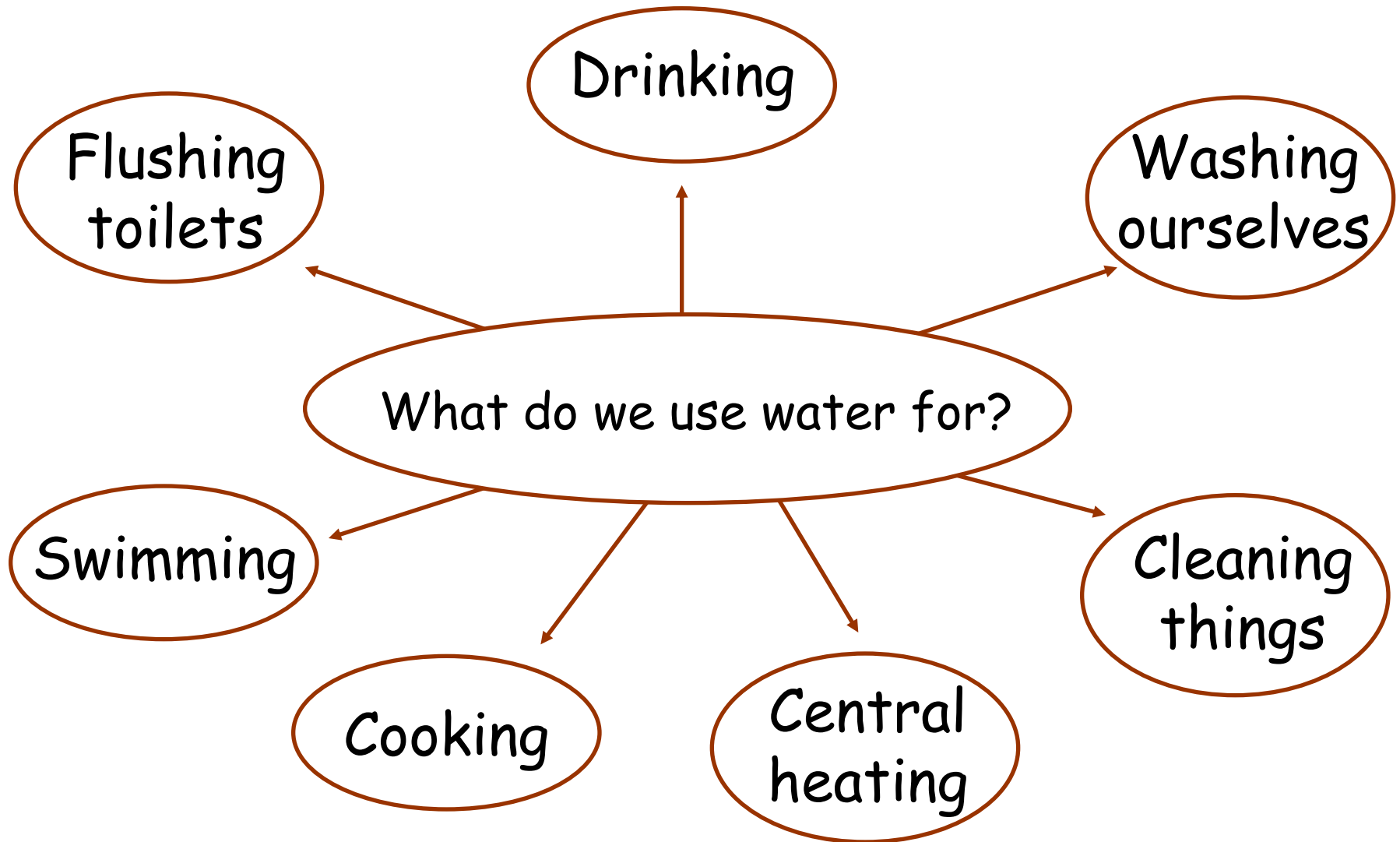


## Unit 11: Water



# Learnanywhere



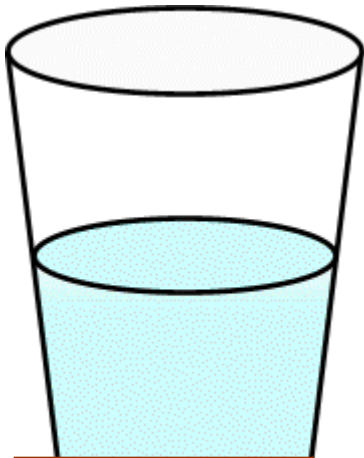
How much water do we use?

Keep a diary for a week, noting down all the times when you use water, and what you use it for. You could even make a tally chart like the one below:

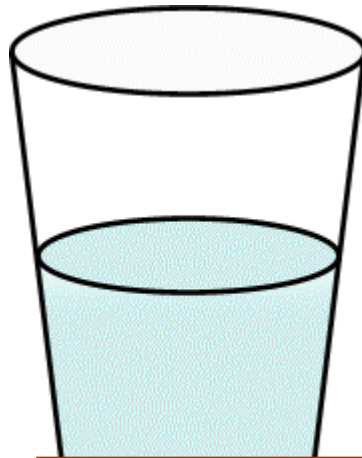
Type of use	Number of times
Drinking	
Bath/shower	
Flushing the toilet	
Washing up	
Washing the car	
Boiling the kettle	

Is all water usable?

Collect several samples of water like the ones below:



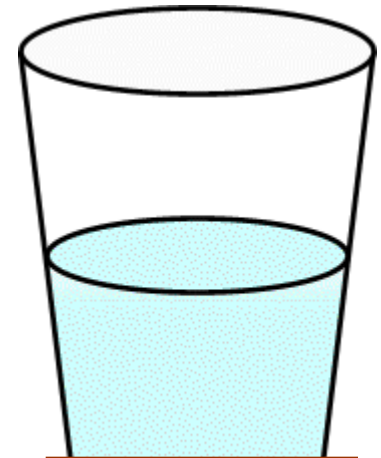
Tap water



River water



Washing-up  
water



Rain water

Do you think that all these samples would be safe to drink?

Is it possible to make them safe to drink? How?

How is dirty water made clean?

## Filtering

or

## Boiling

The water is passed through a filter, which works a bit like a sieve. Any particles of dirt or other things get caught in the filter, and the clean water passes through.

However, filters can't trap really small things like germs, so the water may still not be drinkable.

Boiling water kills any germs that may be in it, making it safe to drink.

However, boiling won't remove all the bits that may be in water, which is why you still get limescale in your kettle sometimes.

## How is dirty water made clean?

Water that goes down the drains into the sewage system has to be cleaned before it is let back into rivers or the sea, otherwise it would cause pollution.

The water is cleaned at sewage treatment plants like the one in the picture:

It is basically a series of filters which get rid of any dirt and other unwanted particles so that the water can safely be pumped back into a river



## Who pays for water?

People have to pay for water to be piped into their homes. They usually pay bills called **water rates** every six months.

In exchange for this the water company make sure that enough water is collected, piped to all the houses and drained, cleaned and returned to rivers and the sea.

Water is usually collected in reservoirs like this one:

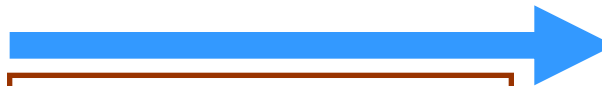




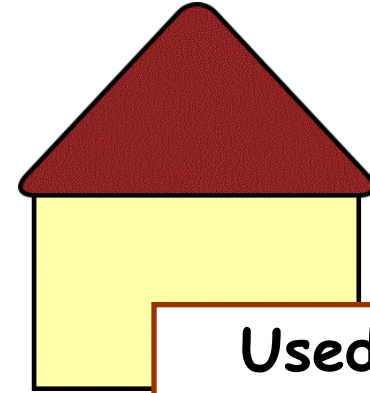
What does the water company do?



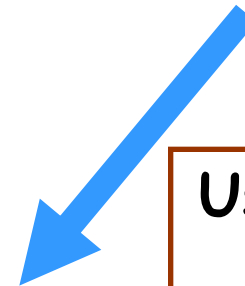
Water collected  
in reservoirs



Piped to houses



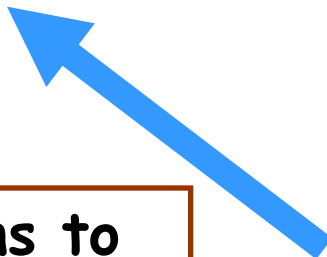
Used by  
people



Used water  
piped to  
sewage  
plant



Waste water  
cleaned



Returns to  
water cycle