



# Welcome!

## Adventurer of the mountain, welcome to the Mission Dahu trail!

All along the way to Lake Friece, you will find missions that will help you discover the natural environment of the Dahu. Along the way, you will learn about the importance of water in this beautiful landscape. Yes, water is crucial for life in the mountains. At the end of this trail, you will be an expert in the field, like me!

### YOUR FIRST MISSION

Your first mission is to find all the statues of the Dahu's friends who are hidden near each panel! Are you up to the challenge? Here's a hint: each panel title will tell you which animal you should be looking for.

### MAP



### HERE'S A HINT

Each panel title will tell you which animal you should be looking for.

### THE DAHU ATTITUDE

Pick up your trash and don't leave anything behind: garbage breaks down into small polluting particles in the environment.

Some of these particles end up in the water of our rivers!

If you find other garbage on the way, pick it up too!

Leave the plants in their place: some plants have a protective function for the environment, for example by ensuring the stability of the soil or by offering living quarters to insects.

### FOR THE CURIOUS

The Dahu is concerned about its environment. Because of its extreme adaptation to the mountain, it becomes very vulnerable when it is threatened. Follow the Dahu through the different missions that are entrusted to you and become an expert in the protection of the mountain environment!



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# Marmot Mission

## The origin of water

You know that water flows downwards; but where does it come from?

### YOUR MISSION

Take a seat near the panel and observe your surroundings.

What clues show the presence of water?  
How did the water get there?

### MY MESSAGE

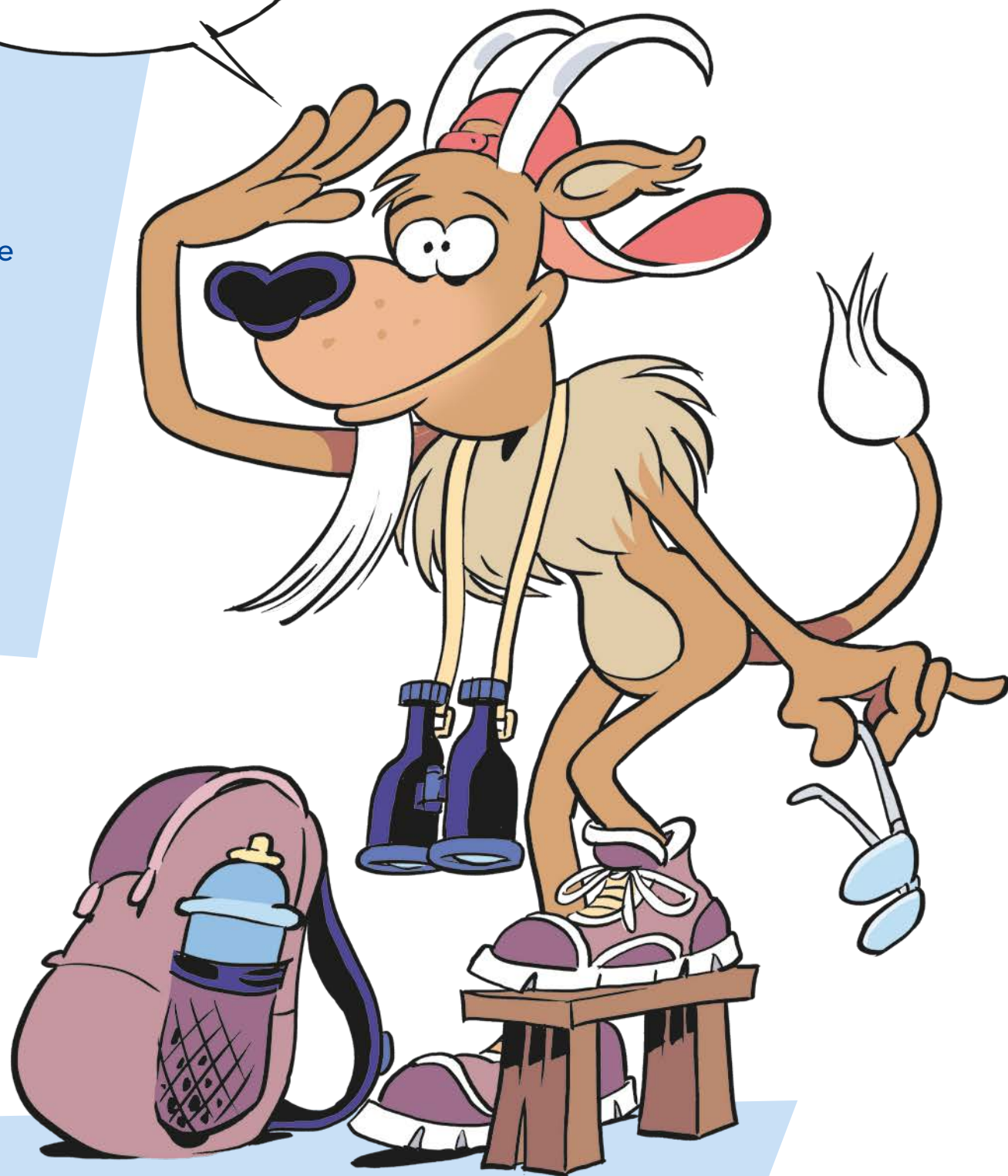
Water is present everywhere and shapes the landscape.

Indeed, between small streams, rain, melting snow or evaporation, water circulates continuously: this is what we call the water cycle.

Its abundance in some places will influence the quantity of plants. As it flows over the mountains, it will carve its path and gradually shape the landscape.

If you have a good eye, you will see many signs of its presence, such as thick vegetation, a stream bed, or animals typical of wetlands, such as mosquitoes.

PSST,  
DID YOU FIND  
THE GROUNDHOG  
HIDING IN THE FOREST?



### FOR THE CURIOUS

The water cycle plays an important role in the water supply of mountain regions. But beyond the regular supply of water, the mountains act as reservoirs and store it in the form of snow and ice during the winter. In summer, this snow melts and feeds the underground reservoirs. Here in Gryon, the underground water is the source of the streams and serves as a natural source of drinking water for Gryon and the region.



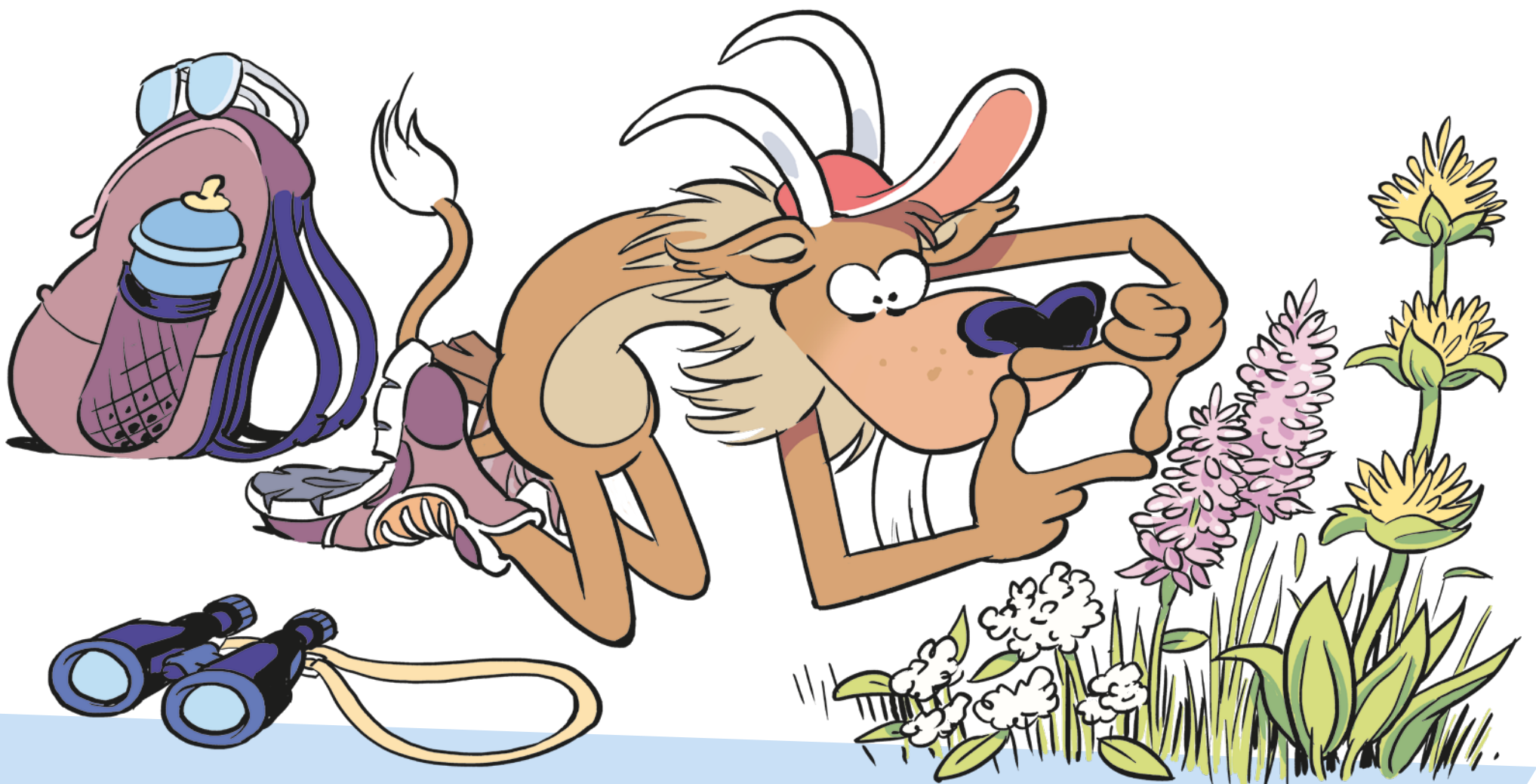
# Bumblebee Mission

## Biodiversity in the mountains

Where there is water, there are plants. Did you know that in the alpine meadows you can find several hundred different species?

### YOUR MISSION

Make a square with your hands and place it on a small area on the meadow. How many different plant species can you count? Can you find a square with more than 5 different plants?



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### MY MESSAGE

Plants and animals, including insects, play an important role in the balance of nature.

The more of them there are, the richer the biodiversity. Plants are the base of the food chain, and the presence of many species will favor the varieties of insects and animals.

Among these plants, there are some protected species, so be careful not to step on them and do not pick them.

### FOR THE CURIOUS

Here are some examples of typical plants of the region.



Gentiana lutea



Meadowsweet



Bladder Campion



Hawkweed



Bear's Garlic



Common Haogweed



Melancholy Thistle



Bearded Bellflower



Genepi



Arnica



# Vole Mission

## Groundwater

Where does the rainwater go?

### YOUR MISSION

Pour some water on the ground and see where it goes!

### MY MESSAGE

Here, the water seeps into the ground, but this is not always the case. In fact, when the soil is already waterlogged, the water may not be able to infiltrate and will run off at the surface. This is for example the case during floods. And sometimes, when the ground fills with water, it can become unstable, even swell, and then collapse.

To prevent this from happening, loggers install logs here and there to stabilize the ground. The role of vegetation is also important in maintaining the soil. Thanks to their roots, plants not only absorb water, but also stabilize and consolidate the ground.



### FOR THE CURIOUS

Groundwater is naturally recharged by rainwater and snowmelt. In Switzerland, groundwater represents about 40% of the drinking water.

It is a very advantageous resource, because as the water flows through the different layers of the ground, it is naturally filtered by the rocks and the soil, which limits the use of chemical treatments to make it drinkable.



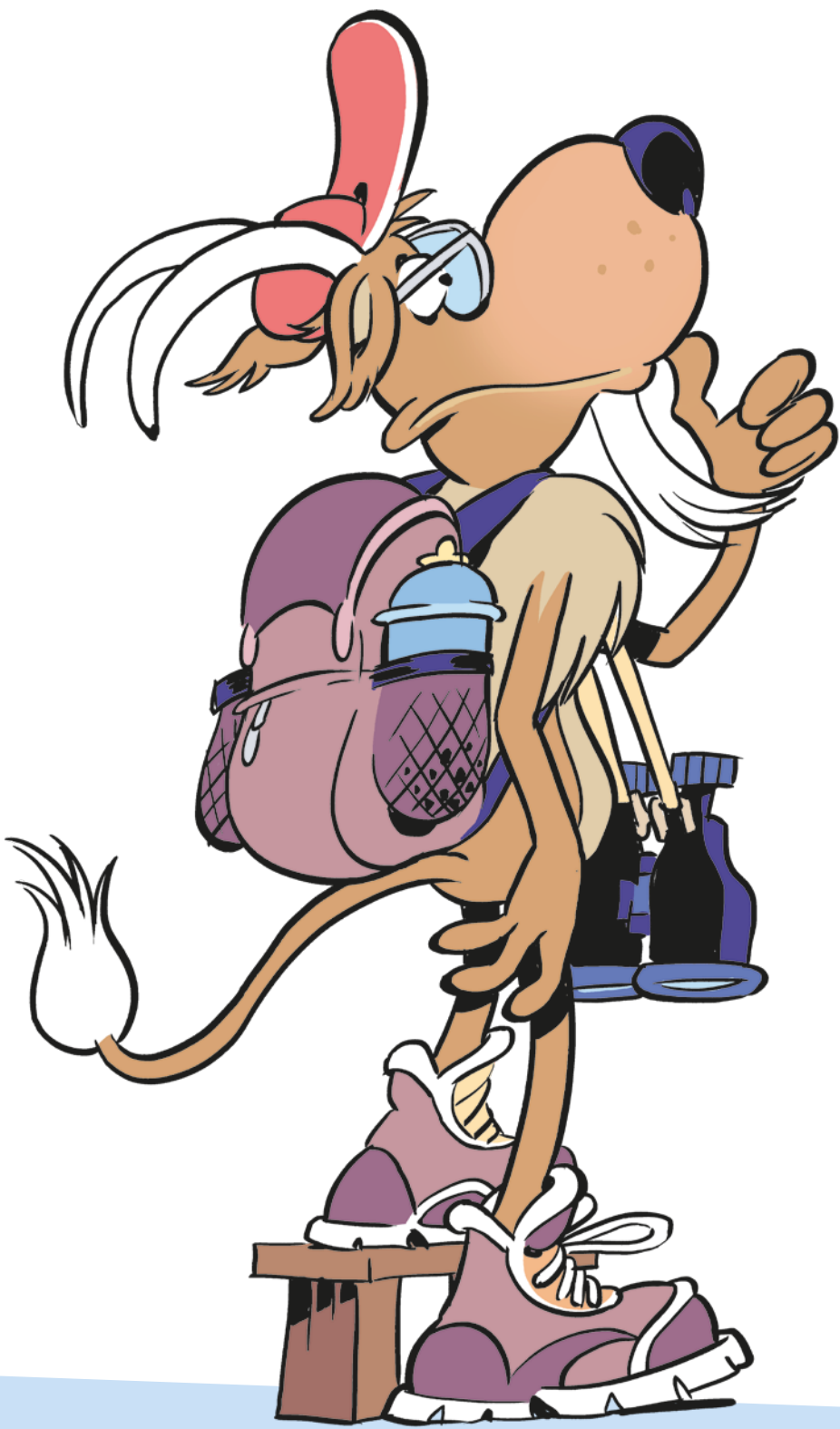
# Salamander Mission

## Wetland

What do you call a natural wetland?

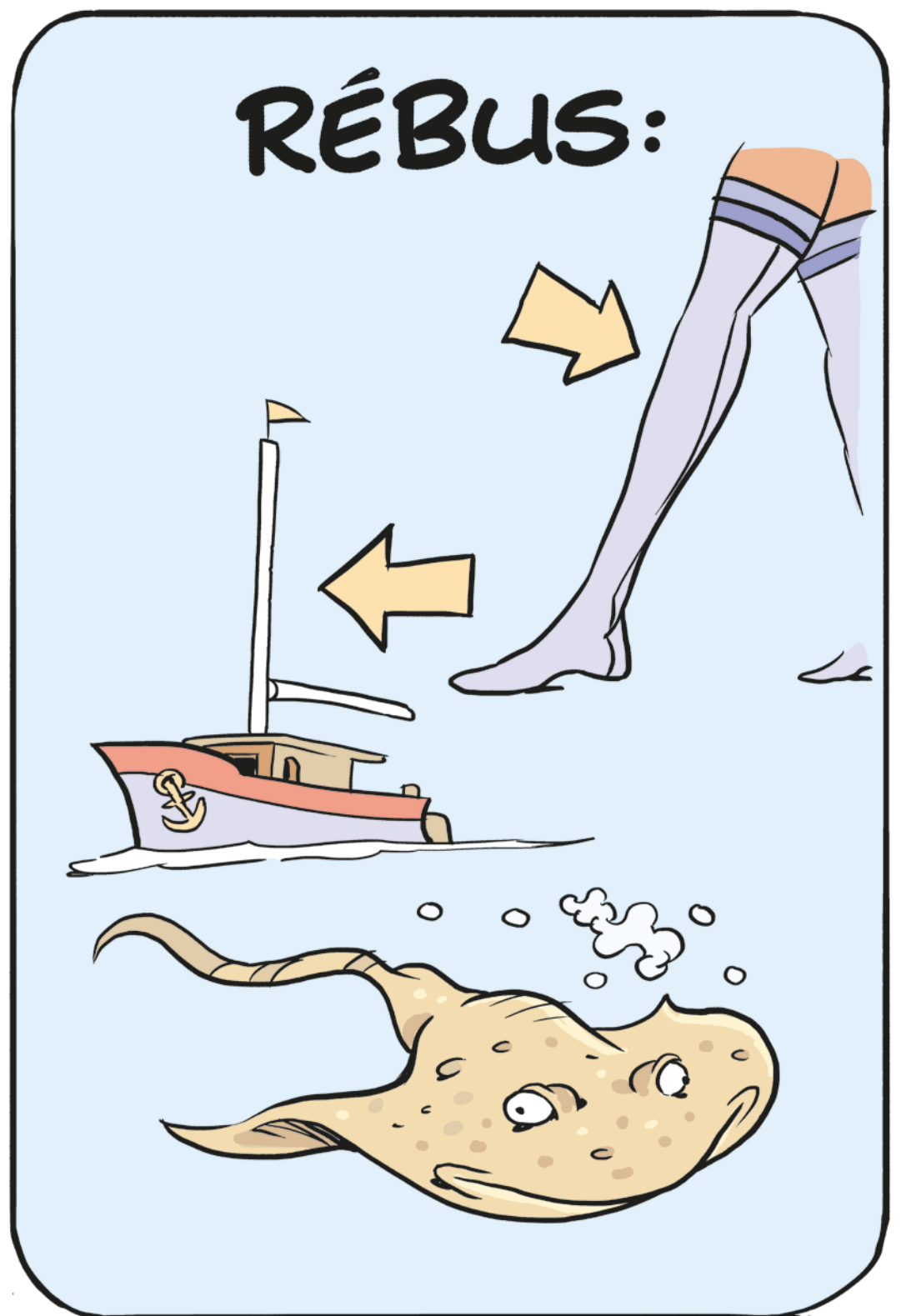
### YOUR MISSION

This mission is not available in english.  
Try it in french if you can!



### MY MESSAGE

The answer is: Bas-marais. If you look closely at the marsh in front of you, you can see that the vegetation is different from the grassland you saw further up the trail. In a low mire like this, there is more water than usual, which allows other plant species to grow.



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### FOR THE CURIOUS

Fens, and in particular low mires make up most wetlands in Switzerland. Low mires are in contact with the groundwater, which also contains nutrients, and are therefore richer than high mires, which are fed only by rainwater. For this reason, many plant and animal species can be found there.



# Hare Mission

## The sounds of the mountain

Did you know that there is a link between water and the sounds you can hear in the mountains?

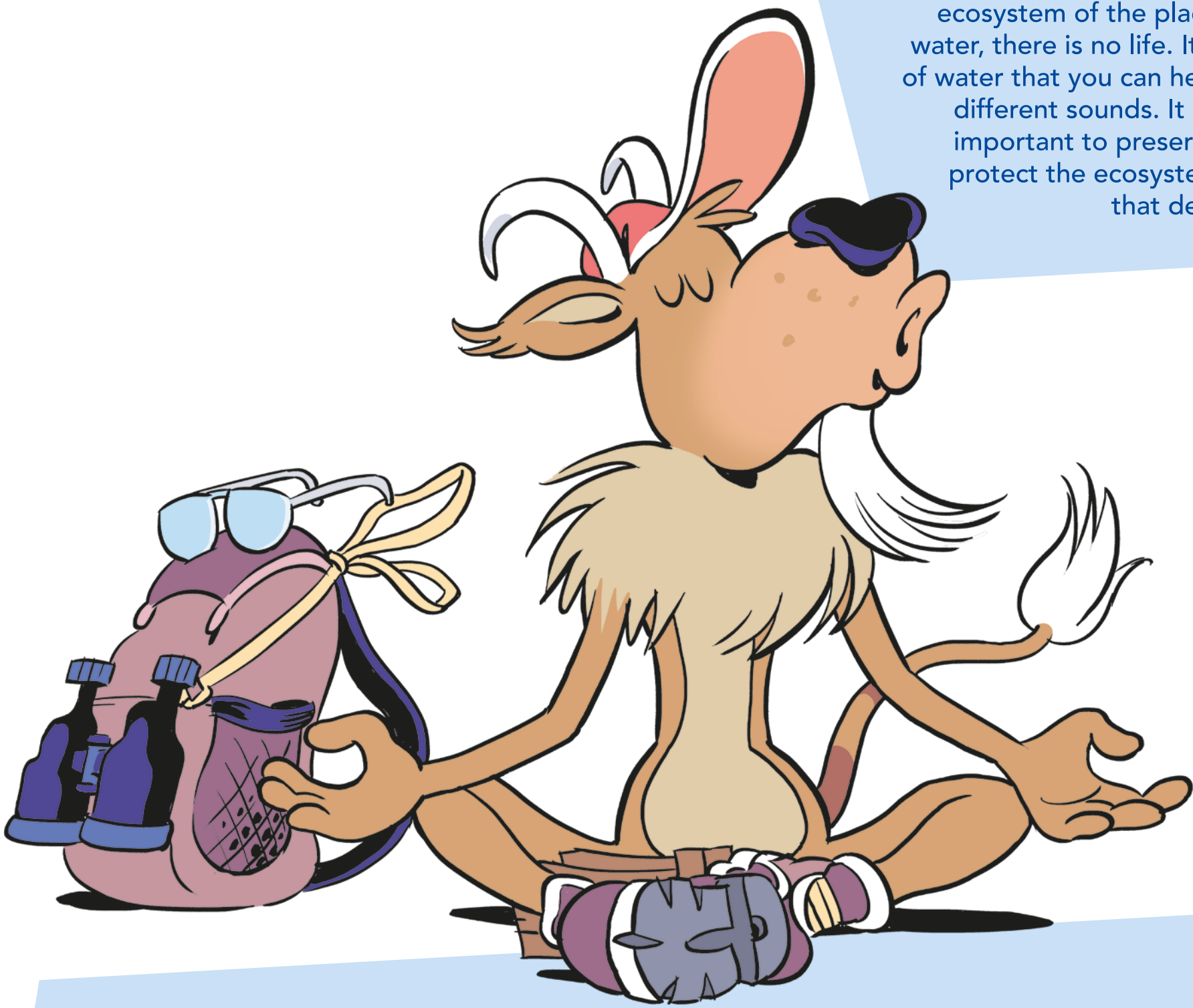
### YOUR MISSION

Take a seat on the grass, close your eyes, and listen to nature for 2 minutes. Identify the sounds of human origin - like an airplane - and those of natural origin - like a bird.

After listening carefully, try to find the connection between the sounds you heard and the presence of water in the mountains! Think about the animals that drink from the stream or live in the water.

### MY MESSAGE

The sounds we hear are witnesses to the presence of life and the ecosystem of the place. Without water, there is no life. It is because of water that you can hear all these different sounds. It is therefore important to preserve water to protect the ecosystems and life that depend on it.



### FOR THE CURIOUS

With climate change, temperatures are rising, rainfall is likely to become less frequent and heavier, and vegetation and wildlife will change.

Some plants and animals will disappear from our regions and will be replaced by others that are better adapted. Who knows if in 20 years, we will be able to hear the cicadas singing at the Alpe des Chaux?



# Frog Mission

## Water Temperature

The stream that flows here comes from the marshes above. Can you guess its temperature?

### YOUR MISSION

Question for a champion: What is the temperature of the water in the stream?

1. between  $-10^{\circ}$  and  $0^{\circ}$ , like the freezer
2. between  $1^{\circ}$  and  $10^{\circ}$ , like the fridge
3. between  $11^{\circ}$  and  $20^{\circ}$ , like tap water
4. between  $21^{\circ}$  and  $30^{\circ}$ , like the pool

Go touch the stream to check!

By the way, don't forget to look for the statue of lady frog!



### MY MESSAGE

The water flowing here is about five degrees. It is cold because it comes from the underground which remains cool all year long.

### FOR THE CURIOUS

The water that comes from groundwater reserves can also be warmer. This is called thermal water. Did you know that in Lavey-les-Bains the water circulates for 5000 years underground before rising to the surface at  $62^{\circ}\text{C}$ ?



# Chough Mission

## The landscape of tomorrow

As you may have already noticed, nature changes with the seasons. But did you know that elements of the landscape also change over the years?

### YOUR MISSION

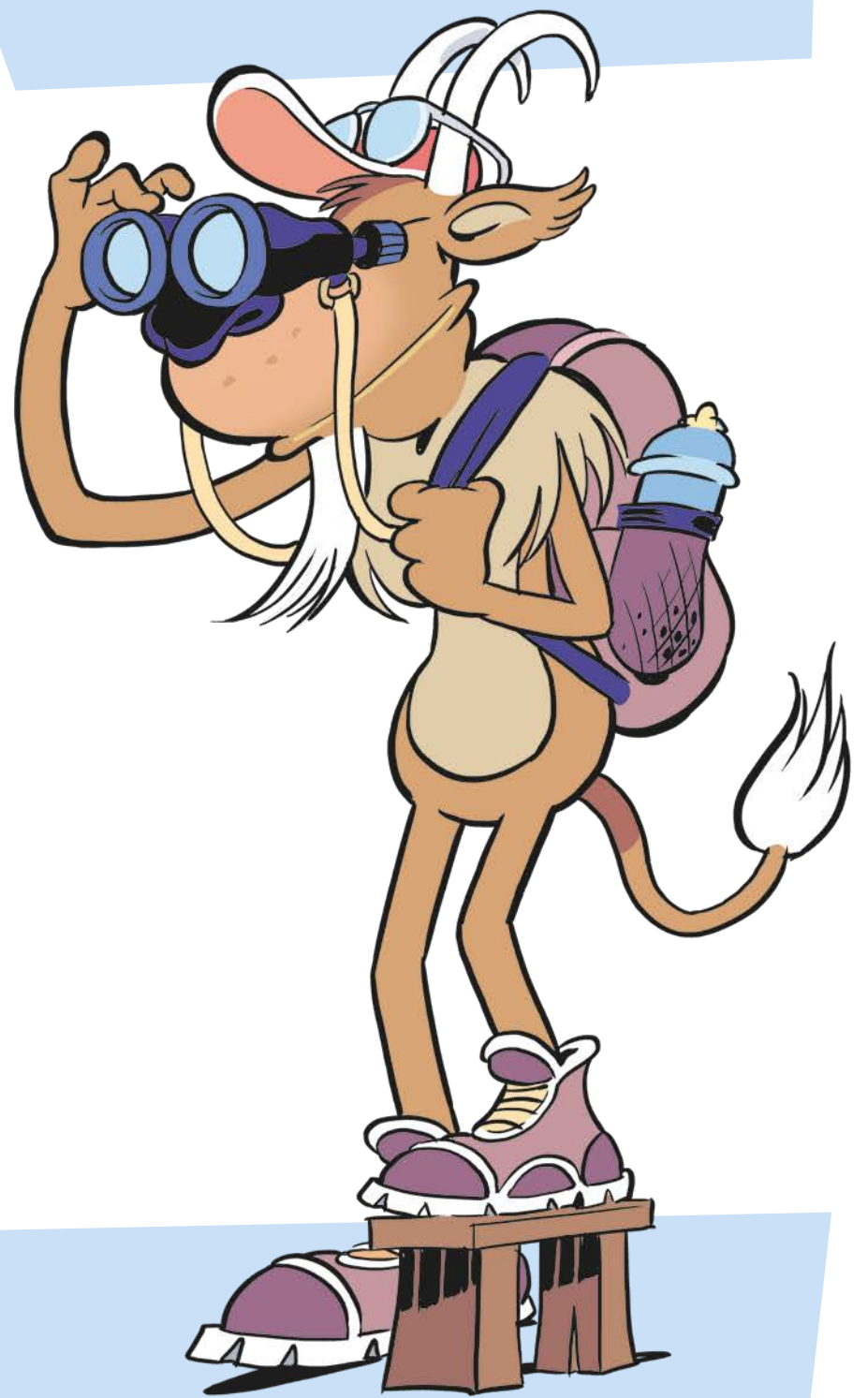
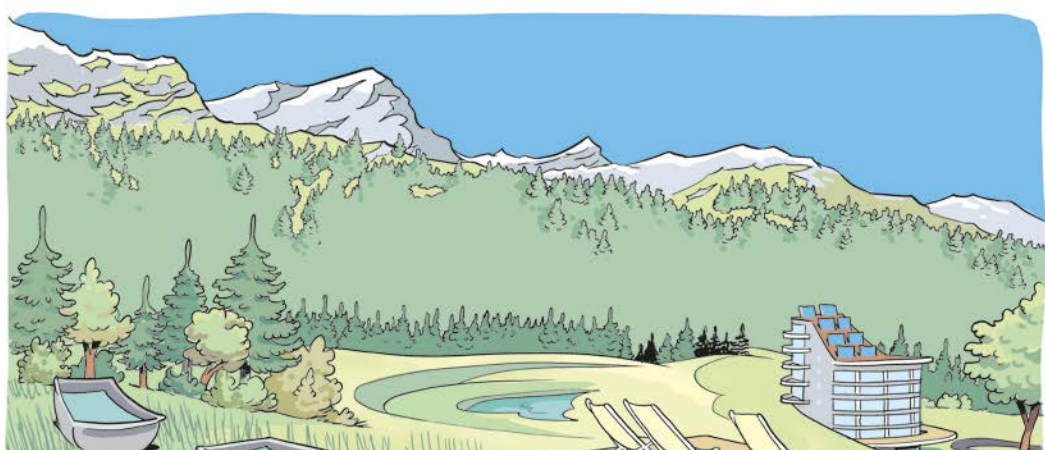
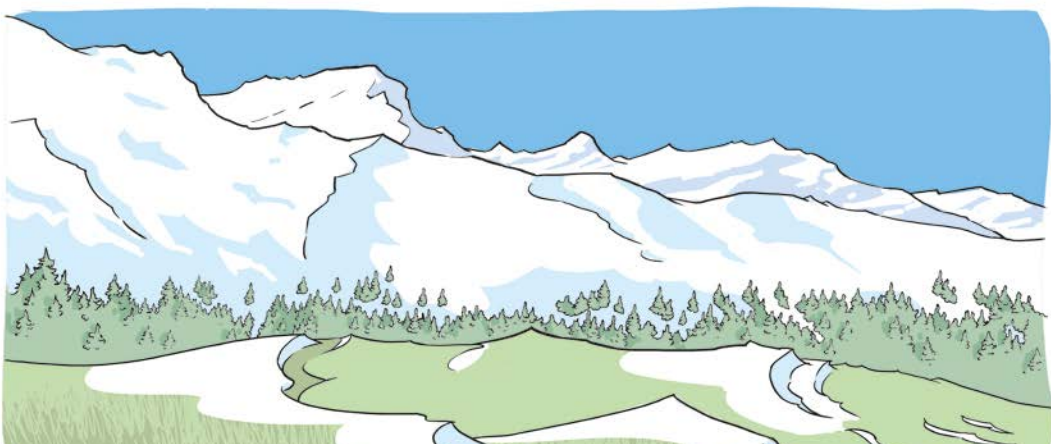
Find 3 differences between the two drawings

Which drawing corresponds to the landscape as it was 500 years ago, and which one probably looks more like the future?

Compare the landscape in front of you with my two drawings.

### MY MESSAGE

The increase in temperature will accelerate the melting of snow and allow plants to grow at higher altitudes. Less regular rainfall, although more extreme, will create periods of drought. These phenomena are part of the effects of climate change.



### FOR THE CURIOUS

Climate change is a global phenomenon of climate transformation linked to human activity. This disruption affects the natural balance, ecosystems, and temperature, reducing the total mass of snow and ice. In the long term, these changes will have an impact on the distribution of plants and animals. In Switzerland, a migration of certain plants to higher altitudes has already been observed. The arnica Montana, for example, now grows on 14 mountain peaks, whereas 100 years ago it was not found at high altitudes.





# Marten Mission

## The Water Artist

Water falls from the sky, but do you know how it got up there?

### YOUR MISSION

With a little water, write your name on a rock in the sun. How long does it take for your drawing to disappear?



### MY MESSAGE

Did your name disappear? The water has turned into steam, this is called evaporation. This water vapor will form clouds, which, in turn, will fall as rain or snow, and so on. This is the magic of the water cycle!

### FOR THE CURIOUS

In Switzerland, it is in the Alps that the most precipitation (snow and rain) is recorded. Out of every 100 drops of rain that fall in our regions, 40 return to the atmosphere (evaporation), about 30 drops run off into streams, rivers or lakes, and another 30 infiltrates into the ground and form groundwater that is further enriched by water from streams and rivers (infiltration).

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# Arrival! Well done!

## A well-deserved swim!

Congratulations for participating in this trail! What was your favorite mission?  
Did you find all the statues of my friends?

### MY MESSAGE

As you have seen, water can take many forms. Sometimes it comes out of the ground, sometimes it seeps in. It shapes the landscape, creating marshes, digging streams, moving the land. It moves and transforms continuously to form the water cycle. Plus, it's vital to plants, animals, and people! Now that you've become a water expert, it's time to reward yourself with a swim in Lake Friece! A well-deserved swim!

### THE DAHU ATTITUDE

Avoid using sunscreen with a chemical filter before going for a swim in the lake, it can be harmful to aquatic organisms! You can, for example, wear an anti-UV t-shirt and use mineral sunscreen. But don't forget to put on some sunscreen once you get out of the water!



### FOR THE CURIOUS

The lake of Friece is a particular artificial mountain lake. The water circulates between different basins and is naturally filtered through layers of gravel in the regeneration zone. Plants also play an important role and naturally regenerate the water by feeding on impurities and micro-organisms. Thus, the water in the lake remains clear and clean, thanks to a good balance of natural species.