



# WebQuest

Advanced level

Food Miles



WEBQUEST NAME:

Food Miles

WEBQUEST LEVEL:

Advanced Level

## INTRODUCTION

What exactly is a WebQuest? A WebQuest is a research activity that allows you to learn new interesting things and acquire knowledge. At the beginning of each WebQuest you will be given some tasks and you will try to complete these tasks as a real scientist. You will search the Internet, where you will gradually find all the information that will help you fulfil your scientific tasks. Each WebQuest has different tasks and a different topic.

This WebQuest is called "Food Miles". Did you know that more than 11,000 tons of food surpluses were created in stores in 2019/2020? Or that Tesco has been making efforts to reduce food waste in its stores? In the Czech Republic, Tesco reduced it by 66% since 2016. The Food and Agriculture Organization of the United Nations estimates that around a third of all food produced for human consumption goes to waste, on the other hand, many people (822 million) experience hunger every day.

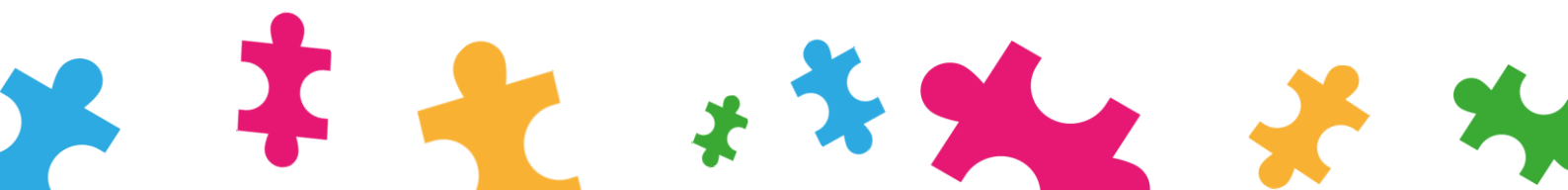
Your first task in this WebQuest will be to find out what is meant by the term "Food miles", what kind of food is thrown out by households and when.

Your second task will be to describe the journey food takes before it gets to your plate.

Your third task will be to find out how a food chain affects the environment.

The fourth task will be to find out how to shop smarter.

The last task will be to find out how to reduce food waste.



## TASKS

This WebQuest will make you an expert on food miles. You will be able to explain this term, you will be able to discuss this topic and tell a short story. The story about what food miles are, what journey the food has to take before it gets to your plate, how a food chain affects the environment, how to shop smarter, and how to reduce food waste. Create the story about food miles by completing the following tasks. Make short notes to tell the story at the end of WebQuest.

### TASK 1

Your first task in this WebQuest will be to find out what is meant by the term "Food miles", what kind of food is thrown out by households and when.

### TASK 2

Your second task will be to describe the journey food takes before it gets to your plate.

### TASK 3

Your third task will be to find out how a food chain affects the environment.

### TASK 4

The fourth task will be to find out how to shop smarter.

### TASK 5

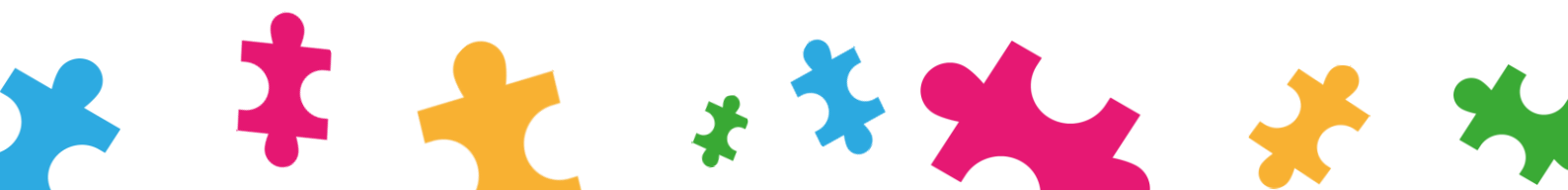
The last task will be to find out how to reduce food waste.

## PROCESS

### TASK 1

Your first task in this WebQuest will be to find out what the term "Food miles" means. Read the following article to find out what this term means.

<http://www.casopisveronica.cz/clanek.php?id=956>





You learned that food miles is the distance that food makes before it reaches you. Food, which is transported from the time of its making until it reaches the consumer (such as potatoes from a field or meat from a farm) to our plate.

Guess what is the most wasted food and at what time of year. Find out if you guessed correctly in the following link in the penultimate paragraph.

<https://www.info.cz/zpravodajstvi/byznys/plytvani-potravinami-je-globalni-hrozbou-nejvice-vyhodi-domacnosti-na-sidlistich>

You read that the most thrown away food is found in the waste containers in housing estates. People who live in the housing estate, do not have the opportunity to reuse the food remains - feed the animals or put them in compost. And what food are we talking about? Spoiled fruit and vegetables are most often thrown away, especially in summer and autumn.

This is the end of the first task.

Great!

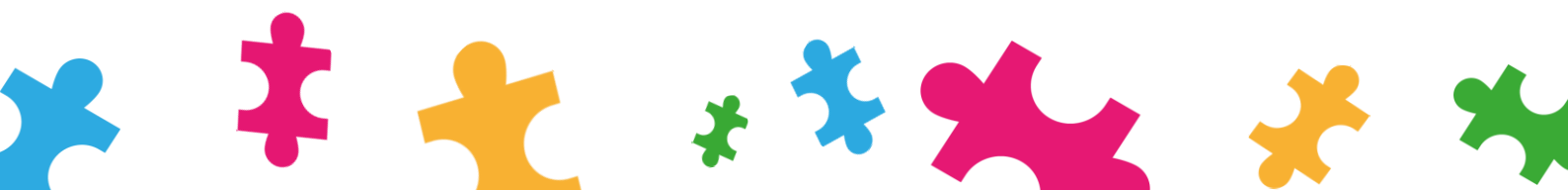


## TASK 2

Your second task will be to describe the journey the food takes, before it gets to your plate. Look at the banana journey.

[https://www.youtube.com/watch?v=rCUnIVhB3CY&ab\\_channel=DOLEEuropeGmbH](https://www.youtube.com/watch?v=rCUnIVhB3CY&ab_channel=DOLEEuropeGmbH)

Can you tell the story of a banana? Use the pictures below.







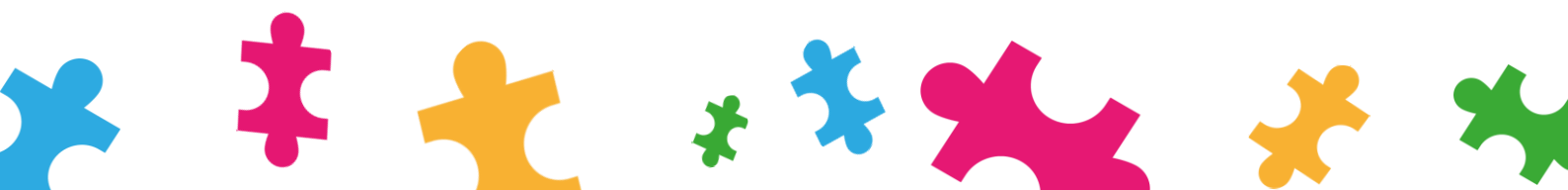
You did a great job with this WebQuest!  
Let's do the third task.

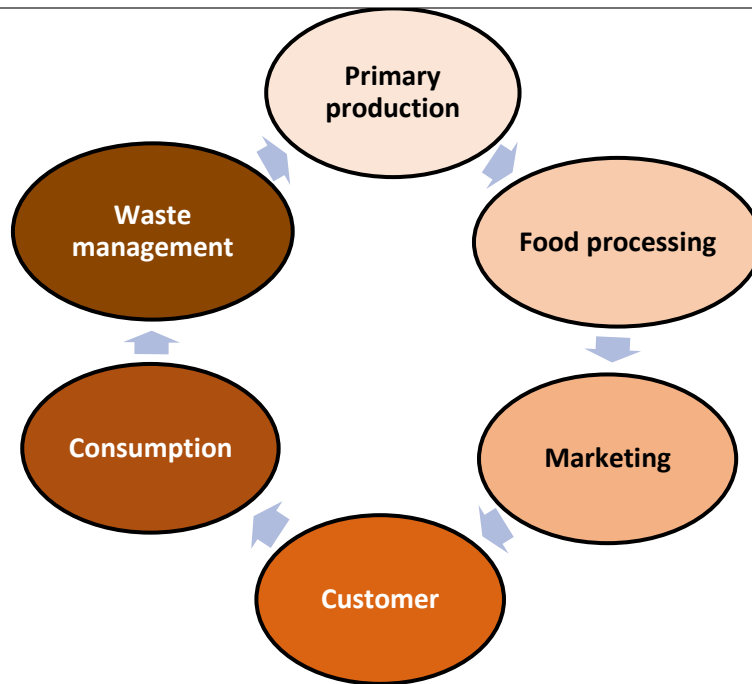


## TASK 3

Find out what are the impacts of food chains on the environment.

But first you need to know what the food chain is. The following scheme will make it easier for you.





Let's take the potatoes for example. Firstly, the potatoes must be grown, then harvested and finally processed. Then they are delivered to a store and you buy them, at best you eat them, and in the end, the rest of the food is processed as waste. All discarded food is either ploughed in the fields or composted and a new cycle begins.

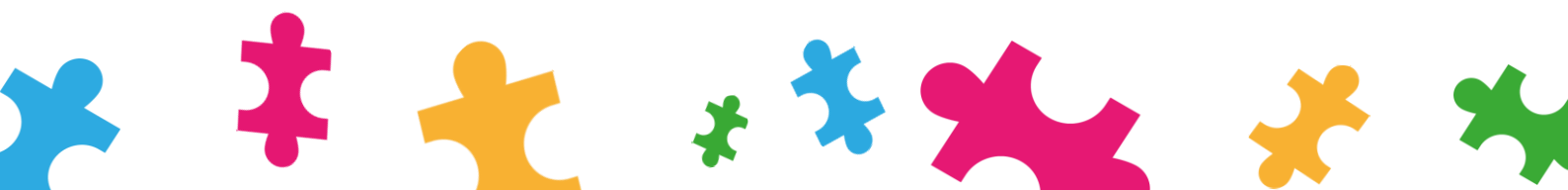
Food is wasted throughout the whole food chain, e.g. during harvest not everything is harvested in the field; some food is damaged during processing; some food is not sold in stores; and finally, there is also food, that we buy and do not eat. Food waste is not a problem just of one sector, but waste occurs in all sectors. Sectors often work together and are interconnected in many ways, providing an opportunity to avoid food waste. Food which wasn't used in one sector can become an interesting resource for another sector. For example, crops that would not be sold can be used as a compound feed for cattle.

And what impact do food chains have on the environment?

Food wasting represents a substantial loss of other resources such as water. Did you know that the production of 1 kg of beef requires 15,415 litres of water? Or 1 kg of apples consumes 822 litres of water?

We also burden the soil and use energy excessively. This leads to the unnecessary production of greenhouse gases, which contribute to global warming.

You did a great job with the third task in this WebQuest!





## TASK 4

How to shop smarter? In the following link, read shopping tricks you need to know to stop food waste.

<https://zachranjidlo.cz/jak-spravne-nakupovat/>

Do you agree? The best way to get fresh food is to buy it from local farmers. You don't even have to go to the farm, because farmers can deliver their food in practical farm boxes for you. Or you can try growing your own food at home or in the garden.

Great!  
Just one more task of WebQuest!



## TASK 5

You already know how to shop smarter and how to reduce food waste. But food is also wasted, for example, in restaurants. In the Czech Republic, up to 27,000 tons of food in company canteens and fast foods are thrown away every year. However, the Czechs decided to bring this practice to an end. Watch the video to see how they figured out the problem.

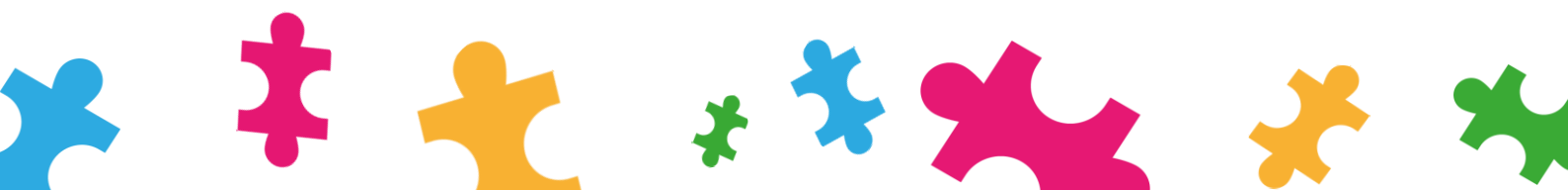
[https://www.youtube.com/watch?v=RI1W5k2Ffdg&ab\\_channel=TVSTISK](https://www.youtube.com/watch?v=RI1W5k2Ffdg&ab_channel=TVSTISK)

If you liked the video, click on the following link to learn more about the "Save the Food" project. Not only will you save money, but you will avoid throwing away food that you will love.

<https://nesnezeno.cz/>

You're at the end of WebQuest about food miles. To prove that you know something about food miles and food waste, tell a short story about it. The story about what food miles are, what journey the food has to take, before it goes on our plate, what are environmental impacts of food chains, how to shop smarter, and how to avoid wasting food. If you can tell the story, it proves that you already know a lot about the food miles.

You also accomplished the last task of this WebQuest perfectly.



## EVALUATION

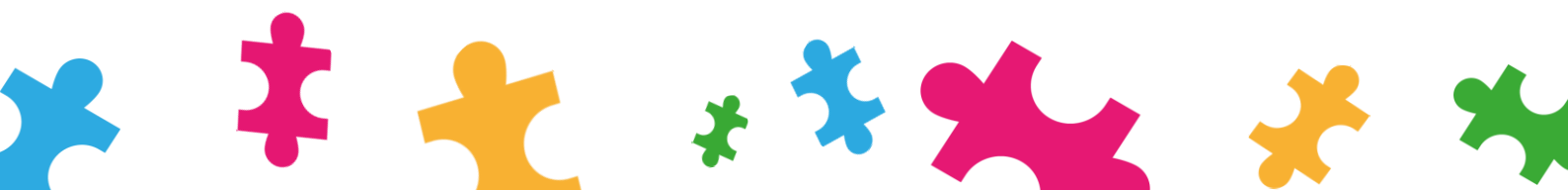
You have successfully completed several tasks in this WebQuest. Try to answer the following questions:

- Which knowledge from this WebQuest was just a repetition for you, because you've already known it?
- What knowledge was new to you?
- Why should people have the knowledge contained in this WebQuest?
- If you had to say a few words about food miles, what would you say?

## CONCLUSION

In this WebQuest, you gained new knowledge about food miles. You know what food miles are, the most commonly wasted foods in households. You also know that food waste has an impact on the environment, because the production of uneaten food also leads to the energy consumption and the production of greenhouse gases. You also know the story of the banana journey. You found out how to buy food in the store correctly and you learned that in the Czech Republic there is an application in which you will find restaurants that try to reduce the food waste.

Congratulations, your knowledge of food miles is very good now!







# GRETA

**Challenge-based Learning in Primary Schools for Climate Change Awareness**



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