Suzy's World

Rain - Why does it rain?

Fact

- When rain clouds are pushed up into cold air the rain drops form and become heavy enough to be pulled to the ground by gravity.
- Water from the sea, rivers, lakes, ponds, pools and puddles is heated by the sun and evaporated into water vapour.
- Clouds are made up of millions of tiny water vapour droplets, which cling together.

Do you know

- There are about 10 different types of clouds.
- On a hot day there is water vapour in the air. When it touches a cold can of fizzy drink, taken straight from the fridge, the water vapour condenses and forms drops on the can. This is just like raindrops forming in clouds.
- The Waikato area gets a lot of fog and fog is a bit like a low flying cloud. Fog is air that is heavy with a lot of moisture, but it is not cold enough for it to make raindrops.

Experiments you can do

Make yourself a rain gauge

What you need:

A small, empty plastic fizzy drink bottle, cut it in half

A measuring cup with millilitre measurements

200 ml of water

Masking tape for marking measurement

Notebook and pen

What you do:

Turn the top half of the bottle upside down and insert it into the base of the bottle. Pour the 200-ml of water, 10ml at a time into the upside down half of the bottle. Mark the level of the water each time on the side of the bottle. Empty the water out and then leave your rain gauge in a safe place outside.

Keep a dairy in your notebook of how much rain falls each day for a week.

Get a friend to do this experiment with the same kind of rain gauge at their house during the same week and see if you get the same amount of rain as they do.

Other Investigations

- Breathe out on a frosty day and make your own mini cloud
- How often do the weather forecasters get it right? Read the weather forecast in the morning paper and that night watch the TV weather report so you can compare what the forecasters said about the day.
- Weather forecasters use the cloud formations to help them predict the weather. See if you can find out the names of some clouds and if they help you to predict the weather.

Jokes

Why didn't the raindrop want to land in the sea? It didn't want to get wet

What often falls, but never gets hurt? Rain

