



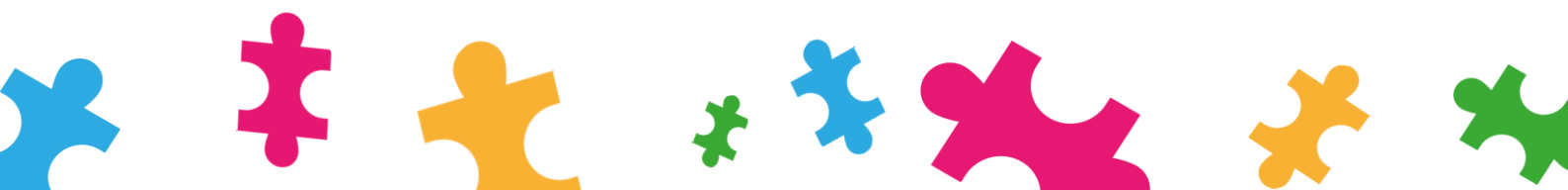
WebQuest

Introductory Level

Fossil Fools



TITLE OF THE WEBQUEST	Fossil Fools
LEVEL OF THE WEBQUEST	Introductory level
INTRODUCTION	
<p>What is a WebQuest? A WebQuest is a research activity that allows you to learn new interesting knowledge and skills. At the beginning of each WebQuest, you will be given some tasks, and you will try to deal with them as a real scientist. You will search the Internet to gradually find all the information that will help you fulfil your scientific tasks. Each WebQuest contains different tasks and a different topic.</p> <p>This WebQuest is called "Fossil Fools". And who exactly are the fossil fools? We are fossil fools ourselves, that is, all the people living on planet Earth. This is because we burn so-called fossil fuels like fools, even if it harms our planet, on which we need to live. And he who destroys the only planet he has for life behaves like a fool; don't you think?</p> <p>Your first task in this WebQuest will be to find answers to the following questions:</p> <ul style="list-style-type: none">▪ What are fossil fuels and why are they called fossil fuels?▪ What effect does the burning of the fossil fuels have on our planet? <p>Your second task will be to find out and explain what the greenhouse effect is.</p> <p>Your third, final task will be to discover if other energy sources can replace fossil fuels.</p>	



TASKS

This WebQuest will make you an expert in fossil fuels. You will be able to discuss fossil fuels, and you will be able to tell a short story about them. The story of when and how fossil fuels came into being, what people use them for, why burning of fossil fuels harms the planet Earth, and how energy from fossil fuels can be replaced. Please, gradually prepare this story while completing the following tasks. Make brief notes to tell this story at the end of the WebQuest.

TASK 1.

Find answers to the following questions:

- What are fossil fuels and why are they called fossil fuels?
- What effect does the burning of the fossil fuels have on our planet?

TASK 2.

Find out and explain in your own words what the greenhouse effect is.

TASK 3.

Discover if other energy sources can replace fossil fuels.

PROCESS

TASK 1.

Let's look at the question of what fossil fuels are and why they are called fossil fuels. What do you think?



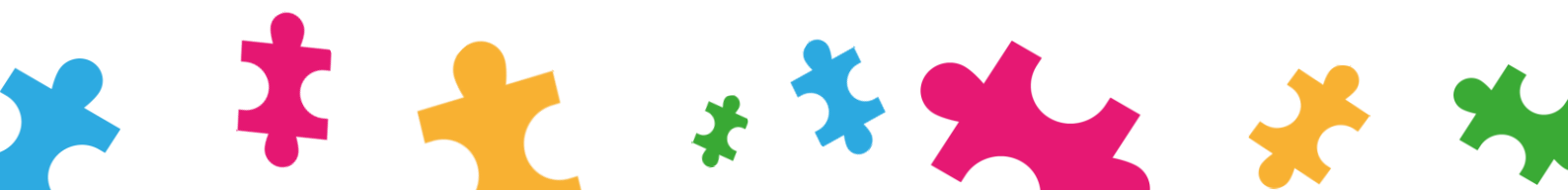
natural gas



coal



oil



Please read the following article and answer the question: What are fossil fuels?

<https://www.eon.cz/radce/co-jsou-fosilni-paliva>

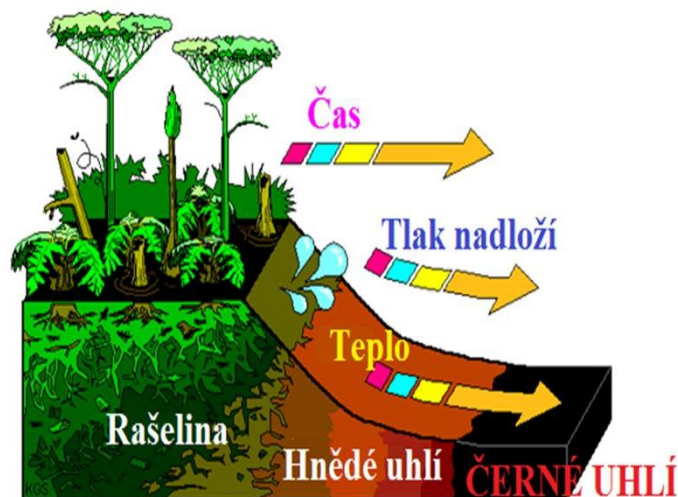
And why are fossil fuels called fossil fuels and what exactly is a fossil?

The word fossil has its origin in the Latin fossilis - excavated. In Czech, the word "fosilie" is written grammatically correctly without a comma, but it can be pronounced short or long. Fossils are the remains of prehistoric organisms that have survived to the present day.

In the following link, you can look at how a fossil looks like.

<https://www.fosilie-shop.cz/paleontologie/co-je-fosilie/>

In the following image, you can see how scientists depict the formation of coal from prehistoric plants and animals.

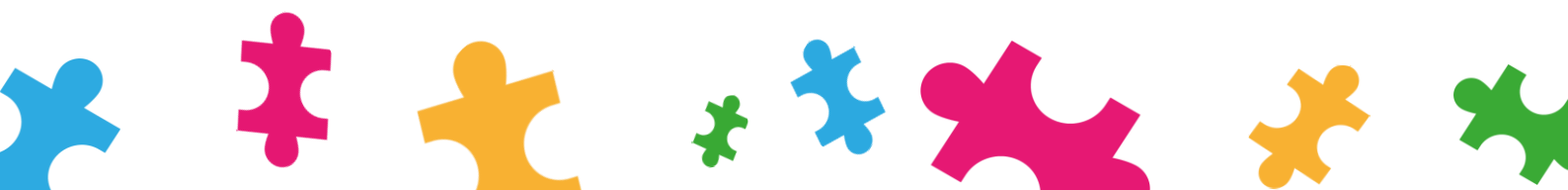


An illustration of the process by which coal has been created over millions of years.

And now we will deal with the question "What effect does the burning of the fossil fuels have on our planet?".

You probably have heard that our planet Earth is warming. This is also called a global warming process. This warming is causing changes on the planet, such as melting glaciers, rising sea levels, more extreme weather changes, frequent floods, droughts and storms. These changes on planet Earth are due to the release of large amounts of greenhouse gases into the atmosphere as a result of many human activities around the world, especially the burning of fossil fuels for electricity generation, heat production and transportation. Burning of fossil fuels also releases air pollutants that are harmful to the environment and human health.

Fossil fuels have some advantages and disadvantages. The advantage is that they are an easily accessible source of energy, which we can use, for example, to generate electricity, to heat our homes in the winter or as fuel for our cars. The disadvantage is that because of the burning of fossil fuels, we are destroying our planet, and we must breathe air that contains harmful substances. Therefore, humans are devising ways to reduce the burning of fossil fuels to reduce their harmful effects on planet Earth and human health.





Your first task was to find answers to two questions. Can you answer them now in your own words?

- What are fossil fuels and why are they called fossil fuels?
- What effect does the burning of the fossil fuels have on our planet?

If you could not answer, go through the first task again and write the answers on a piece of paper see if you can find the answers yourself. And if you were able to answer, you can start the next task.



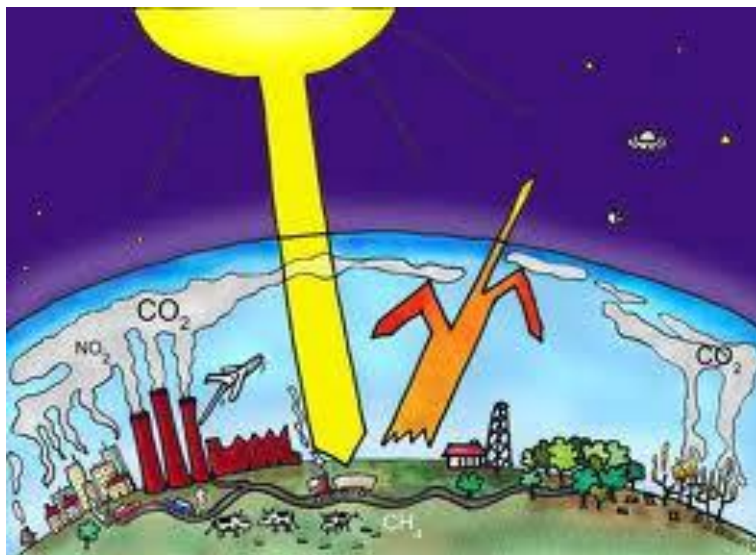
TASK 2

Find out and then explain in your own words what the greenhouse effect is.

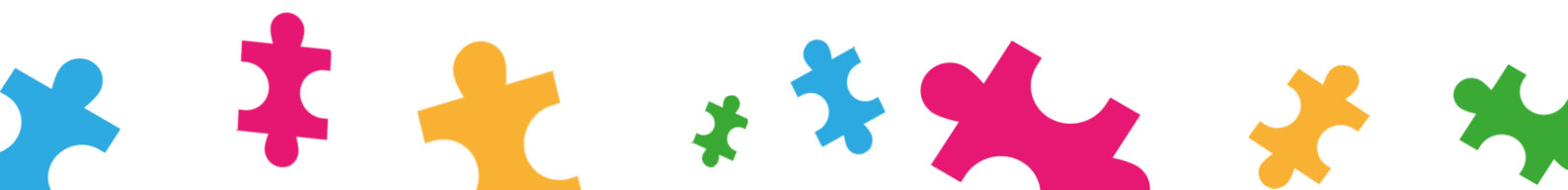
Watch the following video on what the greenhouse effect is.

<https://www.youtube.com/watch?v=jLO-6B4efr8>

In the following picture, try to describe why our planet works similarly as a greenhouse. If you can't find the explanation, try watching the video again.



You did a great job!
Embark on the last task.





TASK 3

Find out if there are other energy sources that can replace fossil fuels.

You already know that people get energy by burning fossil fuels. Burning fossil fuels, however, is harmful to planet Earth and humans. That is why people are trying to obtain energy from so-called renewable sources. People try to obtain energy from the sun, water and wind because these energy sources do not harm the planet as much as burning fossil fuels.

Watch the following video about getting energy from the sun, water and wind.

<https://www.youtube.com/watch?v=sudq--JSdEE>

Which energy sources can replace fossil fuels? Do you know the answer?



You're at the end of the WebQuest about fossil fuels. To prove that you are an expert on fossil fuels, tell someone a story about them. The story of when and how fossil fuels came into being, what people use them for, why burning of fossil fuels harms the planet Earth, and how energy from fossil fuels can be replaced. If you can tell such a story, it is proof that you already know a lot about fossil fuels.

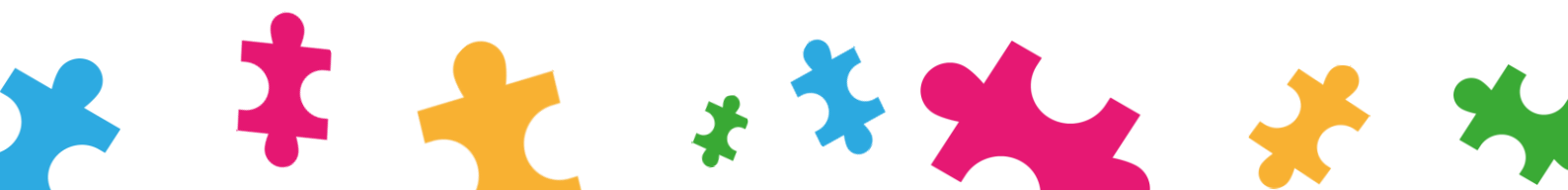
You have finished the last task of this WebQuest! Excellent!



EVALUATION

You have successfully completed several tasks in this WebQuest. Please, try to answer the following questions:

- Which knowledge from this WebQuest was just repetition for you, because you already knew the answer?
- What new knowledge did you learn today?
- Why should people have the knowledge contained in this WebQuest?
- If you had to say a few words about fossil fuels, what would you say?

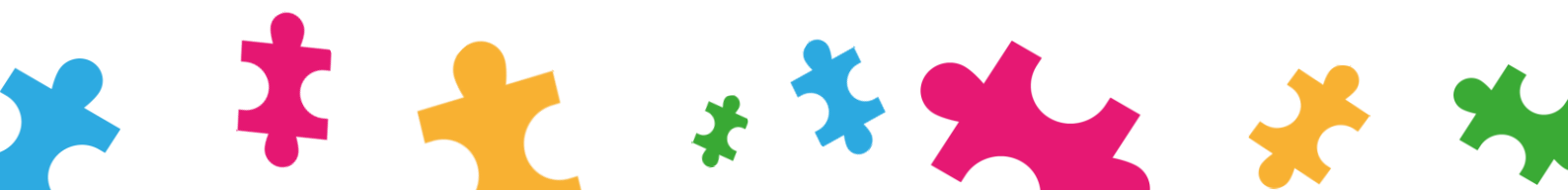




CONCLUSION

In this WebQuest, you learned new knowledge about fossil fuels. You already know that fossil fuels include oil, coal and natural gas. You also know that the burning of fossil fuels has a detrimental effect on planet Earth and human health. You found out what the greenhouse effect is. And you have also learned that energy from fossil fuels can be replaced by energy from sunlight, water and wind.

Congratulations, your knowledge of fossil fuels is perfect now!





GRETA

Challenge-based Learning in Primary Schools for Climate Change Awareness



Istituto Comprensivo "Don Milani" di Lanciano



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