

Worlds waters -lesson



Beginning discussion:

Q: What substance is on the surface of the earth the most?

A: Water. Part of the Earth's surface is water, and that's why our planet looks blue when viewed from space.

Q: If we look around here, would you be able to name where there is water?

A: snow, ice, people, trees, clouds, air, ground, snacks...

Q: Where else is there water - what do we not see here now, for example?

A: In seas, lakes, rivers, groundwater, glaciers...

Q: Can you tell me why water is so important?

A: Life on Earth is born of the seas and all living things need water to survive. Modern science still believes that there can be no life without water. Living things are even made up mostly of water. Man has about 70% water. Up to 96% of the cucumber is water, etc. The thirst is due to the fact that our body loses about 1% of water, for example through sweating.

DEMONSTRATION OF WORLD WATERS:

Accessories: 10l bucket, deciliter measure, teaspoon, four small transparent containers. Water and volume signs.

1. Fill the bucket with water.
2. Take with a teaspoon a small drop of water in one of the containers.
3. Take the amount of teaspoon of water into another bucket.
4. Take from the bucket a little bit less than one deciliter of water into a third container.
5. Take from the bucket a little bit less than two deciliters of water into a fourth container.
6. Ask the students to put the water signs in front of the containers
7. Ask the students to add the volume signs in front of the containers (for students who dominates the %-concepts)

Water signs (amount of water in brackets):

- sea (bucket)
- lakes, rivers and swamps (teaspoonful)
- groundwater (a little bit less than one deciliter)
- ice and snow (a little bit less than two deciliter)
- living things (drop)

Water signs for printing:

SEA

LAKES, RIVERS AND SWAMPS

WATER TABLE

ICE AND SNOW

LIVING BEINGS

Volume signs for printing:

< 0,01% 0,03% 0,73% 1,73% 97,5%

Closure discussion:

Q: Consider from which containers we get our domestic water?

A: Groundwater and surface water

This demonstration shows to us how water is both a very abundant and scarce natural resource. Climate change is increasing water-related problems: as heavy rains, storms and other extreme weather events are increasing, dry areas are drying up even more and mountain glaciers are melting, changing water flows and rising sea levels, which in turn is polluting groundwater and destroying farmland.

Demonstrate ice and snow melting:

The impact of melting ice and snow as a result of climate change can be demonstrated by placing an object (eg. a branch etc.) only slightly visible into a bucket. After that, snow and ice that are put into a bucket are showing the events.