

Lesson 11. What can we do to make the world clean and healthy? Green lifestyle.

In this lesson pupils will be introduced to the green lifestyle. By carrying out the activities included in this lesson, pupils will learn about the human actions that can help preserve nature. Pupils will understand the importance of waste sorting, ways to save water, learn to choose green modes of transportation and prioritize renewable energy sources. The lesson also includes practical activities, making stationary holders (pencil-cases) from toilet paper rolls, as well as experimenting with the possibilities of water purification and using solar energy to roast a marshmallow.

Lesson duration:

depending on the duration of discussions, eco workshop, experiments and additional activities, the lesson takes approximately 80-100 minutes.

Before the lesson:

get to know the methodological recommendations for the lesson and prepare materials to successfully plan and conduct the lesson for your pupils.

Materials necessary for the eco workshop:

Activity 7: toilet paper rolls (at least one for each pupil), glue, cardboard sheet, scissors, items for decoration (pencils, felt-tip pens, coloured paper, stickers, old magazines for creating collages, etc.).

Activity 9: for each group two glasses, a piece of cloth (medical gauze works well), a small box and very dirty water (like in a yard puddle).

Activity 11: for each group a bowl, foil, food wrap, plasticine, a wooden stick (for example, a toothpick), marshmallow.

Terms:

moderate consumption – *thoughtful purchase of products, goods, considering the need for new things, creating a shopping list, sustainability of purchases,*

modes of green transportation – *modes of transport that consume as little non-renewable energy resources as possible and create as little pollution to the environment as possible (walking, cycling, public transport, transport that uses more environmentally friendly fuel),*

renewable energy sources – *energy sources that can be used again and again, at the same time without polluting the environment (water, wind, solar energy).*

Hand-outs (for printing):

A worksheet for pupils to strengthen the acquired knowledge about sorting waste, saving water and other habits that help to preserve then environment;

The lesson

At the beginning of the lesson introduce pupils to the behavioural rules, emphasizing that they should listen carefully because the board does not repeat information several times. In the lesson you will need to cooperate, express your opinion and be able to catch what others say. For younger pupils or pupils who find it challenging to stay focused on work for longer periods of time, dynamic breaks can be included between tasks.



Tablets can also be used for the interactive tasks.

1. A clean and healthy world.

Pupils focus on the topic of the lesson, discussing how to take care of our planet and live more environmentally friendly. Pupils can think individually first, recall what they have learned in previous lessons, then discuss in pairs or small groups, so that everyone has a chance to speak out, and share their ideas with the entire class later. At the end of the task, pupils listen to information about why it is important to take care of the environment.

3. Nature conservation II.

Pupils strengthen the knowledge acquired in the previous activity by connecting the pictures with the corresponding habits. Before placing the picture in its intended place, the teacher can encourage pupils to describe what they see in each picture (for example, what is the action that saves energy or water).

2. Nature conservation I.

Pupils click on the pictures and listen to information about the habits and actions that contribute to caring for nature and the environment on a daily basis. Before listening to the information, the teacher can invite pupils to express their thoughts and ideas about each of the offered options.

4. Waste sorting I.

Pupils click on the waste containers and listen to information on how to properly sort different types of waste.

Additional activity #1.

You can ask pupils the question: “Is it possible to sort waste at your home (school, nearby neighbourhood)?”.

Additional activity #2.

Invite pupils to complete task 1 on the worksheet, colouring the waste containers in the suitable colour.

5. Waste sorting II.

Pupils strengthen the knowledge gained in the previous activity, dragging the given waste in the corresponding containers.

Additional activity.

Invite pupils to complete task 2 on the worksheet, finding pictures in old magazines and booklets, cutting them out and gluing them next to the appropriate waste containers where they could be thrown out. It is also possible to simply write down or draw extra examples of what waste can be thrown out in each of the given waste bins.

7. Eco workshop.

At the beginning of the eco workshop explain that it is important to take care of the environment. Natural and reusable materials can be used to create something beautiful and useful at the same time. On the screen there are the necessary materials, instructions and photos so pupils can make a pencil-case or a container for stationery from toilet paper rolls. The teacher has to prepare the necessary materials beforehand (see guidelines on page 1). In this activity it is better for pupils to work individually, so that everyone gets their own pencil-case. The length of the toilet paper rolls can be changed by clipping them, as well as several rolls can be glued together on one cardboard sheet (in this case hot glue works better), so it can hold more writing implements, a glue pencil, scissors, a ruler.

6. Consumption.

Pupils click on the pictures and listen to information about consumption and what each of us can do to shop more reasonably, thus saving our planet and its limited resources.

8. Water consumption.

Pupils arrange the given pictures (daily actions, habits) in order, starting with the one that consumes the biggest amount of water in the family during a month and ending with the least amount of water spent. To give everyone a chance to involve, pupils can first vote, for example by raising their hand, for each of the pictures that they think consumes the most amount of water, then the second most, and so on. It is important to tell pupils that it is still important to observe these habits (wash hands regularly, bathe, wash clothes and the floor), but try not to waste water unnecessarily (for example, do not wash only one piece of clothing in the washing machine, turn off the water tap while brushing teeth or rubbing hands with soap).

Additional activity.

Invite pupils to complete task 3 on the worksheet, drawing 3 examples on how to save water on a daily basis.

9. Experiment.

The necessary materials, instructions and photos are shown on the screen for pupils to create their own water treatment plant in small groups. The teacher has to prepare the necessary materials beforehand (see guidelines on page 1). If there is not enough time during the lesson, this activity can also be done as a demonstration for the entire class, but pupils especially appreciate the opportunity to engage themselves.

Additional activity.

At the end of the experiment you can ask pupils: "Is it possible to completely purify water in this way?" (the expected answer would be "no"; it is important to emphasize that it is not allowed to drink such simply purified water!), "Is it wiser to try not to pollute water and save it, or to handle water irresponsibly and then purify the polluted, dirty water?" (the expected answer would be the first option).

11. Experiment.

This activity can only be performed in sunny weather (recommended in early autumn or late spring, when a bigger amount of solar energy reaches the Earth). The necessary materials, instructions and drawings are shown on the screen, so pupils in small groups could check whether the sun has energy and how it can be used. The teacher has to prepare the necessary materials beforehand (see guidelines on page 1). If there is not enough time during the lesson, this activity can be done as a demonstration for the entire class, but pupils especially appreciate the opportunity to engage themselves. Instead of marshmallows, you can also melt the remains of wax crayons.

Additional activity.

At the end of the experiment you can ask pupils: "What other purposes solar energy

10. Energy sources.

Pupils click on the pictures of renewable energy resources. To give everyone a chance to get involved, pupils can first vote for each of the pictures, for example, by raising their hand, whether or not it is renewable (so, it will expire some day). It is important to click on each of the pictures during the activity, because then you can find out more information about it (also about exhaustible or non-renewable energy resources).

12. Green modes of transport.

Pupils go through a maze on the screen to find out which vehicle is the most environmentally friendly to travel to a city 200 km away. To give everyone a chance to participate, pupils can first vote on which vehicle will be the correct answer.

can be used for?”, “Where have you noticed solar panels in your neighbourhood?” (for example, on the roof of a building).

13. Test – What have you learned so far?

With the help of the interactive test pupils have the opportunity to check the knowledge they have acquired in the lesson. The test can be taken by everyone together or individually – using tablets. You can also divide pupils into small groups and invite them to discuss each question and agree on the correct answer.

14. Keeping the world clean and healthy.

Strengthening the knowledge acquired in the lesson and creating a transition to Lesson 12 “What will our planet Earth be like in 100 years?”, pupils discuss and express their ideas about what each of us can do to keep the world clean for the next 100 years. Pupils can first think individually or discuss in pairs so that everyone has a chance to speak out, and then share their ideas with the entire class.

Additional activity.

Invite pupils to complete task 4 on the worksheet, writing what is already done in the family (or school) to conserve nature.

At the end of the lesson ask pupils:

What did you like the most? What new did you learn? What will you tell your parents? What else would you like to know?

Images from the lesson process

