

The Amazing Cycle of Water



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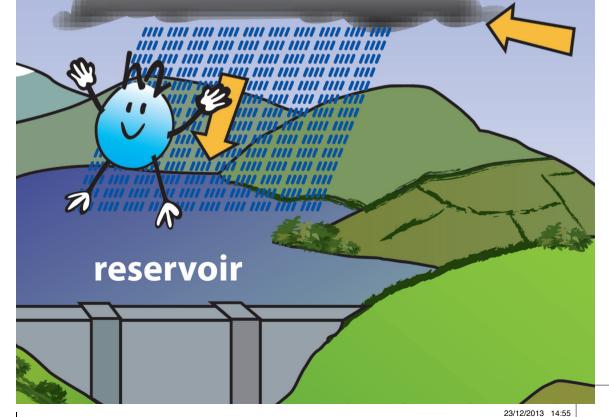
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rainfall



The Amazing Cycle of Water

- The seas hold 97% of the world's water and are salty.
- 2% is frozen in the polar ice-caps.
- 1% is freshwater and provides all the water we use.
- This includes all the water in lakes, rivers, atmosphere and underground.

1 Cloud Storage / Rain

When clouds blow across the land and the temperature drops, vapour forms into droplets, which fall back on the land as rain, snow or hail. Rain :

- finds its way to streams, lakes and rivers, or
- can pass through porous ground such as chalk to form aquifers, or
- can be trapped in man-made reservoirs.

2 Reservoir

The reservoirs, rivers, lakes and aquifers are the sources of water we use at home and at work.

The Water Cycle

- There is a never ending supply of water through a natural process called the water cycle.
- Just like a bicycle wheel, the water cycle has no beginning and no end. It has been the same since time began.
- Thanks to the water cycle, water doesn't get used up - it simply goes round and round!
- This water or hydrological cycle has to be used sensibly by humans to meet our needs.

Supply and Demand

The rise in (a) population, (b) the building of new towns and industry and (c) leisure activities, mean a greater need for water. We each use approximately 155 litres of clean treated water every day for washing, cooking, drinking, watering the garden, etc. Currently Northern Ireland Water supplies around 560 million litres of water each day.

Use Water Wisely

The treatment, distribution and disposal of water are expensive and effect the environment. Therefore, we all need to use water wisely. Use one of our water audit leaflets to work out how your usage compares to the average. You will be surprised at how much water you actually use.

initial initial

3 Water Treatment Works

Northern Ireland Water enters this natural cycle and makes sure that the water we use is clean and safe. This is done at a Water Treatment Works, where it is filtered and bacteria is removed. The water is then supplied through a network of pipes to homes, schools, factories and to all other users.

5 Evaporation

When the sun shines on the seas, rivers and lakes it turns some of the water into water vapour (gas) this is called evaporation.

This gas rises to the sky; it cools again to forms clouds and turns to rain.

4 Wastewater Treatment Works

Used water from our baths, washing machines, sinks, toilets and rain that runs into the sewers, is called wastewater or sewage. Before it is put back into the sea is has to be cleaned, this happens at a Wastewater Treatment Works.