scenario, or if there are any ways it could be improved.

Rōpū, get ready to flow!

Step 1
Label your containers with your two hapori connection points. Eg school and hospital or whare and fire station. Place them underneath your wai network.

Step 2
Open the tap and double check all connections so your prototype won't spring a leak.

Step 3
Measure out 500ml of wai with a measuring jug.

Step 4
Slowly pour the wai into your water reservoir and watch it flow!

Step 5
Measure the amount of wai (ml) that ends up at each hapori connection point.

Step 6
Write your results in the test tracker.

You'll need:
- Your pipe prototype
- 500ml of wai (use the rainwater you collected in module 2)
- 2 x containers that can hold 500ml of wai
- Measuring jug

Test tracker

Quantitative data			Qualitative data	Improvements
Wai supply (% and ml)			**What did you observe as the wai flowed?**	
Hapori connection point 1	**Hapori connection point 2**	**Total wai**		
Fire station: 30% 150ml	Whare: 65% 325ml	95% 475ml	Water flowed too quickly to the fire station. Some got trapped at the start of the network.	Swap large internal diameter pipes for small internal diameter pipes leading to the fire station.

Analysis

What did you learn from your test?	What changes could you make to improve your prototype?

Don't waste the wai you send through your network! You can add the same wai to your network in later tests.