

Lesson 7



HOT AND COLD DESERTS

Lesson objective: To acquaint pupils with the living environment in the cold and hot deserts. To create an insight about the environmental changes, which are happening under the influence of climate warming.

Terms: An oceanographer, a bathyscaphe, a coral reef, the World Ocean, carbon dioxide, microplastics.

Materials required for the experiment:

- 1) 2 transparent glasses, 2 eggs or 2 shells, water, vinegar
- 2) A plastic bottle, scissors or a knife, a container with water, rocks, sand, cotton or a coffee filter, an activated charcoal can be used.

10. Information (Audio/text)

3 min. 

Learning objective: To provide information about the camel's ability to store up fat and water.

ACTIVITIES

Teacher: coordinates activity.

Pupils: observe the information on screen.

On the screen: an animation about camels.

Camels do not store water in their humps, but fat that they gradually use it in case of food shortage. The hump shrinks when the fat reserves are used up. The body of camels can lose a third of its fluid – such a fluid loss would be fatal for a human. To restore the amount of fluid in the body, a one-humped camel can drink even 100l of water in one go.

11. Eco workshop

10-15 min. 

Learning objective: To practise the green lifestyle principle – to give things a second life and to develop cooperation skills by working in a group.

ACTIVITIES

Teacher: coordinates work.

Pupils: divide into groups or pairs and make a model of a camel.

On the screen: instructions on how to make a model of a camel from egg cups and toilet paper rolls

12. Discussion

3 min. 

Learning objective: To create an idea of the work of scientists in the polar desert.

ACTIVITIES

Teacher: coordinates activity.

Pupils: express opinion.

On the screen: an animated polar desert landscape with an igloo, where polar explorers, that research the life of polar bears, live.

Would you like to go to the cold desert at the North Pole to participate in an expedition together with scientists – “How to help polar bears?”? Why yes or why not?

13. Information (Audio/text)

5 min. 

Learning objective:

To create an understanding of the climate change's influence on glaciers and polar bears.

ACTIVITIES

Teacher: coordinates activity.


Pupils: listen and observe information.

On the screen: video.

Scientists have found out that the climate on Earth is getting warmer. The warmth affects not only the hot desert, but the cold deserts too. Ice is melting, the vast Arctic blanket is shrinking. If the ocean continues to warm up and glaciers melt, the sea level will rise more and more rapidly. After some time many low-lying villages, towns and islands will be threatened by floods.

The reduction of areas covered with ice seriously threatens the future survival of polar bears. It is constantly more difficult for polar bears to find food.

14. Discussion

8 min. 

Learning objective:

To create awareness that each of us can take care of the planet with our actions this very day.

ACTIVITIES

Teacher: coordinates activity.

Pupils: divide into 5 groups. Each group chooses one of the offered situations and agree on one answer within the group. Groups present their answer to the whole class.

On the screen: discussion questions.

This is Rudis. He learns in the 3rd grade and plays football in his free time. Rudis lives in an apartment close to school together with his parents and little sister. The family of Rudis is concerned about environmental issues, and they really want to help polar bears. Therefore they save natural resources daily, because they know that it affects the climate around the world.

Imagine and tell how Rudis's family acts in these everyday situations:

1. How does Rudis go to school and how do his parents go to work?
2. What does Rudis's family do with waste
3. How does Rudis's family save water?
4. How does Rudis's family spend weekends?
5. How does Rudis's family save electricity?

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