Geography

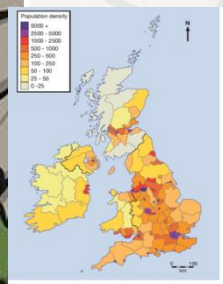
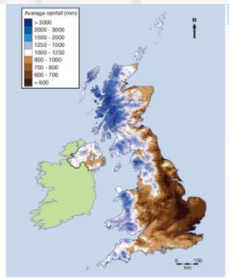
Summer 2

Week 4

Water

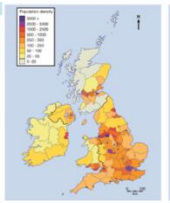
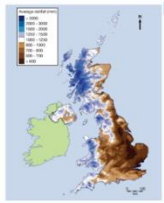
Keep referring to your knowledge organiser – see web page

We'd like you to complete the tasks outlined in this week's pack.


Activity 1

Use the 3 maps on the worksheet to help you investigate water supply and demand in the UK.

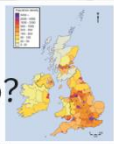




Activity 2

Use the maps to investigate where most of the rain in the UK falls – is it high ground or lowland? What kind of place is Nottingham.

Water conservation

Activity 3 What can we do?

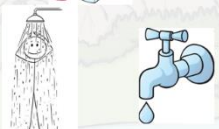



Design a poster with some top tips for saving water.

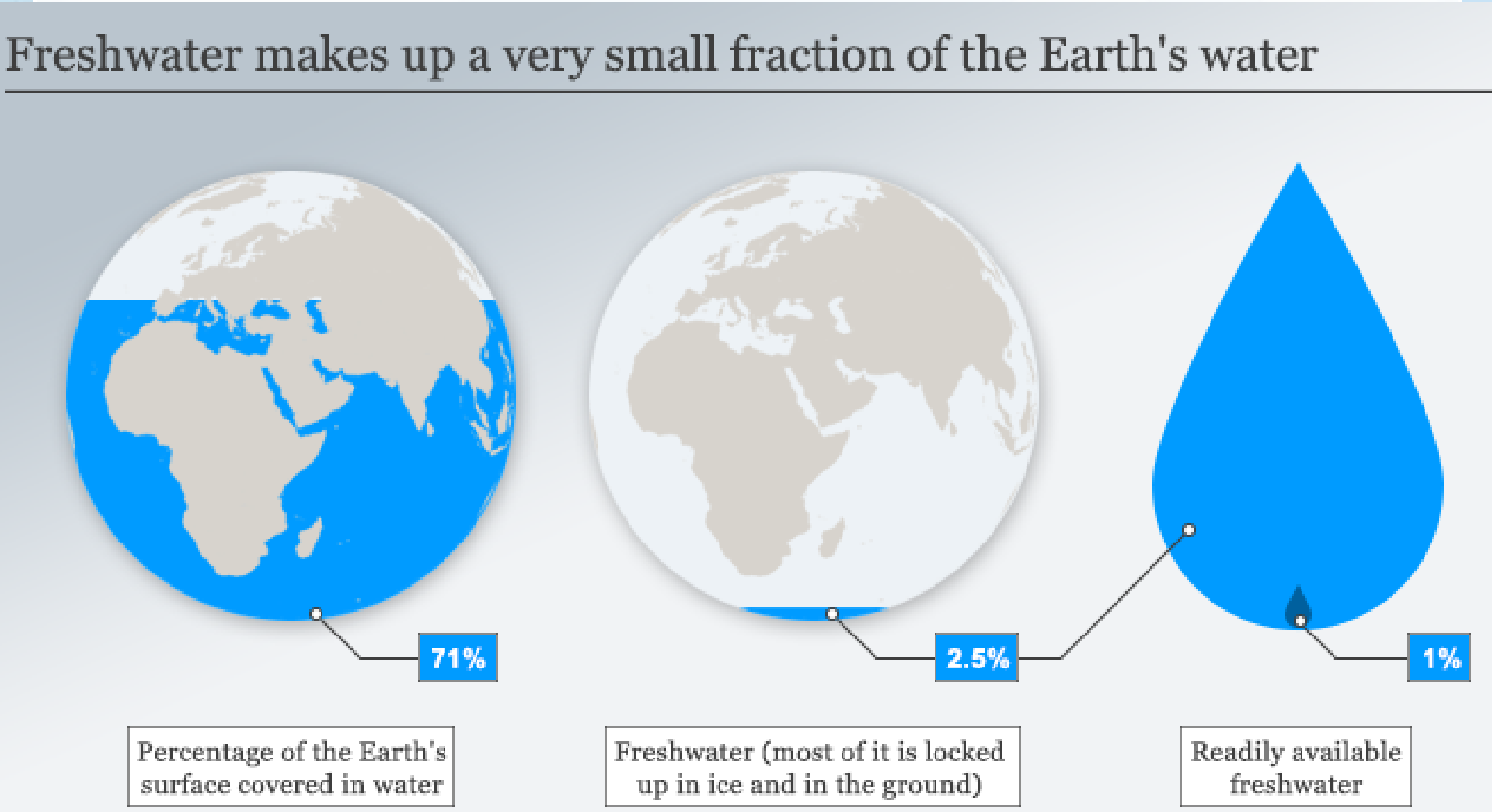








Who owns the water?



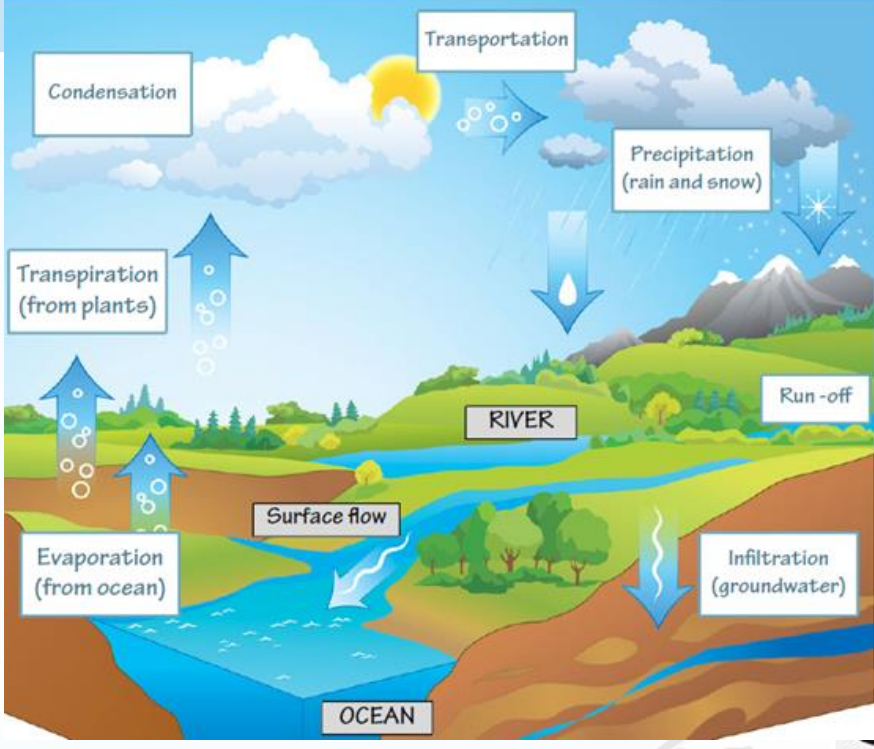
The water-cycle

Water moves one from place to another.

So who owns it?

The water in your tap today might be in my garden next year?

They say that a glass of water in London is on its eighth time around!

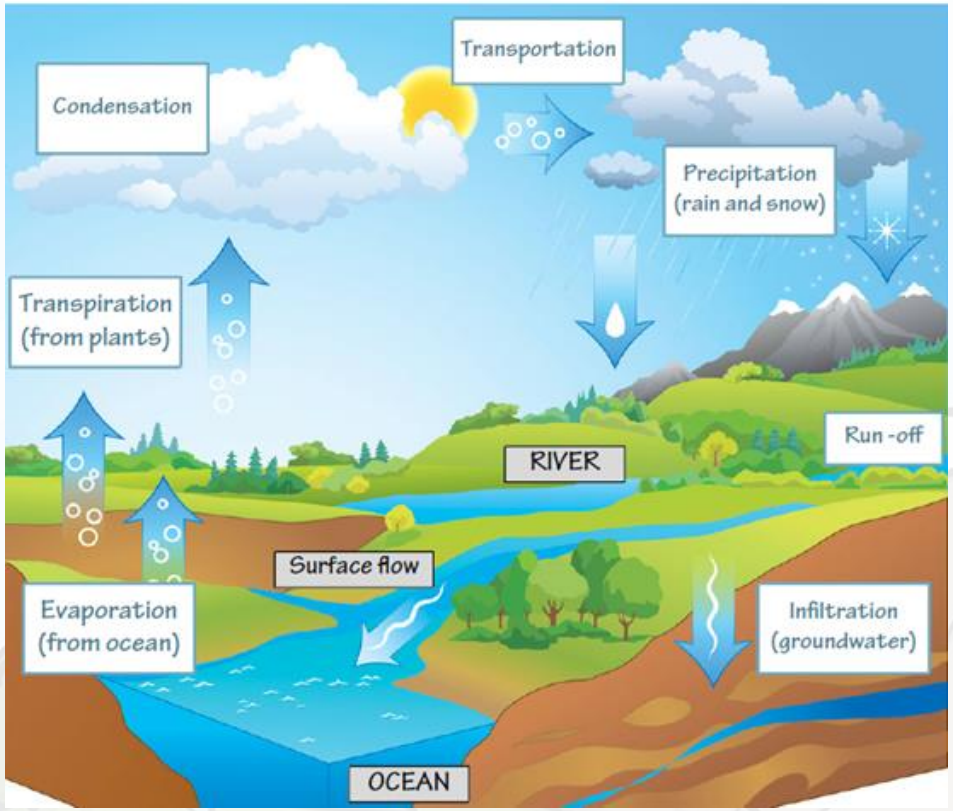


The water-cycle

Water is free surely.

It falls from the sky so nobody owns it!

What do you think?



This is a water bill!

We pay for the water that comes in and we pay for the water that goes out - including the rain!

Ask at home to see what a water bill looks like.

Why do we pay?

We pump the water from the ground, rivers and lakes.

It is sent to a water treatment plant.

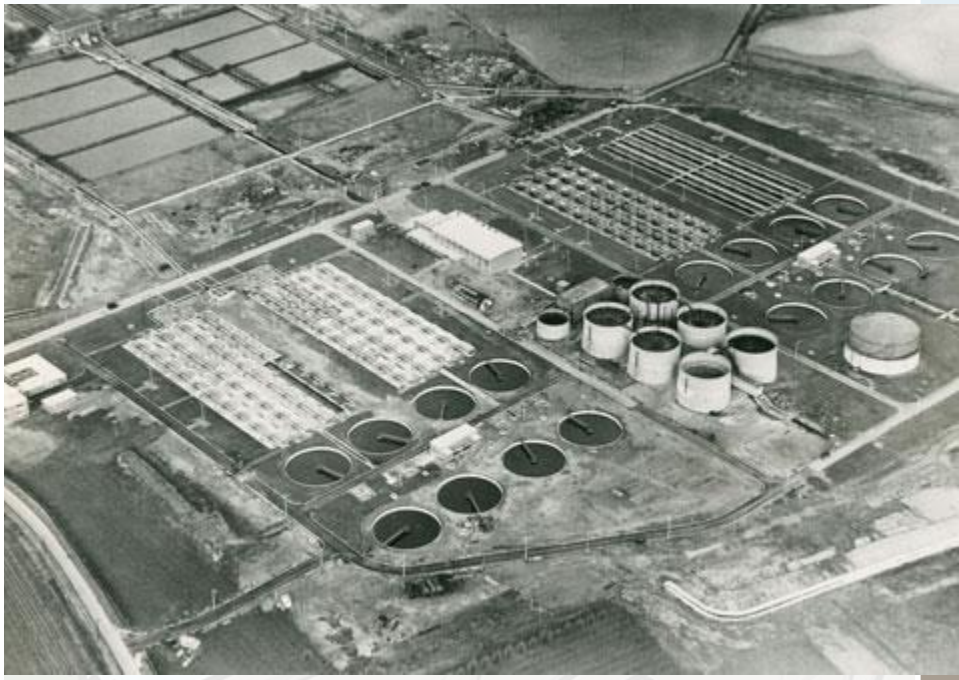
Here the quality of the water is improved, to make it suitable for drinking.

Then it is pumped to houses, schools and other places.

Why do we pay?

Waste water and water treatment is a complicated process involving several steps.

Bringing clean water to and treating waste water from our homes, schools, shops, places of work is very expensive.



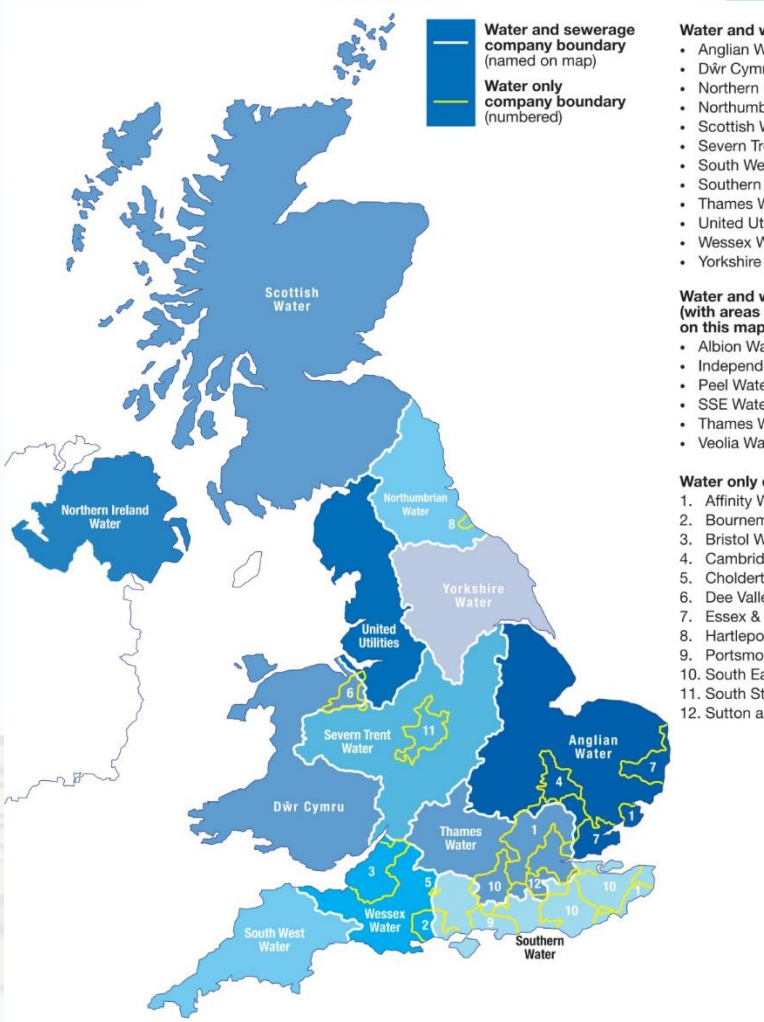
Who do we pay?

Water UK ensures the provision and supply of water across the UK.

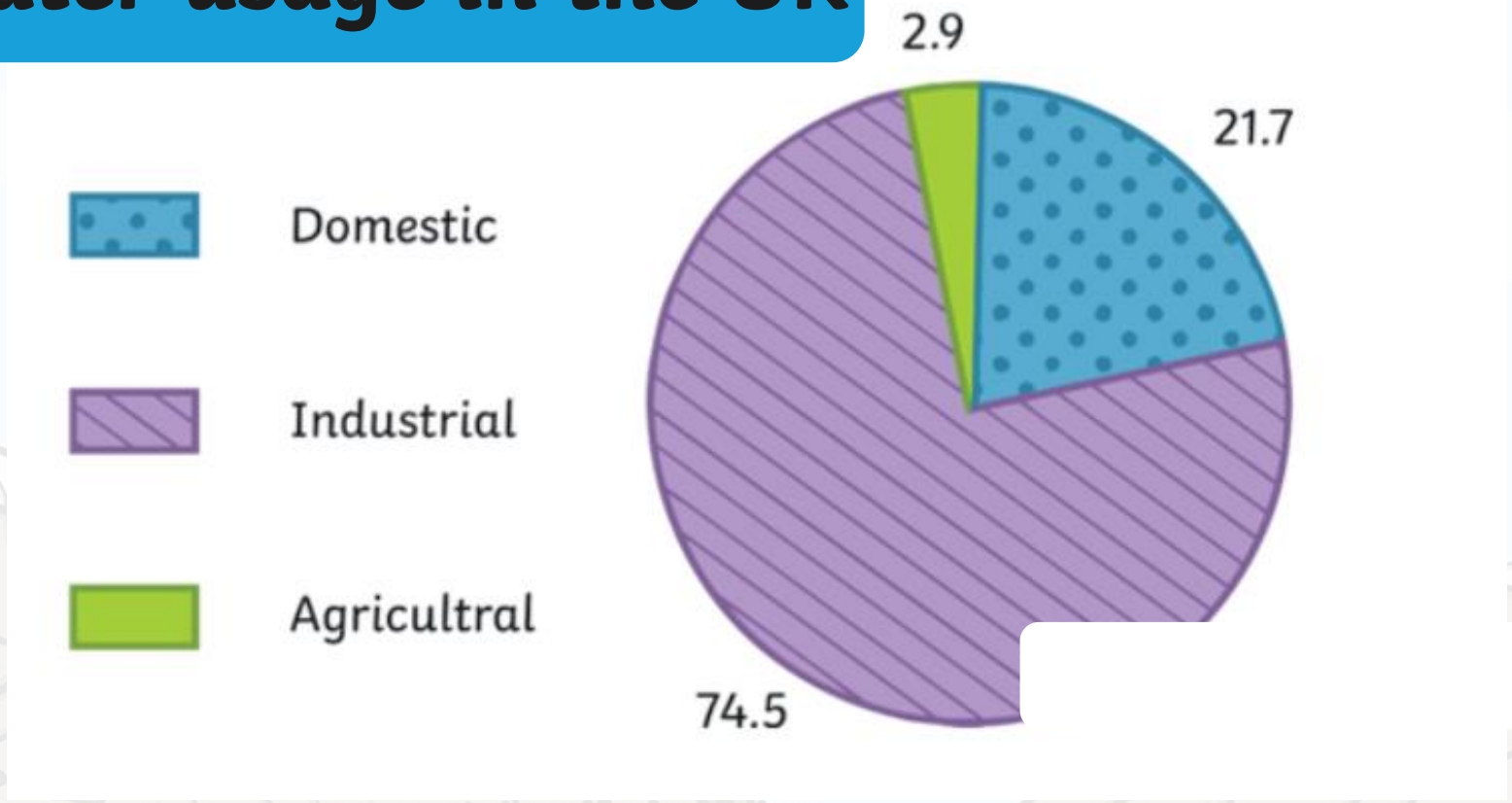
It has regional companies.

Do you know what our company is called?

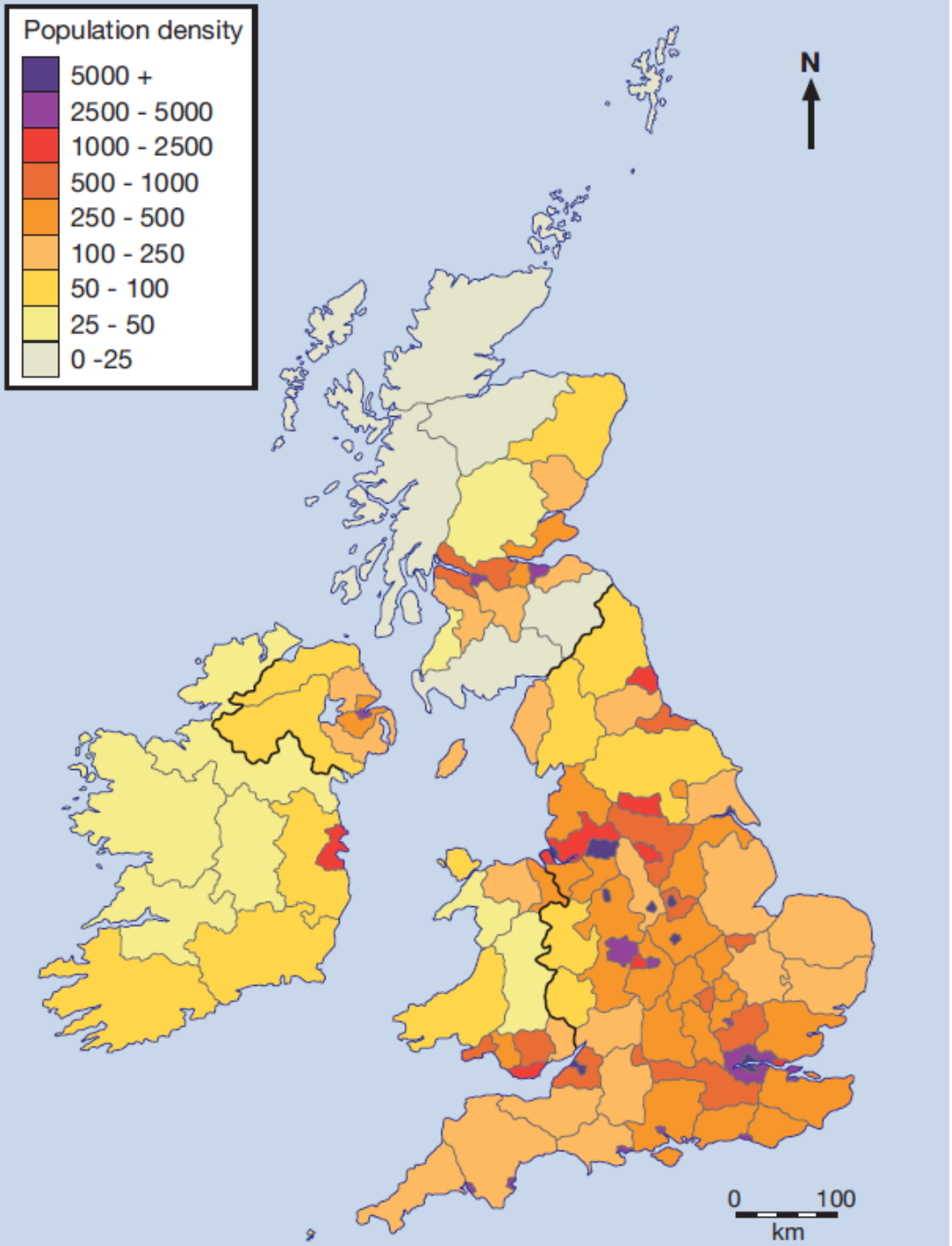
Some of these companies are also responsible for the safe collection, treatment and removal of sewage.



Water usage in the UK



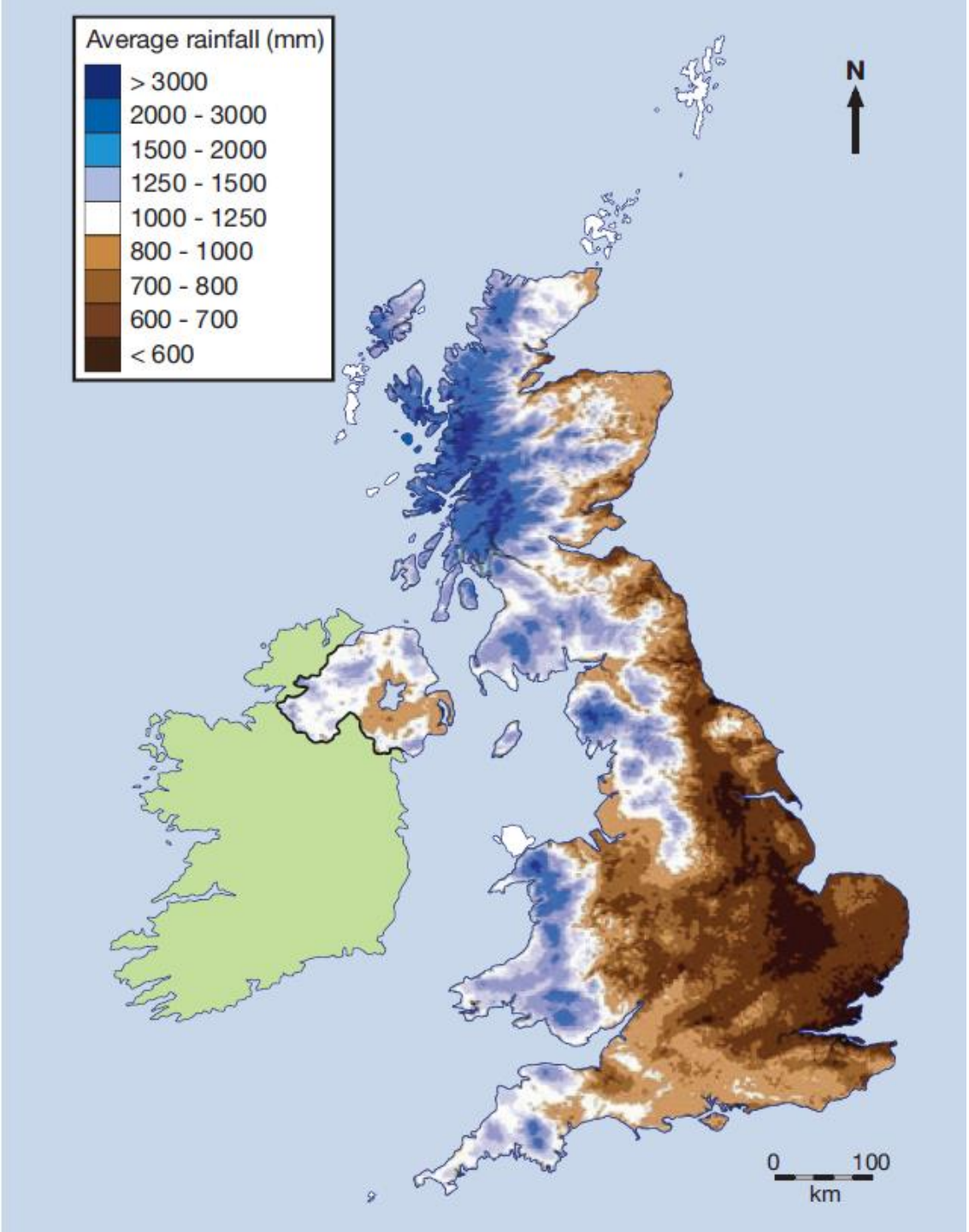
Where do you think the biggest demand is for water? In a city or in the country? Why?



This chart shows where people live. The purple colour means more people.

What areas would be purple?

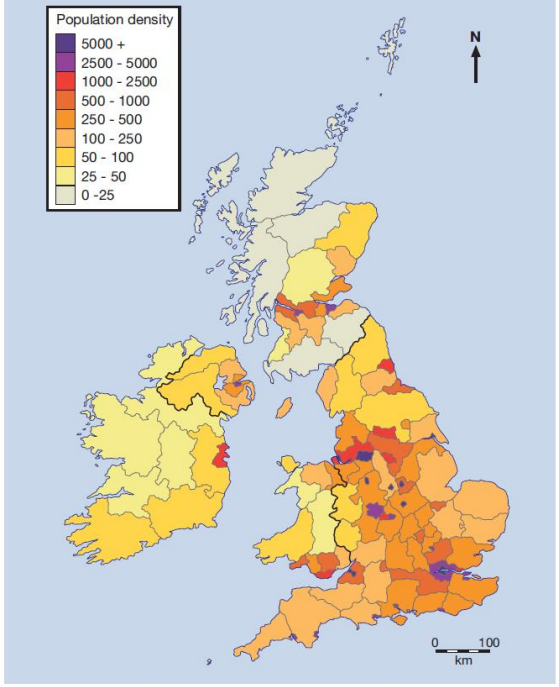
The light grey and yellow areas mean less people.

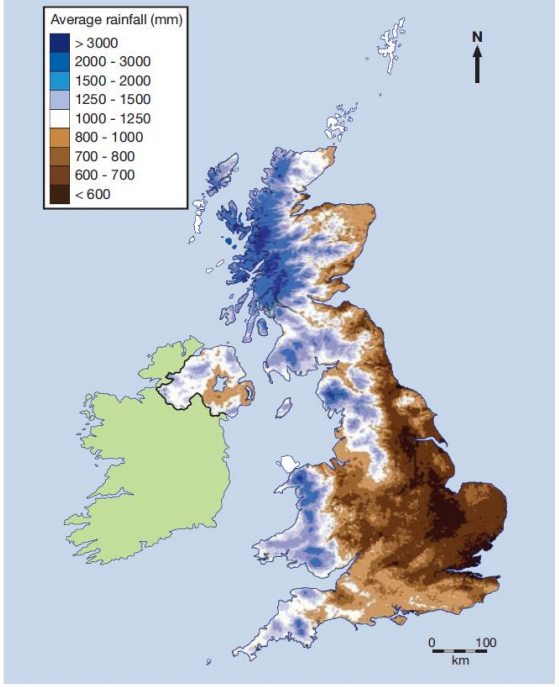


This chart shows the average rainfall across the UK. The blue areas shows where the greatest rainfall is.

Where does most of the rain fall?

Where is most of the rain needed?





Activity 1

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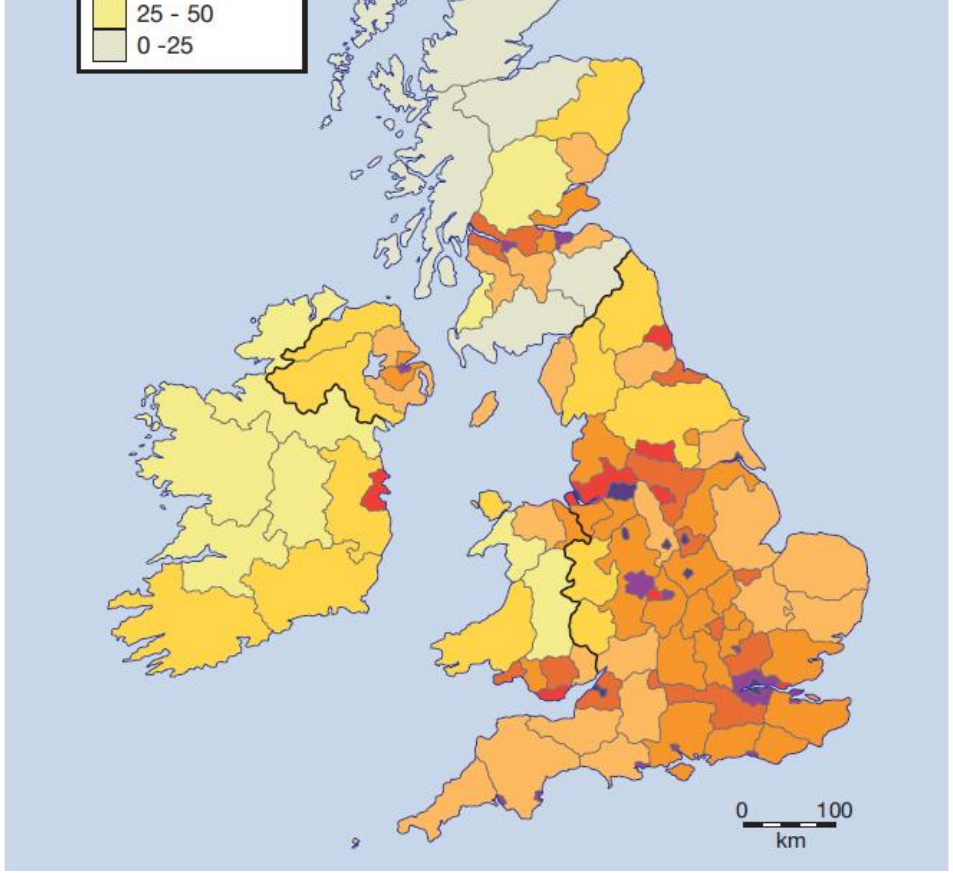
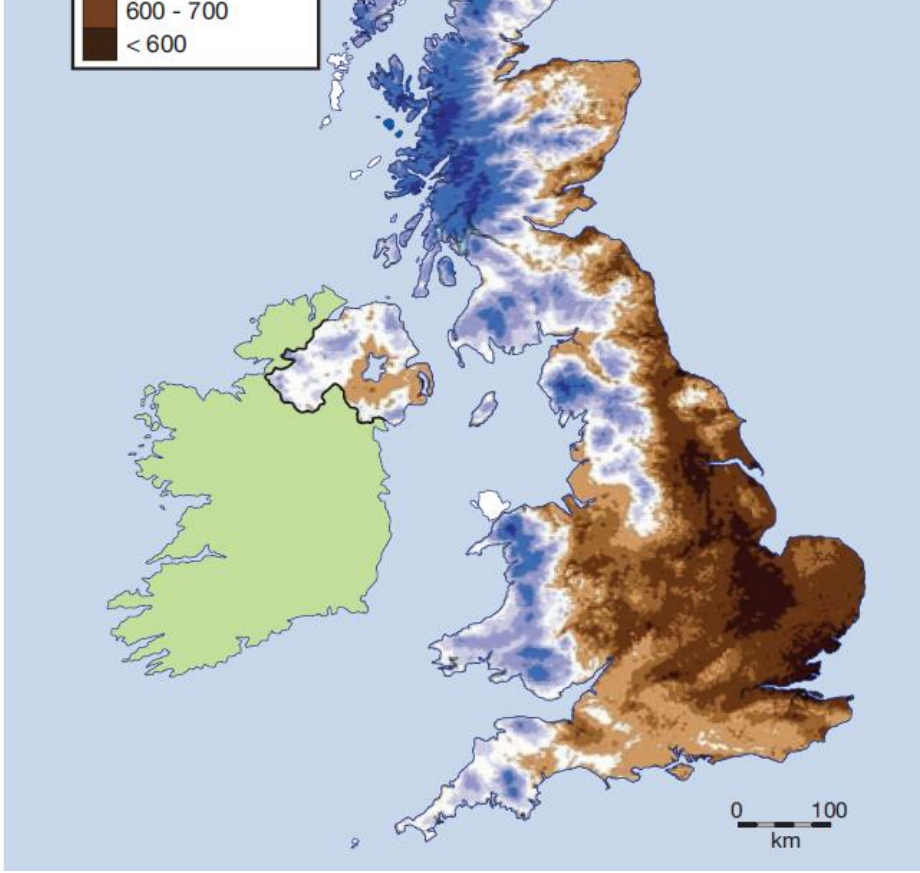
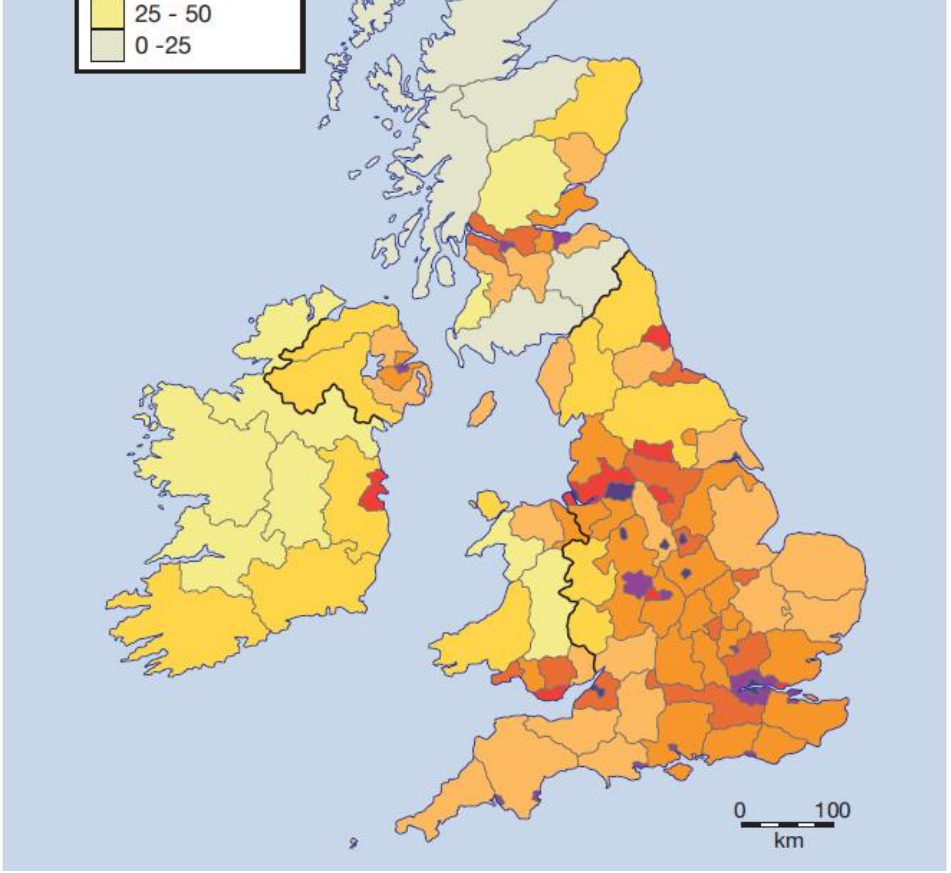
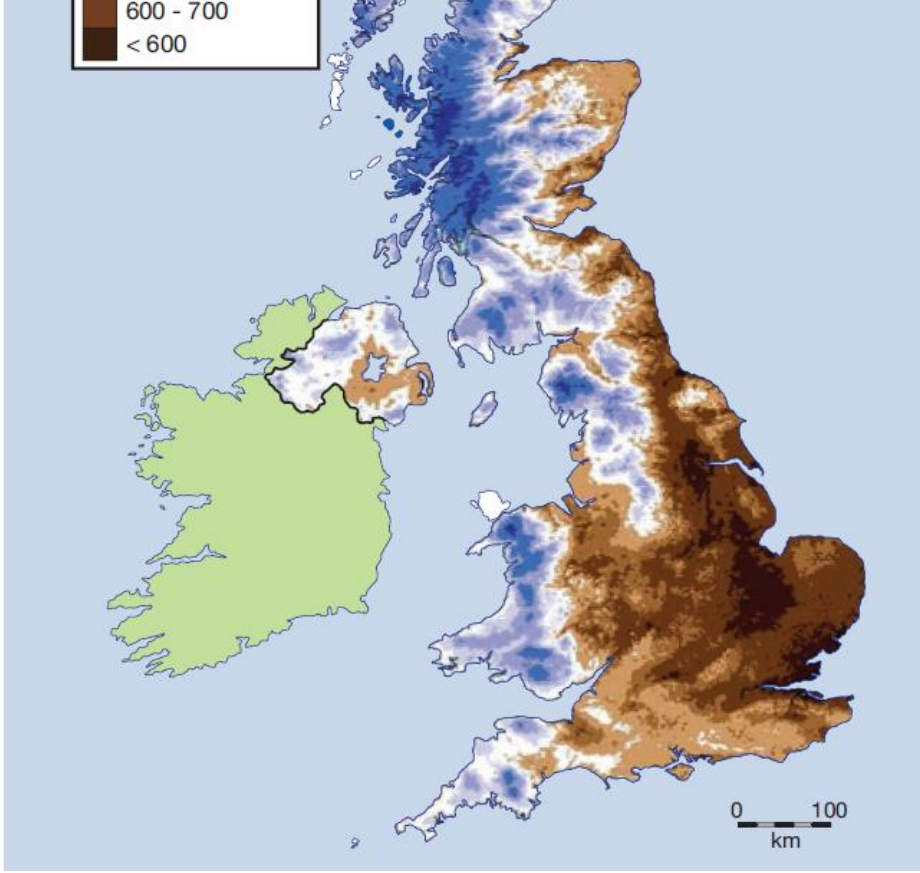




Use your counties map to find Nottingham.
What kind of rainfall do we get?
Do we have a large population?

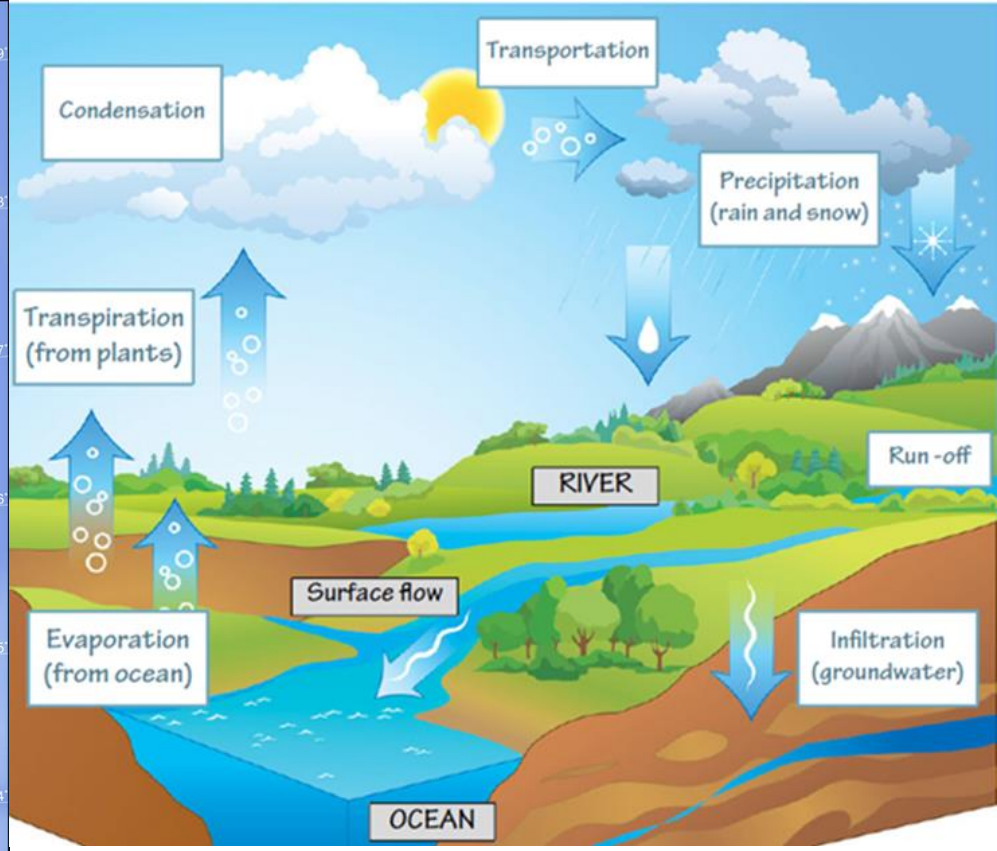
When there is a high population but low rainfall we call is **water stress**.



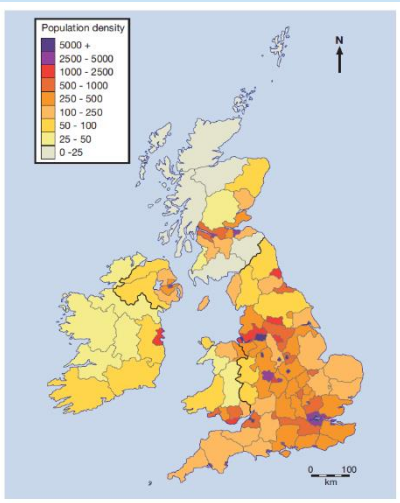


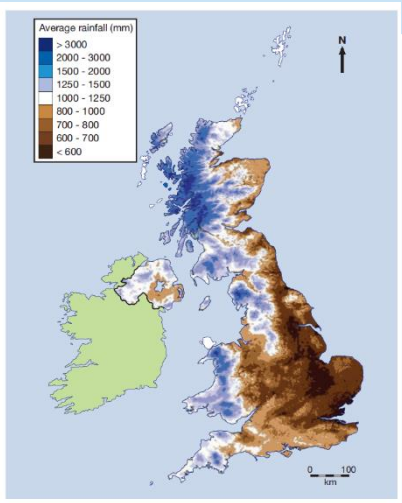
Areas that experience **water stress** need to get their water from areas where water is plentiful.

I wonder if the areas where it rains a lot have other geographical features in common.



How are the water-cycle and mountains linked? Green areas are low-lying and brown areas are high ground.



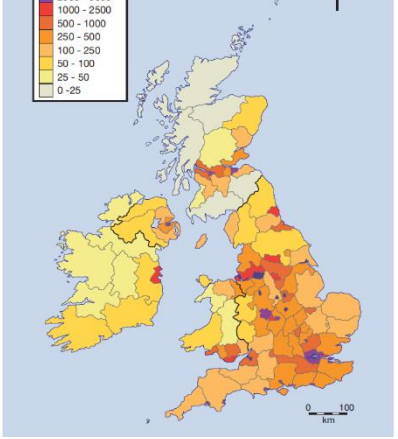


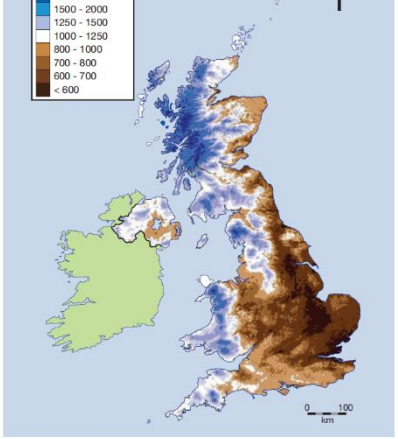
Activity 2

Use the maps to investigate where most of the rain in the UK falls – is it high or low? What kind of place is Nottingham.

Water stress

Nottingham is low lying and has low rainfall. We need more water than we get from rain.

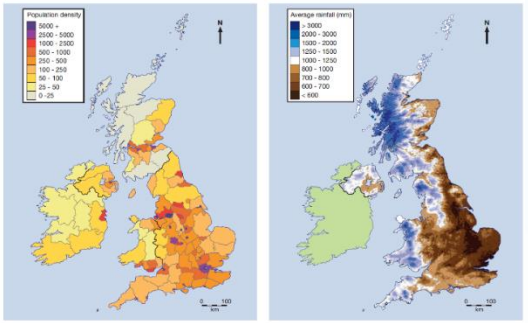




Where does it come from? How do the water companies manage water stress?

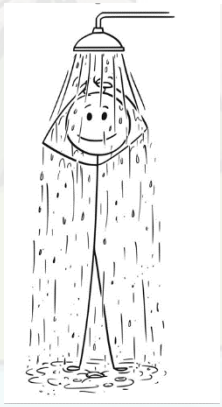
- As much water as possible is pumped out of aquifiers from underground but they are not replenished quickly enough
- More reservoirs are being built in the north and west of the country
- This extra water will then be transferred to the areas with water stress
- Encourage water conservation strategies

Water conservation



Activity 3 What can we do?

Design a poster with some top tips for saving water. Use the prompt sheet and/or sorting cards to help you with ideas.



Did you know...

That each person in the UK on average use 150 litres of water a day! A figure that has been growing every year by 1% since 1930.

Most people in the UK consume a lot more than 150 litres, as water is in most of the foods that we eat.

Why do you think that we use so much water?

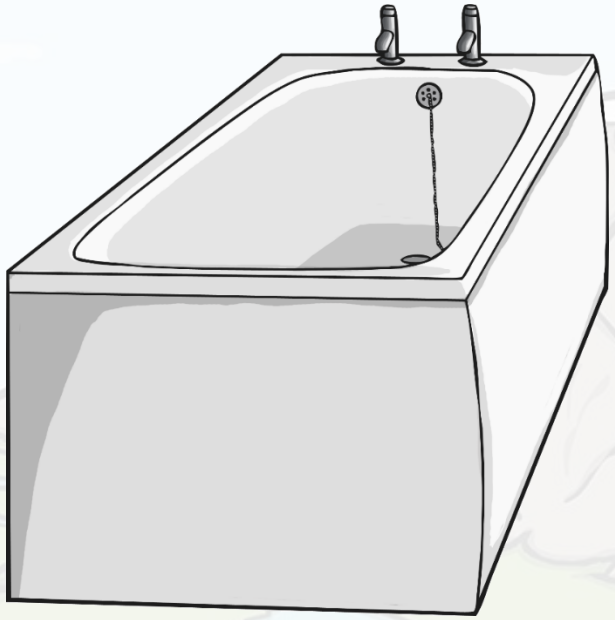
Filling a Bath

Did you know that just having one bath uses 80 litres of water! While a short shower can use as little as a third of that amount.

Solution

So try and take showers more often than a bath.

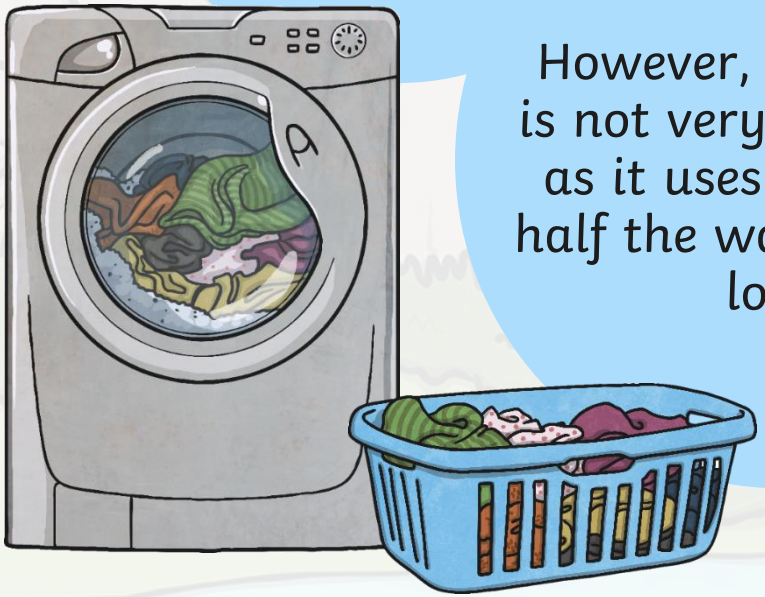
But when you do have a bath, you can minimise your water use by reusing your bathwater to water your houseplants or garden.



Washing Machines

Did you know that a full load in a washing machine uses 65 litres of water.

However, a half-load is not very economical as it uses more than half the water of a full load.



Solution

Try and wait until you have a full load before you wash your clothes.

Flushing the Toilet

Did you know that every time you flush the toilet 2.5 litres of water is used?

According to the World Toilet Organization (WTO), the average person uses a toilet 2,500 times year, or six to eight times a day.

Solution

Some water-saving bag devices can be used in the cistern to save water.

A Dripping/Running Tap

Did you know that a dripping tap can waste up to 4 litres of water a day?

If you leave the tap running it wastes 6 litres per minute, so turning the tap off when brushing can save around 12-18 litres every time you brush your teeth.

If every adult in England and Wales remembered to do this, we could save 180 mega litres a day - enough to supply nearly 500,000 homes.

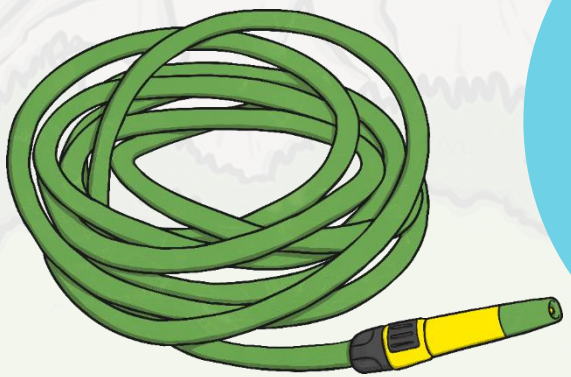
Solution

When you are brushing your teeth try and turn off the tap.

Using Hosepipes

Did you know that the average hosepipe uses 170 litres of water for every 10 minutes that it is turned on, and in one hour a hosepipe will use the same amount of water as a whole family would typically use in 2 days.

Solutions



So when watering your garden remember to use a watering can and not a hosepipe.

Also having a water butt to collect rain water reduces the amount of water wasted.