# The water cycle



The water we use at home and at work comes from the natural environment. It is being recycled all the time in what is called the water cycle.

#### What is the water cycle?

Water is continually moving around planet Earth from the sea to the sky, from the sky to the land and then from the land back to the sea again. It is also changing state from a liquid to a gas and a solid all the time. This never-ending movement of natural water is called the water cycle.

Anglian Water has a big role to play in the water cycle. We take water out of the water cycle from sources like reservoirs, or deep underground, and clean it before pumping it to our customers for them to use. We then collect dirty water from our homes and businesses and make it clean enough to return to the water cycle.





## As the water moves around, it changes state:



The sun heats the water in the oceans, causing the water to turn from a liquid into a gas called water vapour. This process is called evaporation.



Hot air rises, so the water vapour is carried up high into the sky.



As the water vapour rises, it cools. The water vapour turns back into tiny droplets of water again, forming clouds. This process is called condensation.



As the clouds cool even more, larger droplets of moisture form which are heavy enough to fall from the air as rain. If the air is really cold, the water might freeze, become solid and fall as snow.



Some of the rain soaks into the ground and makes its way through the rocks slowly until it reaches a river, or seeps out of the ground forming a spring.



In some places the surface of the ground is impermeable. Surfaces that are impermeable don't let water pass through them, so the water runs off these surfaces into lakes, streams and rivers. Some of this water evaporates, forming water vapour.



Water collects in rivers and lakes and flows downhill to the sea to complete the water cycle.



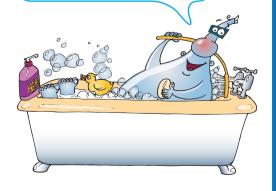
### From salty to pure

More than nine-tenths of the world's water is stored in the oceans, but we can't drink it because it contains lots of salt. Fortunately, when sea water evaporates, the salt is left behind, creating pure water that falls as rain and is normally safe to drink!



◆Dead Sea salt

There would be no life on planet Earth without water. That makes it very precious indeed.



# The Anglian water cycle



See if you can use your knowledge of Anglian Water and the water cycle to complete the diagram by putting the words in the right place. Good luck!

#### **Learning objective:**

To understand the water cycle, including condensation, evaporation and the role of Anglian Water.



- Cut out each of the water cycle facts.
- 2 Place them in order.
- Match each fact to the correct part of the picture.
- 4 Stick down the facts, in the right order.



#### You will need:

- Scissors and glue
- A copy of the water cycle picture

## **Water cycle facts**

The sun's heat evaporates water, forming a gas called water vapour. This condenses to form clouds. The clouds cool and larger droplets of moisture form which fall to the ground as rain or snow.

The clean water is stored in water towers or underground tanks before it is pumped to our customers.

Water is pumped to a water treatment works, where it is cleaned and made safe to drink. Some water runs off surfaces into lakes, streams and rivers. Anglian Water collects this water in reservoirs and from underground.

By using water at home and at work, we make this water dirty. Sewers carry this wastewater to one of our wastewater treatment works.

The cleaned wastewater is returned to the environment through rivers, where it rejoins the water cycle.

At the wastewater treatment works the dirty water is cleaned up again!

