



## Calculating your carbon footprint

A set of educational resources for parents





## Introduction

Dear Parents,

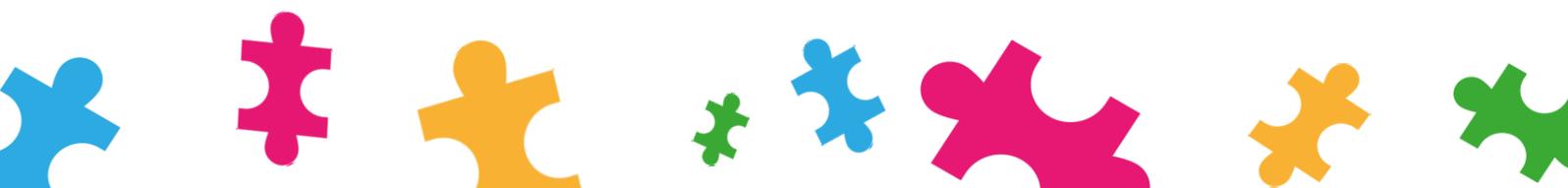
You take care of your children, and you also teach them important skills for life. You are role models for them, and you shape their personality. Your role in their lives is irreplaceable and crucial.

The ecology and future of our planet Earth is a more important topic for young people than it has been in your lives, during your childhood and adolescence. As parents, you should keep up with your children. Planet Earth is the only planet we have for life and is common to all people. We bring you educational tools for parents that include short educational videos, household exercises, and tips for parents in the field of ecology.

The topic of this set of educational resources is “Calculating your carbon footprint”. You can learn about this topic. You have a chance to find out what ecological and educational activities you can do with your children and how your family can further reduce the negative impact on our planet Earth.

## Educational Video

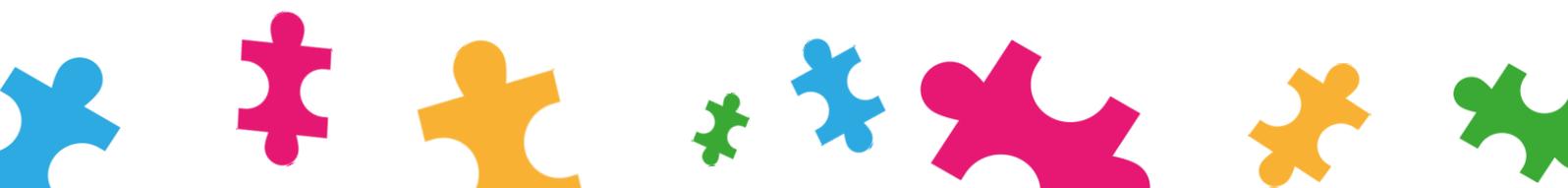
Watch this video to learn about what carbon footprint is:





## Household Exercise

Topic Addressed (4 of the 12): 4. Calculating your carbon footprint																			
<b>Exercise Title</b>	<b>1. Carbon footprint calculator quiz</b> <b>2. Practical activities to reduce carbon footprint</b>																		
<b>Duration of Exercise (in minutes)</b>	Quiz- 10 minutes Practical activity- 1 week	<b>Materials Needed</b>	Printer and a pen																
<b>Introduction</b>	Learn together with your child how to calculate your carbon footprint, and what changes you can make in your life to lower your carbon emissions.																		
<b>Step-by-step instructions</b>	<ul style="list-style-type: none"> <li>• Do the quiz together with your child</li> <li>• Add up your results to calculate your carbon footprint</li> <li>• Read the quiz explanations at the end</li> </ul> <p>After completing the quiz, use this week-long challenge below to aim for small changes to make in your daily lives to reduce your carbon footprint and become more environmentally friendly:</p> <table border="1"> <thead> <tr> <th>GOALS</th> <th>✓</th> </tr> </thead> <tbody> <tr> <td>I will recycle at least 3 things this week</td> <td></td> </tr> <tr> <td>I will walk/cycle instead of using the car at least once this week</td> <td></td> </tr> <tr> <td>I will make an effort to turn off the lights every time I leave a room in the house</td> <td></td> </tr> <tr> <td>I will only eat meat 3 days this week</td> <td></td> </tr> <tr> <td>I will try to shower for only 5 minutes each time</td> <td></td> </tr> <tr> <td>I will reduce my usage of electronic devices</td> <td></td> </tr> <tr> <td>I will reduce my consumption of dairy products</td> <td></td> </tr> </tbody> </table>			GOALS	✓	I will recycle at least 3 things this week		I will walk/cycle instead of using the car at least once this week		I will make an effort to turn off the lights every time I leave a room in the house		I will only eat meat 3 days this week		I will try to shower for only 5 minutes each time		I will reduce my usage of electronic devices		I will reduce my consumption of dairy products	
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## How big is your carbon footprint?

Circle the answer that applies the most to you

### 1. How often do you eat meat?

- Every day (20 points)
- Most days (15 points)
- About once a week (10 points)
- Rarely (5 points)
- Never (0 points)

### 2. How long are your showers?

- 5 minutes (2 points)
- 10 minutes (4 points)
- 20 minutes (8 points)

### 3. How often do you travel by car?

- Every day (100 points)
- Most days (80 points)
- One or two days a week (50 points)
- Never (0 points)

### 4. How often do you turn off lights/the TV at home?

- All the time (0 points)
- Most of the time (1 point)
- Not so often (2 points)
- Never (3 points)

### 5. When you go grocery shopping, how often do you use plastic shopping bags?

- All the time (5 points)
- Sometimes (3 points)
- Rarely (1 point)
- Never (0 points)

### 6. Do you recycle at home?

- Yes, all the time (1 point)
- Sometimes (2 points)
- Never (4 points)

### 7. How often do you use public transport?

- Every day (60 points)
- Most days (50 points)
- Once or twice a week (30 points)
- Rarely (10 points)
- Never (0 points)

### 8. How often do you eat fast food?

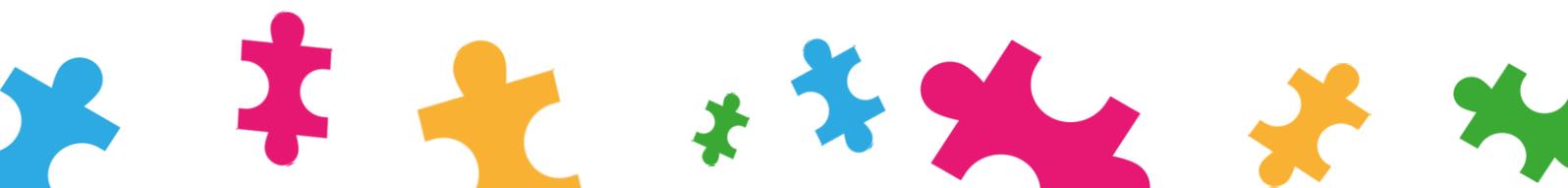
- Often (5 points)
- Sometimes (3 points)
- Rarely (1 point)
- Never (0 points)

### 9. How often do you use electronic devices such as the TV, phone, computer, tablet etc?

- Every day (5 points)
- Most days (4 points)
- One or two days a week (3 points)
- Rarely (1 point)
- Never (0 points)

### 10. How often do you eat dairy products?

- Every day (10 points)
- Most days (8 points)
- Sometimes (5 points)
- Rarely (2 points)
- Never (0 points)





## QUIZ RESULTS

Add up all of the points from your answers.

If your points added up to:

0-50: Congratulations! You are doing a lot to reduce your carbon footprint.

50-100: Great. You are quite conscious of your consumption.

100-150: There is room for improvement.

150-220: Look for better ways to become more environmentally friendly!

## QUIZ QUESTIONS EXPLAINED

**Question 1 and 10-** Meat and dairy account for nearly 15% of global greenhouse gas emissions.

Meat and dairy facts:

- Cows and sheep release methane, a greenhouse gas that is more powerful than CO<sub>2</sub>.
- Rearing cattle requires a lot of grass for them to eat, and to ensure that cows get enough grass, farmers often use a fertiliser on their fields to encourage plant growth. This releases a lot of CO<sub>2</sub>.
- Due to the demand for beef, rainforests are cut down to rear cattle, and deforestation accounts for a lot of greenhouse gas emissions.
- Your carbon footprint when eating a plant-based diet will be 10 to 50 times smaller than eating a diet mainly consisting of animal products.

**Question 2-** Hot showers cause large amounts of carbon dioxide to be released, because heating up the water tank takes a significant amount of energy.

**Question 3-** The greenhouse gases released by cars are a huge contributor to climate change. Fossil fuels are burned in cars, and the greenhouse gases released account for around 20% of all greenhouse gases emitted in the world.

**Question 4-** Lights and the television take a lot of energy and generate carbon emissions. Making an effort to turn off lights and the television when they're not needed is a simple way to reduce your carbon footprint.

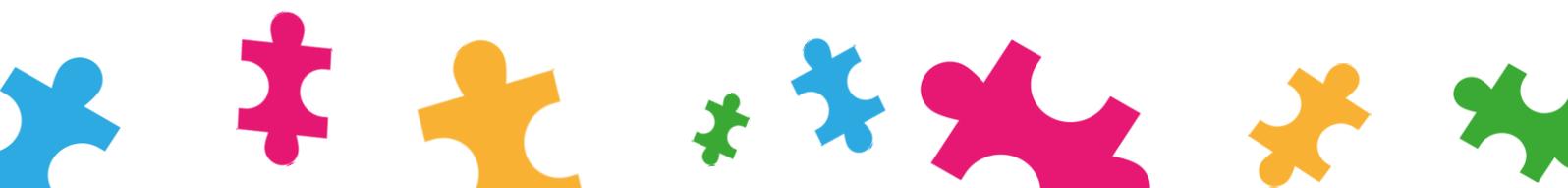
**Question 5-** Plastic bags are made from oil or natural gas, so they are a form of fossil fuel. Reducing the plastic you buy can reduce your carbon footprint.

**Question 6-** If you recycle, then this material will be used to make new products. This is a better alternative than mining for new materials, which causes greenhouse gas emissions.

**Question 7-** Public transportation services like trains and buses contribute to climate change because they burn fossil fuels, however, as you can see per the points system, public transportation is less harmful to the environment than cars.

**Question 8-** Fast food is damaging to the environment in many ways. Fast food restaurants use a lot of packaging, they cause greenhouse gas emissions during the production of their food, and they use a lot of transport.

**Question 9-** The production of electronic devices releases CO<sub>2</sub>, as many of these manufacturing plants are run using fossil fuels.





## Tips for Parents

### Tip 1- Buy local products

The planet will thank us for the small things we do for environment. Shopping locally and eating local food has many benefits for your own health, and for the health of the planet. Making more of an effort to shop locally will greatly reduce your carbon footprint, because less energy is required to grow and transport local food.

For example: Most avocados in Europe are imported from South America, so the environmental impact of transporting this fruit to Europe is very large. Cutting down on foods that require a lot of energy to end up on your dinner table is a great way to help save the planet.

### Tip 1- Buy second-hand items

What do we do when we need new clothes?

We go shopping and buy something new.

What do we do when we need a new phone?

We go to the shop and buy a new one.

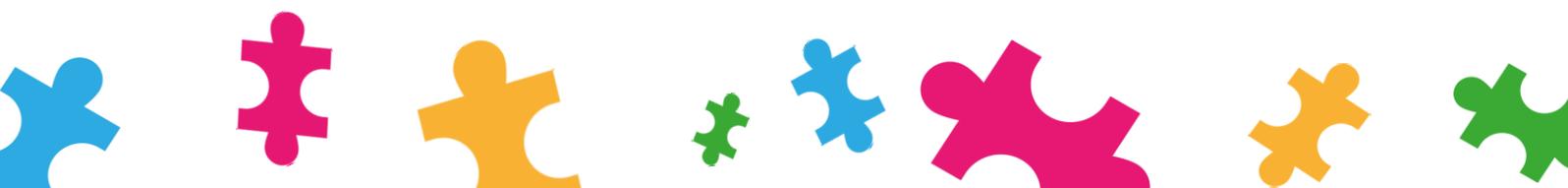
There are much more environmentally friendly ways to get the things you need. Buying second-hand products reduces the demand for the production of new products, and production harms the environment due to the carbon dioxide emitted in factories and during the extraction of resources needed to make items.

Use the internet to search for local second-hand shops, and consider buying used items in the future rather than buying new goods.

### Tip 1- Limit your heating at home

We all love a toasty house when the weather is cold outside, however, making an effort to turning your heating down by even 1 degree can make a big difference.

Instead of turning the heating up when it gets a little cold, try more environmentally friendly options such as putting on a jumper, or grabbing a blanket, and encourage others in your household to do the same!





# GRETA

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



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