

Learning Tool Code	Title
SDG13-SDGfP	Changing the lamp - changing the world
Objectives	
<ul style="list-style-type: none"> ● To develop interest in a dozen problems for saving energy resources and forming the beginning of the skill of their rational use. ● A form present for a decade in an electricity preschool where it is "live" like entering a housewife and creeping people. ● Let's reminisce about ten minutes from the past and really shine a light on the device, from the process to their transformation by man. ● Activation of the basis and cognitive activity, intellectual ability, ability to objectify facts, phenomena, composition and analysis, mental activity, creative abilities. ● Include a preschool decade in the usefulness of energy activity. ● Acquiring a level of professional competence, enriched with knowledge about the current issue of the energy market. ● Enhancing performance design organizing skills from toddler to preschool age. ● Made in conditions of recognition of a student with energy resources through the enrichment of the environment for the development of subjects and a system of killing by the student, technical parents and social organizations ● Encouraged, they showed interest in building energy sources for working with children, for their participation in joint activities. ● Yes, delegating the pedagogical competence to the parent and enriching the technology, educational experience and preparation for the reconciliation of the parent-child relationship. ● Igniting the knowledge of energy resources, the deterrent attitude towards consumption is of energy resources. 	
Activity details	
<ul style="list-style-type: none"> ❖ Materials- charter flowers, knives, sculpted, materials ❖ Duration – 56 minutes ❖ Number of groups - several groups of students <ul style="list-style-type: none"> - (5 grade, ages 11-12) 	
Instructions	

Hello dear friends! Look around you. How many familiar and comfortable things surround you! You woke up this morning - you turned on the lights in the room and a delicious breakfast is already being prepared on the stove. If necessary, turn on the TV or computer, listen to the washing machine in the bathroom, or mom prepares a delicious omelet with a mixer. In the evening your house will be lit with light bulbs! And all this thanks to electricity!

Today, many people still use incandescent lamps, compact fluorescent and LED lamps to illuminate the premises. Did you know that incandescent bulbs make people burn coal? The fact is that incandescent lamps consume a lot of electricity. And the more electricity needed, the more coal must be burned in a thermal power plant to produce electricity. The more coal-fired power plants burn, the more greenhouse gases (carbon dioxide) are released into the atmosphere and the stronger the greenhouse effect will be.



You probably know that the greenhouse effect is a phenomenon in which carbon dioxide, along with other gases, creates a dense "blanket" above the ground. The sun's rays easily penetrate it, warming our planet, but this heat is difficult to return. Thus, the Earth is warming more and more, which leads to changes in weather: droughts, hurricanes, floods, namely - global warming.

/ 5 minutes /

Our city - Stara Zagora is located near the TPP - Maritsa East, which is one of the sources of air pollution and global warming. So we decided to tell the townspeople how replacing

old incandescent lamps with new compact fluorescent and LED lamps can help reduce the destruction of the atmosphere.

First, we made our own environmental campaign brochures.

/ 2 minutes /

The problem with the greenhouse effect excites us so much that together we created a real ecological fairy tale "Svitlik and Lumik are in a hurry to help":

Svitlik is a small LED lamp and Lumik is a fluorescent lamp. They really want people to stop using incandescent bulbs. For this purpose they visited the students:

1-student:

- A loud bell rang in the hallway for everyone,
- Ecology brings our students to a lesson. unknown:
- What does this science study?

2nd student:

-Organisms on Earth. How do they live, interact on our blue planet?

How it is necessary to live in the world in order not to lose the environment. So that we can breathe freely and drink clean water!

3rd student:

-Now in Stara Zagora, Bulgaria and on the whole planet there are almost no places that one would not change. Through his activity he ruthlessly destroys the atmosphere, thanks to which life exists.

4-student:

K-The more coal people burn, the more carbon dioxide will be released into the atmosphere. This gas, along with other gases, creates a dense "blanket" over the Earth.

Unknown:

- Of course! So let's talk now. What do children know? Driving:

-The heroes of the fairy tale are already in a hurry to visit us and really want to help all people save the Earth from global warming.

/ 10 minutes /

Incandescent lamps:

1-lamp: -And what will we do? We are warm, touch!

Don't drive us to the yard, calm down, come to your senses!

2-lamp: -We have been living very peacefully with you at school for so long. We give light from morning to noon on a gloomy day.

Science Ecology:

-Cunning lamps, don't be stupid! You are warming your sides! The atmosphere worries you not one, not two years!

People burn coal, lose the world to your joy.

And pollute the planet - from now on I will not let you!

atmosphere:

-I, the atmosphere of the planet, will not suffer from you, because new safety lamps will now illuminate the classroom!

6th student:

- Svetlik with Lumik friends! Our class will live with you.

We will use you for eleven years in a row! Light:

-Thank you sincerely, we will help you.

So let both adults and children live safely! Lumik:

-We will shine for a long time, we promise everyone. Tell us about us at home - we will visit every house! driving:

-Dear, Svitlyk and Lumik, you are so useful. The residents of our city need to know about you.

Incandescent lamps:

-And what to do? Who needs us?

7th student:

And to you, Incandescent Lamps, we can offer another interesting job! We will dress you nicely and hang you on the Christmas tree. From now on, every year you will decorate people's winter holidays.

Incandescent lamps:

-Hurray, we agree, we agree! Svitlik and Lumik:

Children, thank you for your help. We promise you that we will serve in your homes for a long time and we will not cause destruction of the atmosphere.

Svitlyk and Lumik helped us make various changes from old incandescent lamps!

/ 12 minutes /

And for you, Svitlyk and Lumyk have prepared a task:

Solving the environmental problem.

Replacing 1 incandescent lamp with 1 LED lamp is equivalent to planting 45 trees. How many trees will be equivalent to replacing 2 incandescent lamps with 2 LED lamps?

solution: 90 TREES

/ 5 minutes /

Tips for the facilitator

Today, society faces a very important task - to change the stereotype in the minds of every citizen that natural energy resources are inexhaustible. It's hard to change the way adults think. But the preschool child can be helped to learn the basics of ecological culture, careful and caring attitude to the wealth of the earth, to everything that surrounds him. Give ideas to change people's thinking.

Debriefing

Creating brochures and cards for the environmental campaign.

Follow-up/Inspiration for the future

Information on social media, school website.

References/Further reading

https://www.youtube.com/watch?v=yiw6_JakZFc

Annex

