



# DID YOU KNOW?

## N° 2 - GROUNDWATER



Knowledge Inventory for Hydrogeology Research

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## WATER FACTS

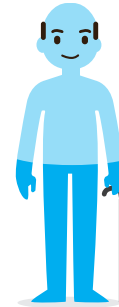
### HOW MUCH WATER IS IN YOUR BODY?



80%



70%

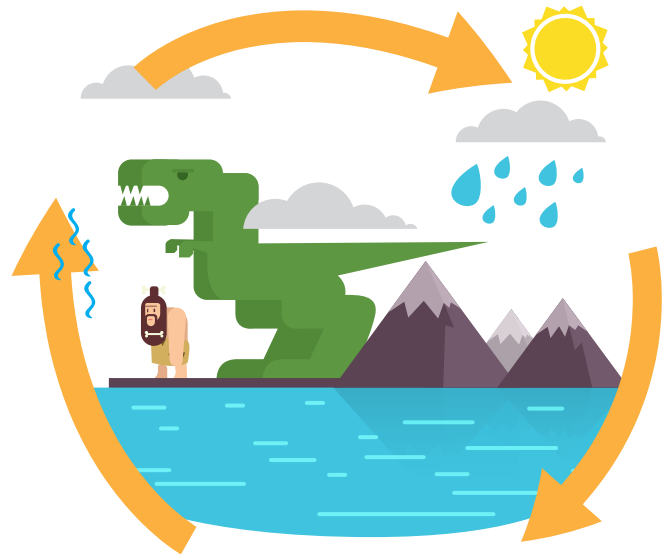


50%

### PART OF THE WATER YOU DRINK TODAY COULD BE THE SAME WATER DINOSAURS OR CAVEMEN DRANK MILLIONS OF YEARS AGO?

**Earth's water cycle**, known as the hydrologic cycle, uses and continuously recycles water.

Water from land and oceans is warmed by the sun and evaporates into the air and forms clouds. Then water falls back to the Earth as rain, snow, sleet, or hail. Some of it falls into the oceans, some may run off the land into lakes, rivers, and streams, and some filters into the soil to be taken up by plants or to become groundwater. Water is returned to the air when plants and creatures breathe and when water evaporates from the oceans, lakes, rivers, and streams.



## WATER FACTS

# HOW MUCH FRESH WATER DO WE HAVE ON OUR PLANET?



## WHERE IS THIS FRESH WATER STORED? SOURCES OF OUR DRINKING-WATER:



GROUNDWATER (AQUIFERS)



CAPTURED RAINFALL



NATURAL LAKES



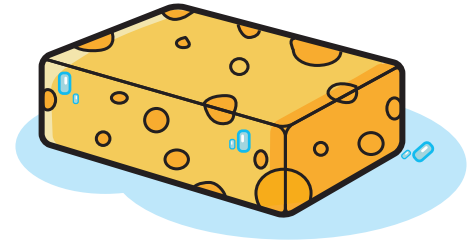
STORAGE RESERVOIRS



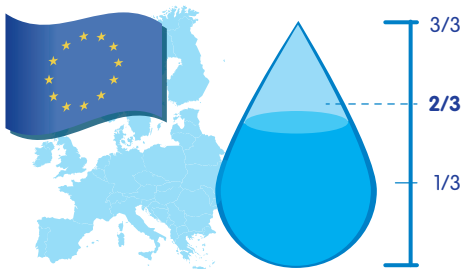
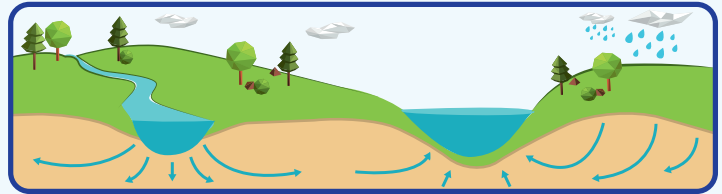
RIVERS

## GROUNDWATER FACTS

Groundwater is stored in soils and sands able to **retain water**, much **like a sponge** holds water.

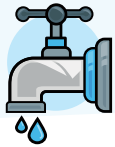


There is a **strong interaction** between groundwater and surface water: surface water adds to groundwater and vice versa (e.g. surface water infiltrates groundwater and groundwater can feed into rivers and lakes).

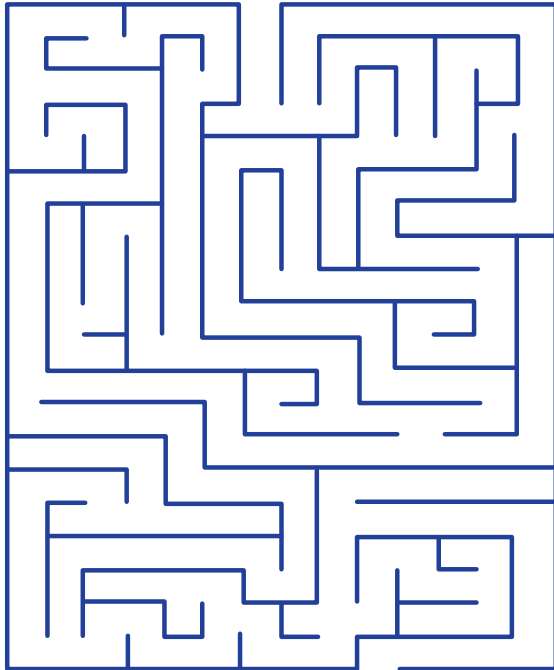


**Groundwater** is a very important type of water supply: it provides around **two-thirds of drinking water** in Europe.

**Exercise:** Mark the water's route from the aquifer to the tap



◀ FINISH



START ▶

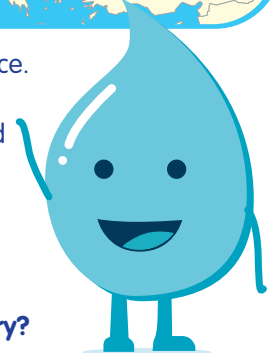


Groundwater **does not follow boundaries**; aquifers are often shared by multiple countries (see the red lines on the map).



Groundwater is a renewable resource. In most of Europe, water removed from the ground is constantly refilled by the infiltration of fresh rainwater. However, large areas of the Mediterranean are water-stressed due to intense use.

**What is the situation in your country?**  
Ask your parents/teachers!



## WHAT DO WE USE WATER FOR IN EUROPE?



Agriculture



Energy



Public Supply



Industry

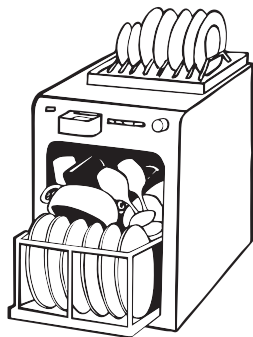


Install new toilets that use less water per flush

## Groundwater protection starts at home! What can you do?



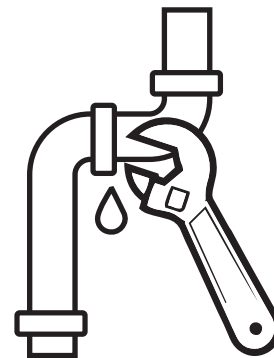
Use environmentally friendly cleaning products, washing powders and detergents



Fully load dishwashers and washing machines

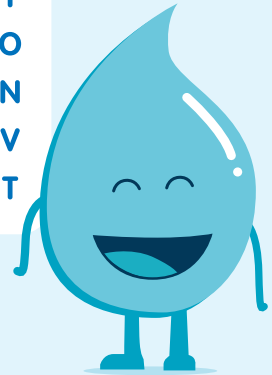


Turn-off the tap while brushing your teeth



Fix leaks

K	D	R	O	U	G	H	T	J	R	I	S	C	C	D
Z	P	R	E	C	I	P	I	T	A	T	I	O	N	C
M	S	E	T	C	J	O	M	R	G	O	S	K	E	O
W	P	C	O	N	T	A	M	I	N	A	T	I	O	N
A	R	O	V	V	R	Q	Z	W	O	Y	R	G	A	D
T	I	O	D	X	B	W	W	M	R	V	Y	Q	O	E
E	N	B	U	K	G	Q	R	E	B	S	N	O	W	N
R	G	Y	X	E	G	Q	B	M	L	U	T	K	B	S
C	V	A	P	O	U	R	P	I	A	L	R	Z	Z	A
Y	P	W	D	E	C	L	O	U	D	S	Z	I	V	T
C	S	E	C	B	F	D	V	R	R	L	Y	G	K	I
L	X	I	F	L	I	Q	U	I	D	X	W	H	Q	O
E	H	A	I	L	I	R	R	I	G	A	T	I	O	N
K	Z	F	I	L	T	E	R	I	N	G	X	O	N	V
P	Z	G	A	Q	U	I	F	E	R	Y	S	C	R	T



### Groundwater word search (check your vocabulary)

aquifer  
clouds

condensation  
contamination

drought  
filtering

irrigation  
liquid

precipitation  
snow

spring  
vapour

well  
water cycle



**Knowledge Inventory for Hydrogeology Research**

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