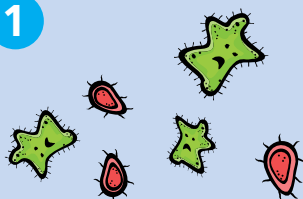




Before water is piped to homes, schools, factories and farms it must be treated and cleaned. It is treated for three reasons:

Each day Anglian Water pumps more than 1 billion litres of clean drinking water to 4.2 million customers. That's enough water to fill more than 12 million baths!

1



To remove any germs and make it safe to drink

2



To remove solid particles and make it clean

3



To remove any unpleasant taste or smell



Making dirty water clean

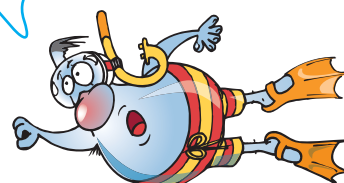
Water treatment in the Anglian Water region takes place at one of more than 140 water treatment works. These operate every hour of every day to make sure the water you use is clean, safe and healthy. The type of treatment depends on the quality of the 'raw' or untreated water. If the water has come from resources deep underground (groundwater) it is usually quite clean already, so it requires less treatment than if it had been taken from reservoirs or rivers. To find out how we treat water, look at the diagram on the following page.



Delivered to your door!

The cleaned water is pumped to our homes and businesses through a huge network of underground water pipes before it reaches your tap. If placed end to end, the water pipes in the network would stretch for 37,000 kilometres. That's nearly long enough to wrap around planet Earth!

Chlorine can sometimes make your tap water smell. Fill a jug of water and leave it overnight in the fridge and you will find that any smell of chemicals will have gone.



Making water safe to drink

The water treatment process is done in stages. Follow the diagram below to find out more.

Storage of water such as in a water tower.

READY TO DRINK!!!

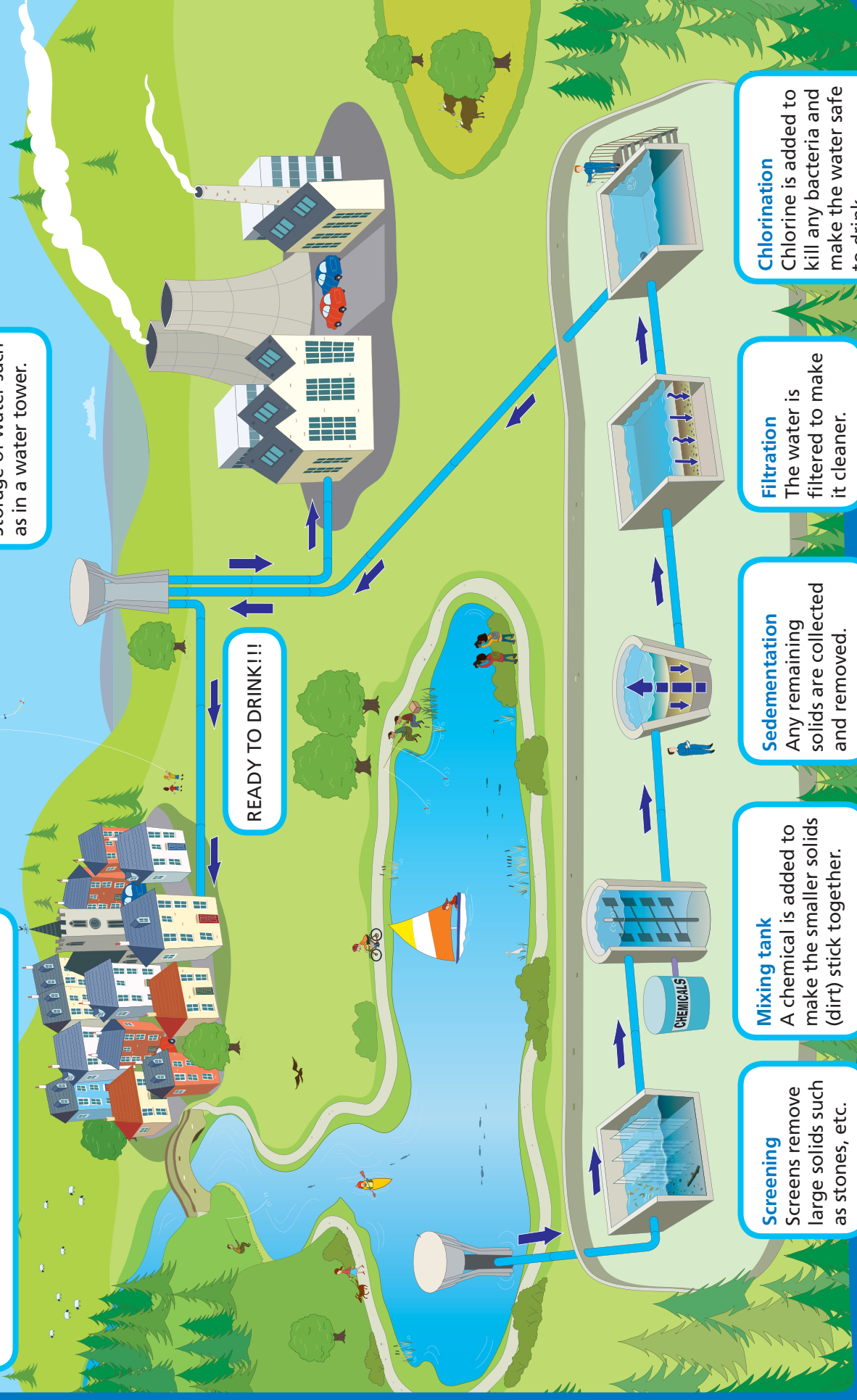
Screening
Screens remove large solids such as stones, etc.

Mixing tank
A chemical is added to make the smaller solids (dirt) stick together.

Sedimentation
Any remaining solids are collected and removed.

Filtration
The water is filtered to make it cleaner.

Chlorination
Chlorine is added to kill any bacteria and make the water safe to drink.





Can you recognise the taste of your tap water? See if your friends and family can identify differences in water taste with this simple taste test.

Learning objective:

To understand the different types of drinking water, and decide whether tap or bottled water tastes different.

What to do

- 1 Fill one bottle with tap water and wrap a piece of paper round it using sellotape.
- 2 Cover the labels on the 3 bottles of bought drinking water in the same way.
- 3 Write a letter on each label, either A, B, C or D.
- 4 Place all the bottles of water in the fridge and leave them overnight.
- 5 Using the sticky labels, write the letters A, B, C or D on four glasses and pour water from the matching bottle into each cup, ready to be tasted.
- 6 Draw a table like the one below to allow you to write down your results.

You will need:

- 1 bottle of tap water
- A fridge
- Glasses/plastic cups
- Sticky labels and a pen
- 3 different brands of bottled water bought from a shop



Observations

- Ask a friend or family member to taste each different type of water and score the water 1 to 4.
- Ask them to identify which one is tap water by putting a tick in the 'Tap?' box of either A, B, C or D.

	Water A		Water B		Water C		Water D	
Name	Score	Tap?	Score	Tap?	Score	Tap?	Score	Tap?
Dad	1	✓	4		3		2	

(1 = most favourite to 4 = least favourite)

Investigating further

- 1 Which was the most popular water? Which was the least favourite?

- 2 How successful were people at recognising the taste of tap water?

- 3 Why was it important to make sure all bottles of water were the same temperature?

- 4 Look at the information label on the bottles of purchased water. Where did they come from? How far has the water travelled? How much did they cost? What is the use by date?

- 5 See if you can find out what factors affect the taste of water.



Bottled water can be expensive in comparison to tap water. You can fill 50 glasses of water from your tap for just 1p!



To find out more, take a look at the drinking water quality section of our website, www.anglianwater.co.uk