



Wonder
Project

Water Challenge

Optional activity: Siphon science

What goes up, must come down! Test the power of gravity by creating a siphon.

Aotearoa New Zealand's wai network is gravity-fed. That means gravity is the reason wai flows through the pipes, to our hapori.

Sometimes, wai even travels uphill thanks to gravity and pressure. You can explore this for yourself through the science of siphons.

You'll need

- Silicone straws
- Food colouring
- Wai
- 2 x small flat containers

Step 1

Fill one container with water and one drop of food colouring.

Step 2

Half-fill the second container with water. Place the containers side by side.

Step 3

Fully submerge the straw in water – squeezing it to get rid of any air bubbles. Then, tightly pinch the ends of the straw before you pull it out.

Step 4

Continuing to pinch each end of the straw, place one end in each container – only releasing them when they're both under the water.

Step 5

Watch the siphon flow!

How did wai flow through your siphon?

How did gravity and pressure impact the flow of wai?

How could you apply this to your wai network?