

SCISCOPE

Syphons Suck!

How do you get water from a higher place to a lower one?

Well, Mr CY O'Connor's pipeline relied on a mechanical pump to get water from Perth to Kalgoorlie, but you can try this simple method.

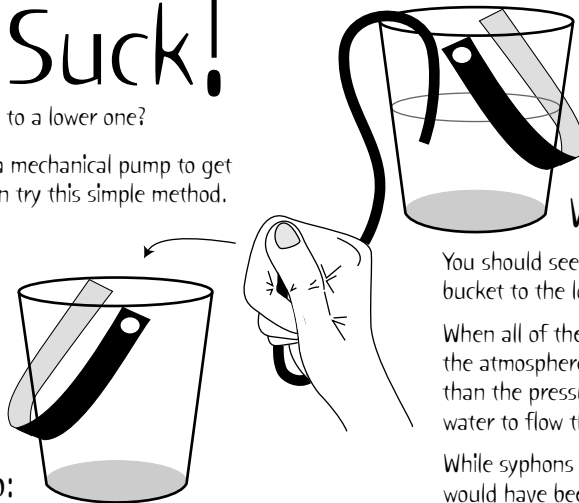
What you need:

- 2 Buckets
- A table or chair
- 2 metres or more of flexible tubing
(ask Dad or Mum if they can spare
a couple of metres of garden hose)
- Water

What to do:

Fill one bucket with water and place it on a chair or table. Now get the other bucket and place it on the ground. Place the hose in the bucket of water and get all of the air out of it. Now, place your thumb over one end of the hose and take this end to the lower bucket while keeping the other end submerged in the top bucket. When you are in position, remove your thumb from the lower end of the hose.

What do you notice?



What's happening?

You should see that the water begins to flow from the high bucket to the low bucket continuously!

When all of the air in the tube is removed, the pressure of the atmosphere on the water in the top bucket is greater than the pressure at the end of the hose. This causes the water to flow through it.

While syphons are useful over short distances, I doubt it would have been useful for getting water 557 kilometres from Perth to Kalgoorlie!



DISCOVERY CENTRE

www.scitech.org.au