

## **The water cycle – water of life**

How important is water? Did you know that 75% of your body is water? Plants are made up of over 80% water. All life on earth needs water.

When the rest of Australia is so dry, how come it's so wet here?

Well, our rain starts out in the ocean where water evaporates and rises up into the atmosphere. The water vapour cools and forms clouds. This is called condensation. South-easterly winds push the clouds towards the coast. In the Wet Tropics, tall mountain ranges block the clouds' path. The clouds are forced to rise over the mountains. The clouds condense even more until the trapped water becomes so heavy it falls as rain – and lots of it.

In the drier parts of the tropics south of Townsville, the mountains are much lower and lie parallel to the rain-bearing winds. They don't trap the clouds, so the clouds don't condense enough to make rain.

Just the right combination of ocean, wind and mountains is why the area between Townsville and Cooktown is the wettest in Australia. And all that rain is why tropical rainforest can survive here.

So where does all the water go? Some water runs off to low points and forms creeks and rivers. Plants soak up a lot of water through their roots. Rainforest trees can also absorb moisture directly from misty clouds. It's called cloud-stripping. The ground also collects and holds water like a sponge. It's slowly released in the dry season. That's why most of the streams flow all year round, even if it hasn't been raining.