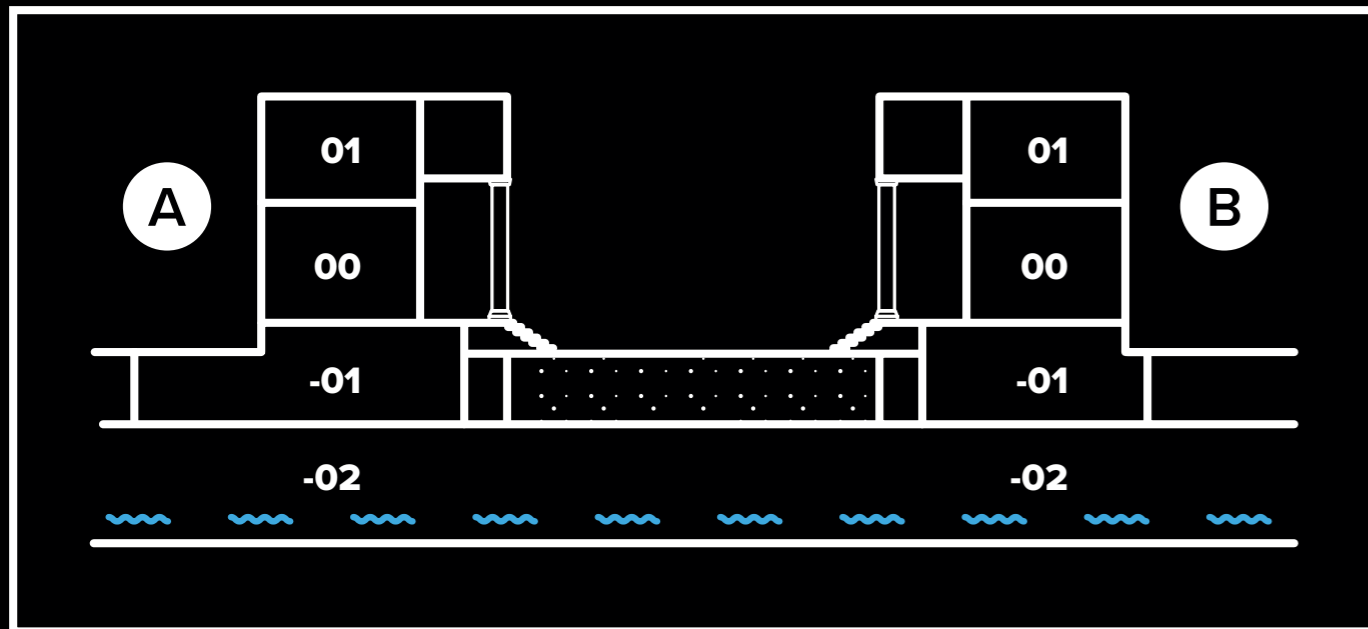


ExplorATion notebook

sewer
useum



sewer museum



00



- 01



- 02



Hello! I'm your guide for exploring the underground world of Brussels.



Then follow me. We're off to discover the Brussels Sewer Museum.

Various activities are offered to you, following the order of the numbered panels.

You'll find some answers at the end of the notebook.

To find your way around, look at the pictograms on the museum map.

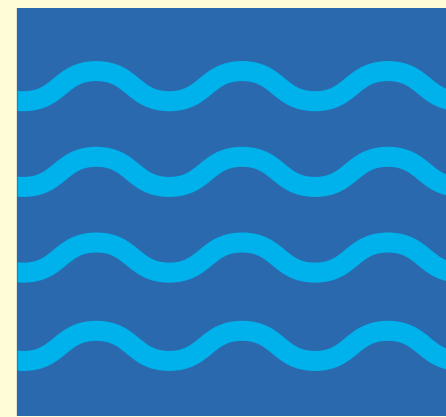
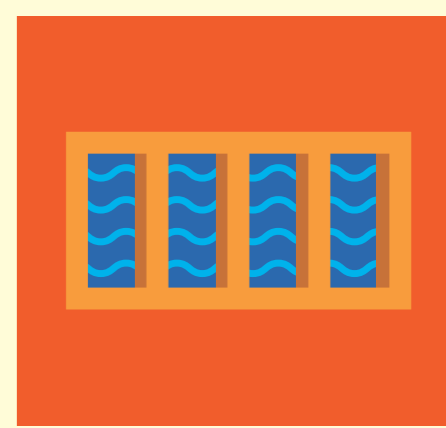
Each room has a specific theme:

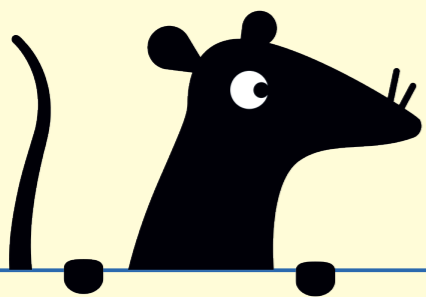
1. Brussels' waterways and their relationship with the sewers
2. The wastewater collection network
3. Combatting flooding
4. Technical developments
5. Sewer network maintenance
6. Sewer workers: working conditions and equipment
7. Blue gold: water and sustainable development

Ready for the adventure?

This booklet belongs to:

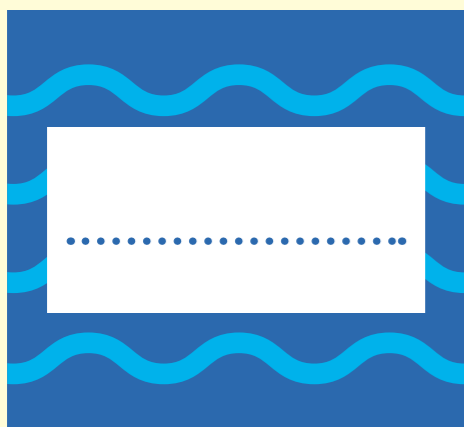
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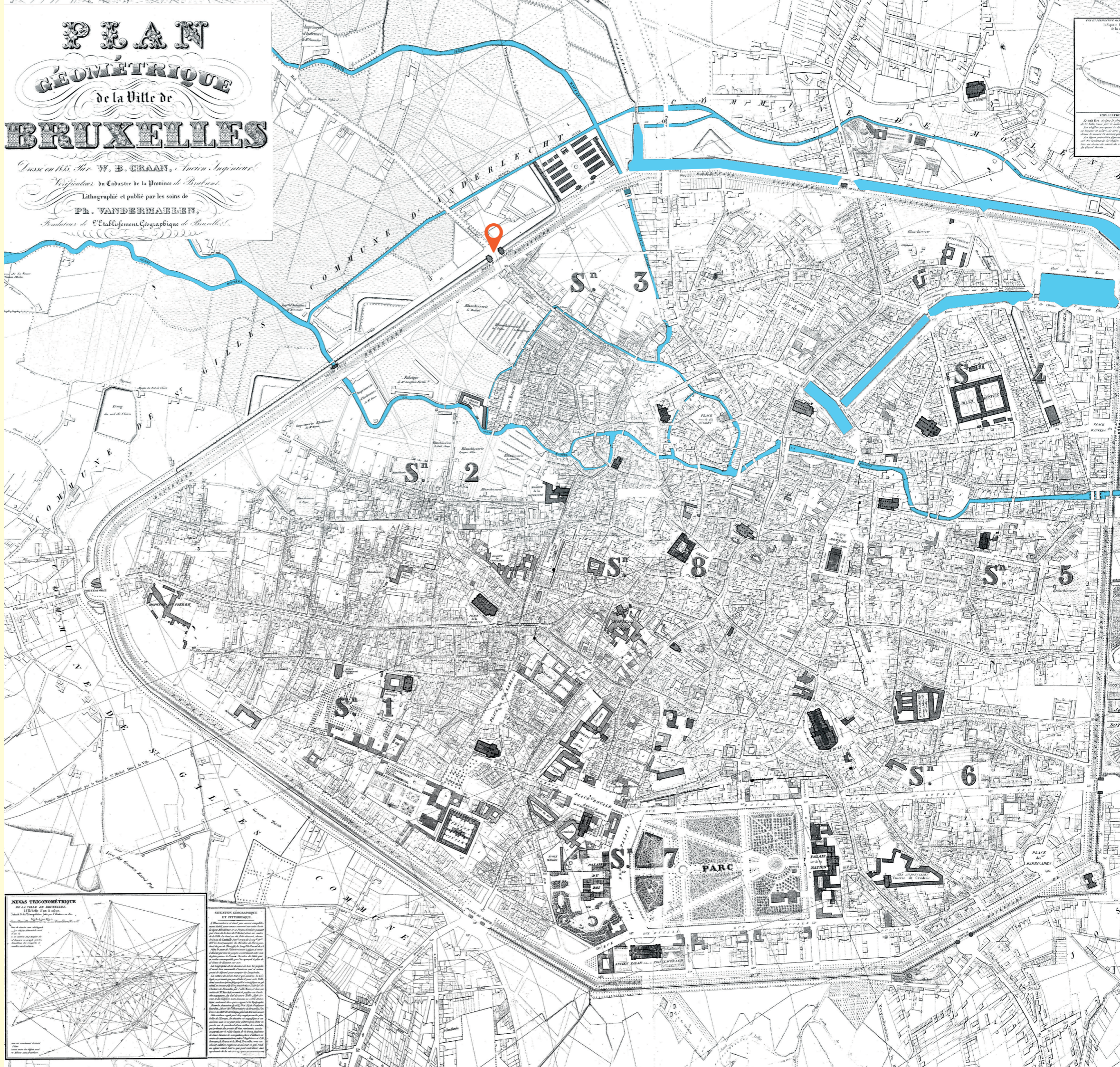


Brussels developed in the Middle Ages. In the beginning, it was just a village along a river. Gradually, Brussels became a major city and the water from this river was used to drive mills, produce beer, wash and dye fabrics. For a very long time, the river was also used to get rid of waste water, back before the extensive sewer system existed.

Find the name of this river on the old map

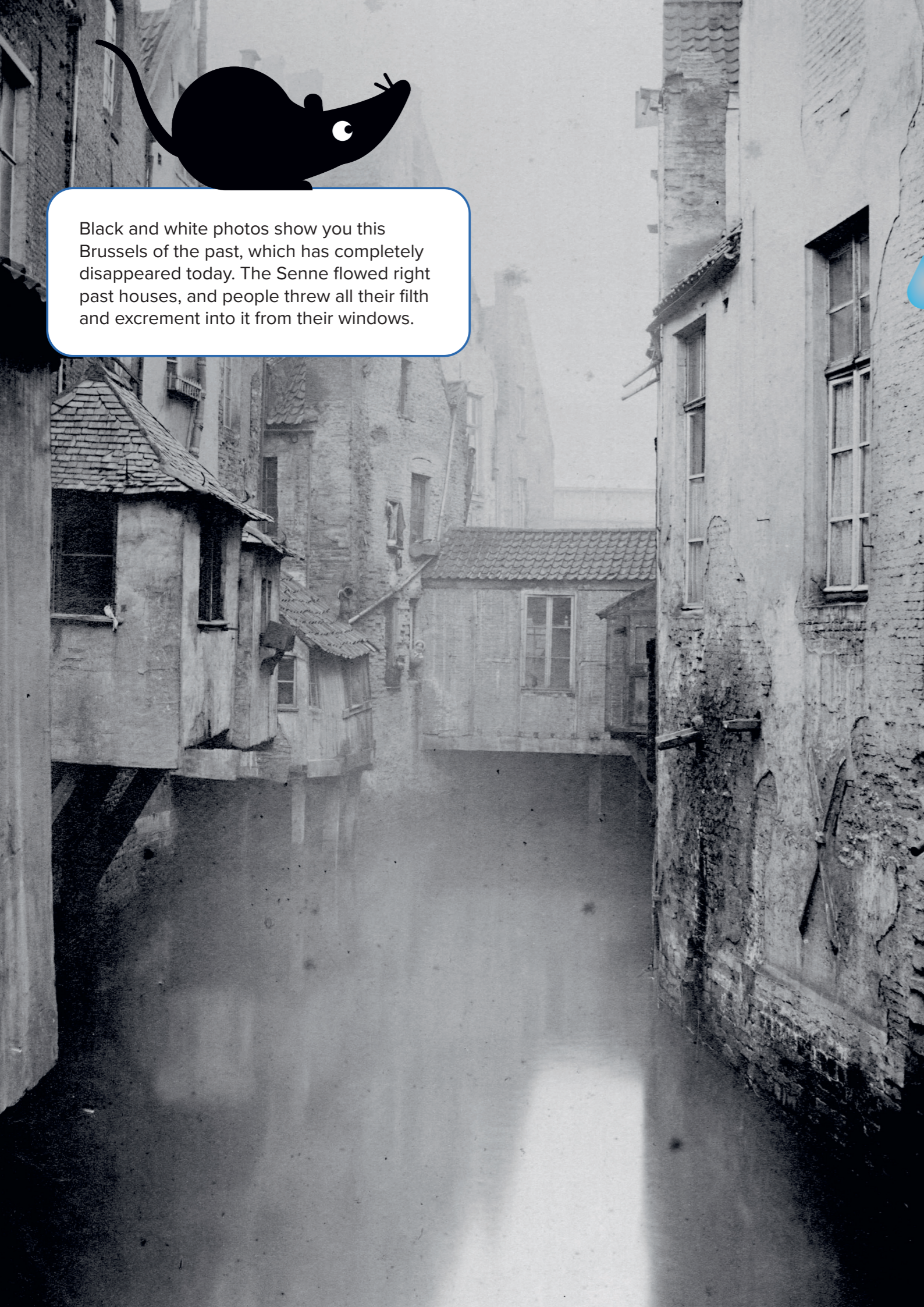


To find your bearings in the city, look firstly at the model of the Brussels topography to understand what a «valley» is, and how it is carved out by a watercourse, imagine where the water would go if the cloud hanging over this model rained down on it.





Black and white photos show you this Brussels of the past, which has completely disappeared today. The Senne flowed right past houses, and people threw all their filth and excrement into it from their windows.



In addition to becoming an open sewer, the Senne often burst its banks during heavy rains...



Can you find the picture this detail is taken from?



Why have the Brussels residents shown here got their feet in the water?



Circle the right answer



They are practising water sports



They liked foot baths



They suffered from flooding very often

Jules Anspach, the Mayor of Brussels (1863 to 1879), decide on an extreme solution to tame the river and make the city less stinky: he approves a plan which made the Senne disappear underground, gave it the company of a whole new network of sewers! The work lasted from 1867 to 1871

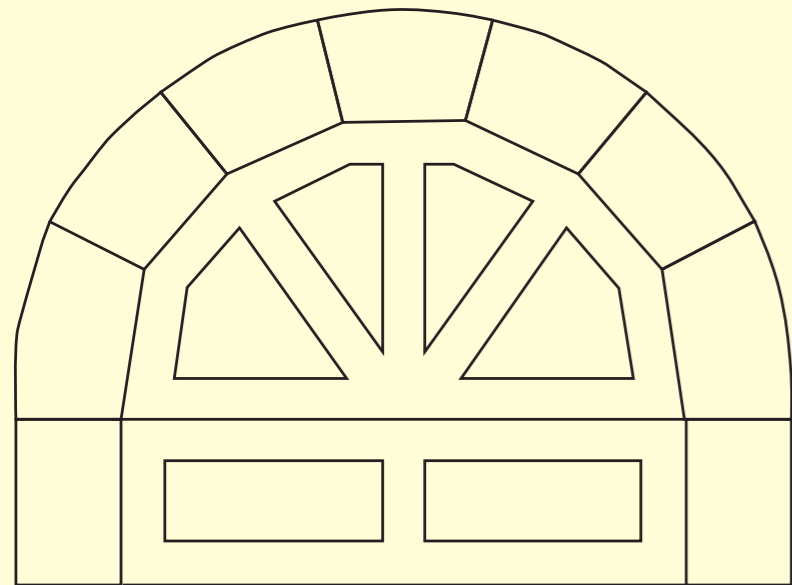
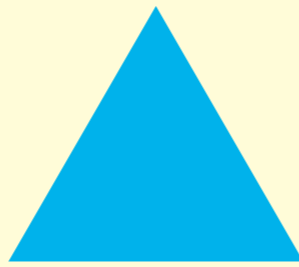
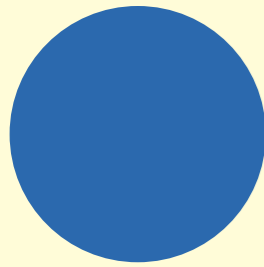




Look at the black and white photo on panel 5 of the large underground «cage» we built to contain it... What shape does it remind you of?



Circle the right answer.



This wooden vault was covered with bricks.

It's time to find out if you're as skilled as the engineers and workers who covered the Senne all those years ago. Let's play the game "Bury the river"! It's up to you to use the template and place the blocks over the top.

The keystone should be placed last. Make sure that the structure does not fall apart when you take out the supporting template. This game will help you to understand the mechanism of the keystone!



The inaugural stone of the vault is kept at the museum. The year of the start of the works is engraved on the stone in Roman numerals.

Look at the initials on the coat of arms; what first name of King of the Belgians does it refer to?

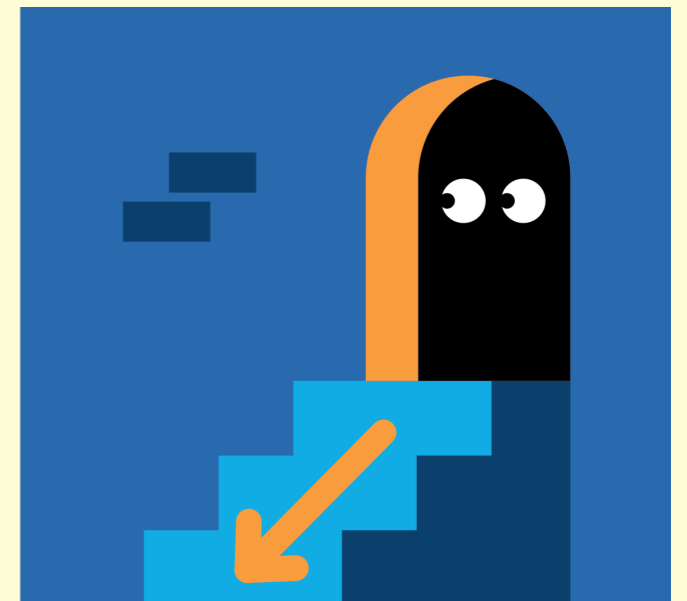
Here's a clue: look at the gold and silver coins with his image in the display case.

60 years after these works, some districts still suffered from major flooding. So the Senne was diverted. You can discover the new route by following the orange line on the aerial photo of Brussels

There is a good reason why I just told you that, it's because it flows beneath where we are standing.

Be patient, you'll see it soon!

To continue the tour, go down the steps.



0 - 01



SEWER ?

Underground pipes which receive rainwater, household and industrial water from the city, flushing them to a treatment plant. «Waste water» is water which has been used (in showers, toilets, etc.), and which is flushed into the sewers through pipes.



WATER USAGE CHALLENGE: TEST YOUR KNOWLEDGE!

Do you know how much water you use every day at home?

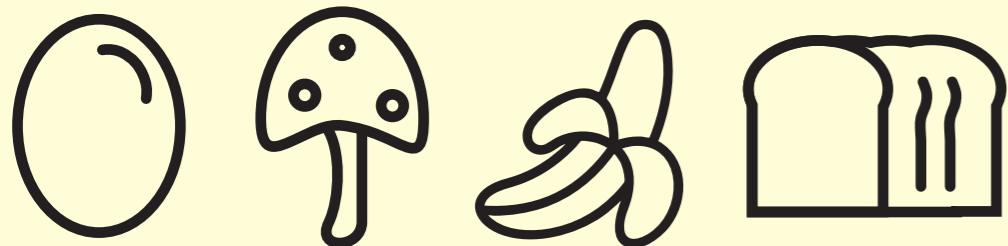
It's used for more than just drinking... So, which activity do you think consumes the most?

Have a guess, then turn the wheel and discover how rainwater can be used to replace drinking water.

Find the entrance to the reconstruction of the sewer, to your right. Go in... and try to imagine the sewer workers doing their job in this small space!

Take your time and have a good look at your surroundings: underground, there are pipes in different shapes and sizes which connect houses to the sewers.

Does the shape of this sewer remind you of one of the food items below? If so, which one? Hint: it's named after it



0 - 01



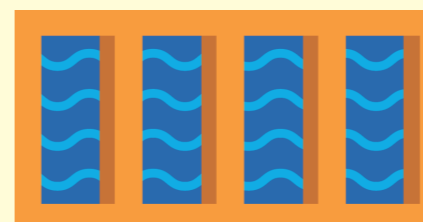
Come out of the sewer and look at the model. You are familiar with the city above ground with its streets and houses. But down below, there are the sewers, storm basin, the Senne, the metro, the electricity and gas networks, etc.

Go to the next room and look for this plate that you've probably already seen in real life in the streets.

What is its exact name?

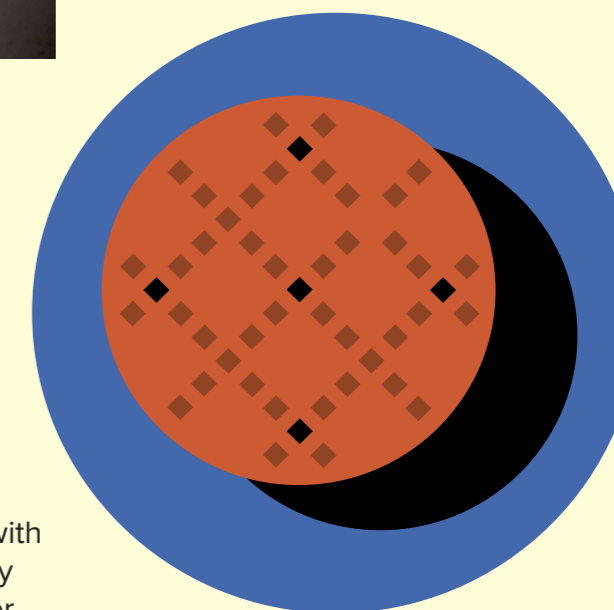
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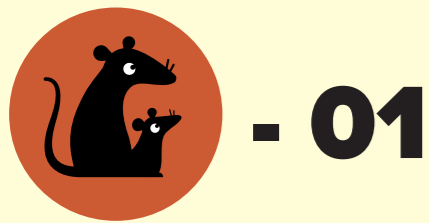
If you lifted it up from the street (and good luck with that, it weighs 90kg!), you would descend directly into the sewers. It's the way to work for the sewer workers. They descend via a ladder to check the sewers and carry out any necessary repairs.



A heavy downpour has mixed up the order of the letters of this object which collects rainwater: drain. Put them back in the right order:

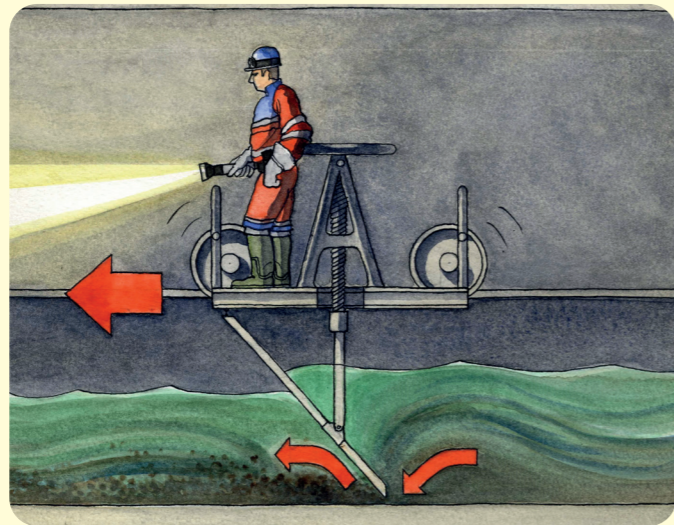






There are many inhabitants in the sewers... the most famous of which is the rat.

We are considered to be "harmful". However, we devour your waste, but humans still try to control our numbers because we can also cause some damage...



Have a good look at the model in the centre, and the illustration to explain how it works.

You'll see this funny machine, in real life, at the bottom!



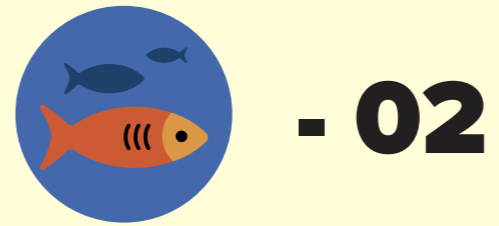
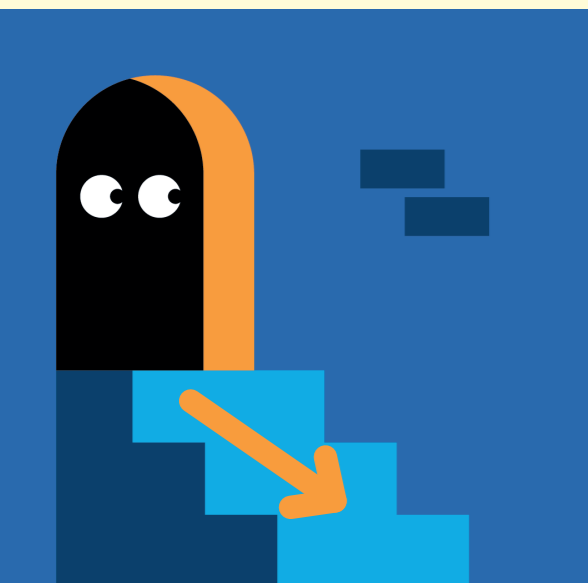
What's the wheel for?

Cross out the wrong answer

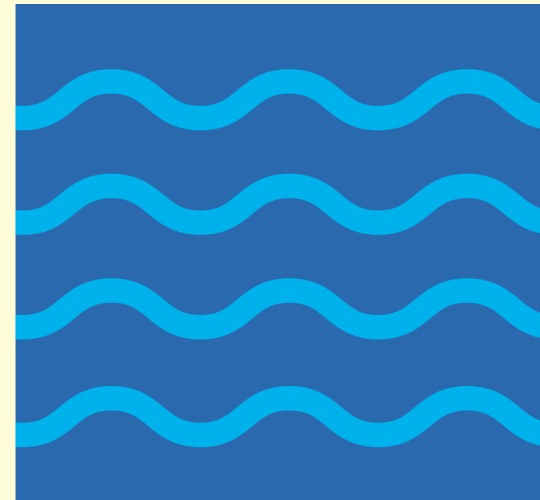
- 1 manoeuvring through the sewers
- 2 lowering the valve, to move forward
- 3 flushing out mud using water pressure

**You've been very patient!
We are now finally going to go down to see the Senne and the sewers...**

Be careful, make sure you follow the safety instructions!



AWAKEN ALL YOUR SENSES!

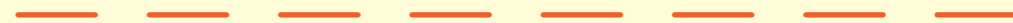
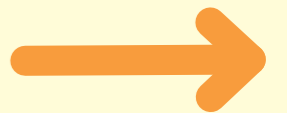


Well, here it is at last.. the **Senne**.

You see we weren't kidding, it has been kind of «enclosed» in a double tunnel and it will see the light again in a few kilometres. It doesn't look much like a river any more, but it's no longer a sewer either!



Look at the plates attached to the walls and the flow of the water, which way is it flowing?
Name of municipality where water flows downstream:



At the end of this passage, on the left, you will be in the real sewer, which is still in operation.
As incredible as that seems, you are already walking in a big sewer, called a **collector**, because it collects water from the smaller sewers. Waste water flows below the grates.

Do you recognise the smells?



Look over there, there is a plate with the name of a boulevard, above a smaller sewer. What does it say?

Two horizontal dotted lines inside a blue rectangular frame for writing an answer.

TAC-TAC - 02

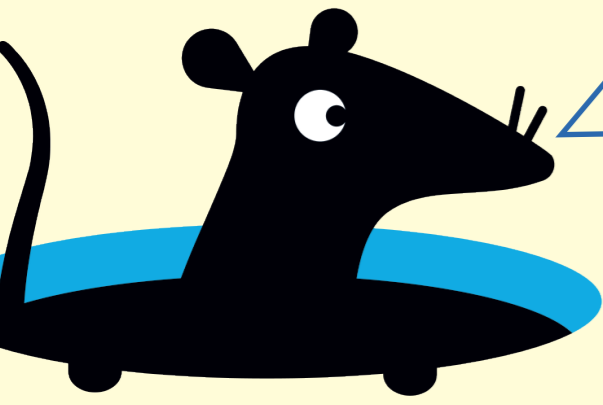
PLOC-PLOC

SPLASH



You can also hear noises, the flowing of the water, but sometimes less expected noises!

These are the cars driving over the copings above our heads.

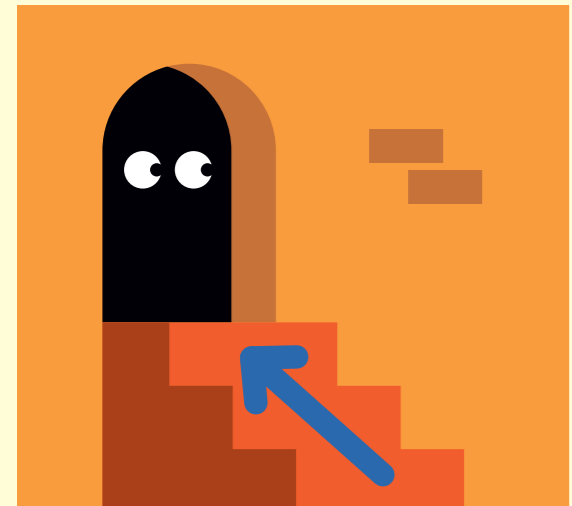


Go on, be brave, go right to the end, and if you see them, say hello to my rat buddies.



See this big machine? It's a roller-type sluice or the valve cart, shown in the model and video above. The entry and exit gate of the sewer workers is at the end of the little corridor on your left.

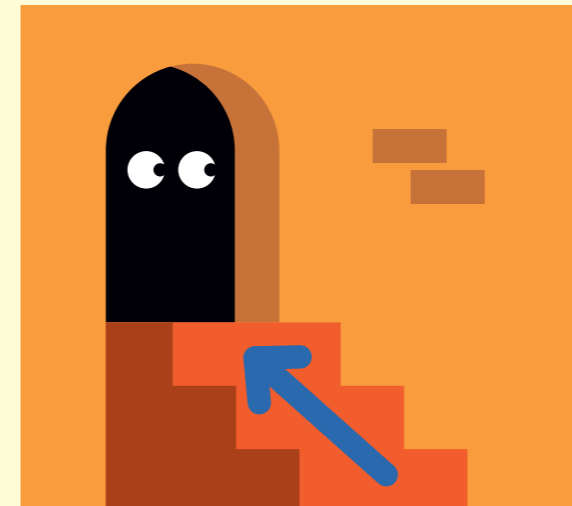
Go back the way you came and climb the stairs on the left before the river. I'll wait for you in the sewer workers' room for the rest of the tour... Wash your hands in the sink.



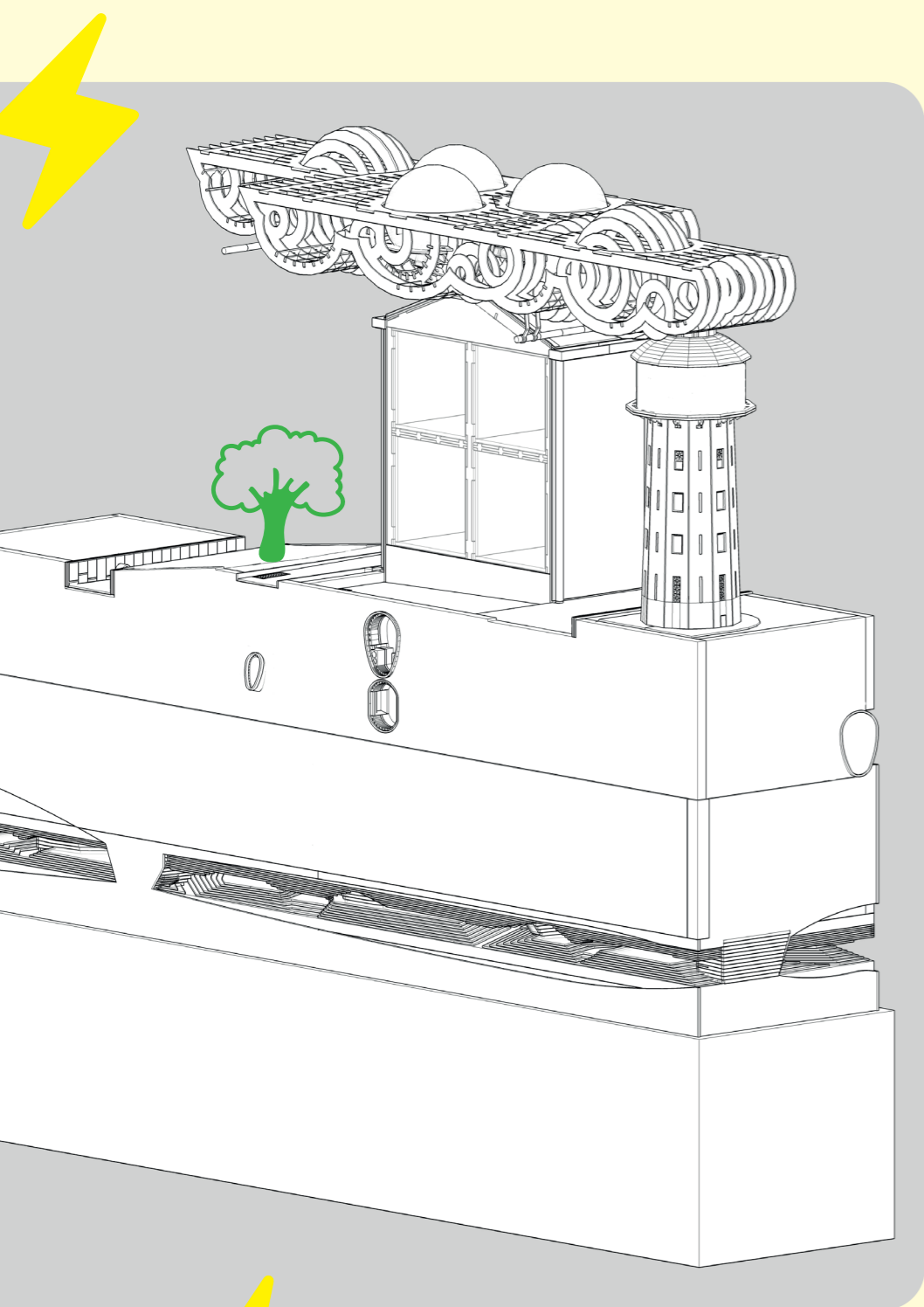
- 01

Being a sewer worker is a dangerous job! Underground, the sewer workers risk catching diseases, getting poisoned from toxic products or gas, and also drowning. To protect themselves, they need good equipment.

Go to the game **PROTECT THE SEWER WORKER**. Identify risky situations in the photos. Then, rotate the central box to find pictures of the potential dangers. Last but not least, at the third station, dress your sewer worker to make sure he is fully equipped.



Climb the stairs to explore the last room in the museum.



The water cycle model summarises what you have learnt during your visit. Observe and listen carefully. When you press one of the control buttons, you can follow the course of the water.

Storm clouds drift over the model



Press the **THUNDERSTORM** button

Water is our **BLUE GOLD** since it is very precious: without it, we wouldn't be able to survive, so we shouldn't waste it! There are smart tips to save tap water.

Water is essential for life on Earth. But it is not unlimited! Our drinking water resources are threatened because of pollution, wastage and increased consumption.

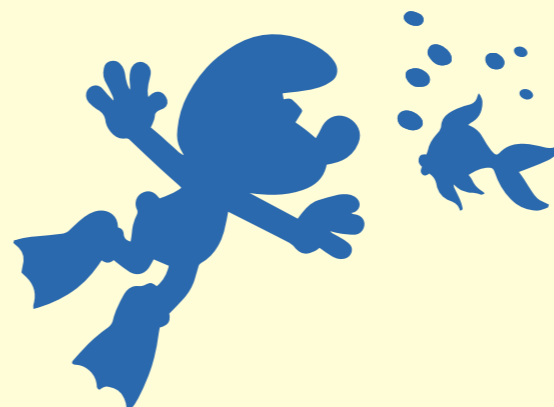


Head over to the games **DOWN THE DRAIN? NO WAY!** and **WHAT BLOCKED THE DRAIN?**

Identify problematic waste that pollutes and clogs up the sewers.

Waste that is not treated at a wastewater treatment plant risks ending up in the river, then the sea... It should be disposed of in the appropriate bins for recycling.

The Smurfs are setting an example and reminding us of the **"The sea starts here... Don't litter"**, campaign, with stencils around the drains that you may already have seen in the street.



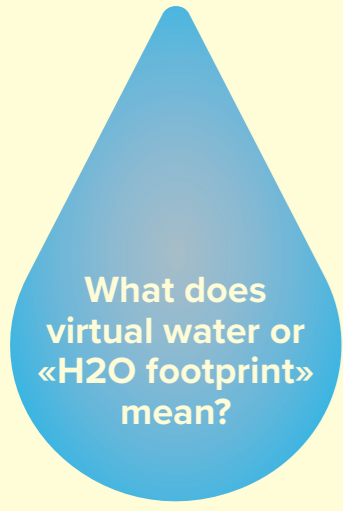
Do you hear the thunder that precedes the downpour?



Rainwater is a valuable resource! Look closely at the model in front of you and sketch some solutions that prevent it from mixing with wastewater in the sewer.

Draw places where rain is a resource

hier begint de zee  ici commence la mer
ne rien jeter | niets ingooien

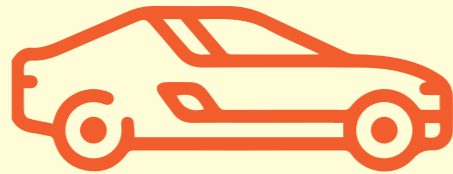
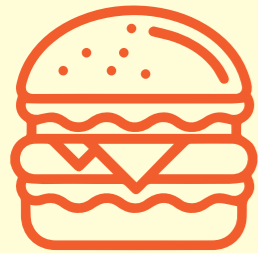


All of our consumer products contain water, even if we can't see it in the finished product. We call «virtual water» or «hidden water» the water which is necessary for industrial production.

In effect, companies consume a lot of water to make products or food. That all adds up to many invisible litres of water!



Match the quantity of water needed to produce:



4 100 l

2 400 l

8 000 l

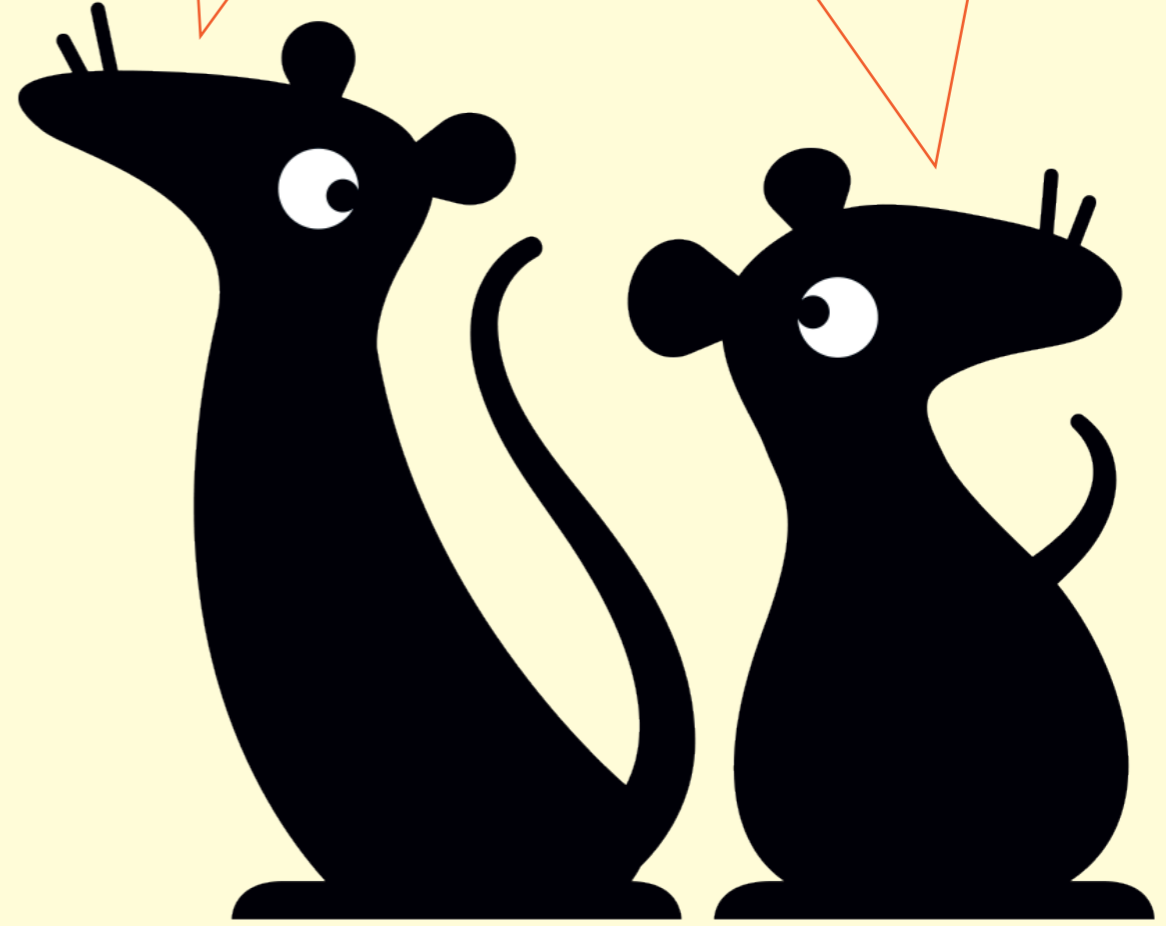
1 350 l

120 000 l

THANKS FOR YOUR VISIT!

This museum is unusual, right?

I hope you will be careful with your water consumption, and that you don't throw just anything down the drain.



Answers
p. 4: Senne / valley, river, pond, canal, sewer... / They often suffered from flooding
p. 8: heart shape
p. 9: Leopold II
p. 10: egg-shaped tip
p. 11: coping / Gully
p. 12: manoeuvring through the sewers
p. 13: on the left, heading north, / Vilvoorde
p. 16: infiltration tank, rain garden, green space, green roof, rainwater tank, river, water table
p. 18: 96 L / 10 eggs : 1350 L / shoes : 8000L / car : 120000L / cotton T-shirt cotton : 4100L / Hamburger : 2400L
Booklet design: Aude Hendrick, Martin Angenot, Carine Van Kelstand all the team of the Museums of the City of Brussels
Layout: Jen Garcia Gonzalez - External Communication of the City of Brussels
Illustration JJ Maquaire © 2007
D/2025/3285/10

