



102 - Climate Change Challenge WebQuests

Low Plastic Diet



**Building Problem-solving Skills of Youth to Address
Environmental and Climate Change Issues**

IO2 – Climate Change Challenge WebQuests

WebQuest Theme: Low Plastic Diet

TIME ALLOCATED:	8-10 hours (varies)
TITLE OF THE WEBQUEST:	FUNplastic Exit Plan Campaign
INTRODUCTION	
<p>Our planet and humankind are both faced with many environmental challenges and issues that affect our daily life negatively; one of them being plastic pollution. Encyclopaedia Britannica defines plastic pollution as the accumulation of synthetic plastic products in the environment to the point where they create problems for wildlife and their habitats as well as for human populations. Plastic bottles, bags and microbeads are everywhere and unfortunately, they end up in our bins and finally to the landfills, waterways, and oceans. According to the National Geographic, the amount of plastic trash that flows into the oceans every year is expected to nearly triple by 2040 to 29 million tonnes.</p> <p>Have you ever wondered what implications plastic usage has on our health and environment and how we could reduce plastic waste, so as to bring the balance back to our ecosystem?</p> <p>The fact is, we simply cannot cope with the amount of plastic on our planet — nor the amount that continues to be produced. Humans are hugely dependent on plastic objects. But even if humans avoided using plastic containers or plastic bags, they would still be a far cry from going absolutely plastic-free.</p> <p>This WebQuest will help you explore the prime causes of plastic waste, what the benefits are of reducing it, how you could take action towards reducing your plastic footprint and inspire others to follow the same path.</p>	
TASK	
<p>You and 2 close friends are working as volunteers in a non-governmental organisation (NGO) in your city. This NGO is committed to implement projects that protect the environment. One of the projects under implementation is entitled “Reducing our Plastic Footprint” and its aim</p>	



is to come up with concrete solutions to fight against plastic waste. In order for this project to be successful, a series of activities are going to be implemented.

The first task of the project has been assigned to your team, and you must develop a campaign in order to raise the community's awareness on the topic of plastic pollution, its negative effect on the planet and on the human's wellbeing and to provide a plan for the community members, adults and youth, to start a "Low-plastic Diet". Within the framework of this task a FunPlastic Exit Plan should be created having the form of a social media campaign that will run for 5 days.

You only have one week to research and learn as much as you can about the plastic pollution and its environmental impact. You also have to find answers about how people in your country and all over the world are trying to combat this challenge to protect planet earth. Your team need to develop your FunPlastic Exit Plan and to integrate it into a 5-day engaging social media campaign, full of fun! Being creative and thinking outside of the box is a must!

PROCESS

Step 1: All about Plastic!

Firstly, you and your team-mates have to research and learn more about plastic pollution so as to find hard data and the appropriate qualitative information to be included in your FunPlastic Exit Plan campaign. Otherwise, it will be extremely difficult to convince your local community to take action to reduce their plastic waste and help save the planet.

Plastic is everywhere. In the ocean, in animal carcasses, even in our food chain. Due to its extreme durability, plastic has become a worldwide problem. Since 1950, it is estimated that 448 million tonnes of plastic were produced, and this number is expected to double by 2050. 12.7 million tonnes of plastic end up to the ocean causing an irreparable damage to the marine life and our ecosystem. Animals eat plastic waste or get tangled up in it and perish. Even in the Arctic, it snows plastic particles and, depending on the region, there are 4:20 times more microplastics in the soil than in the world's oceans.

Follow the links provided and find out some tough truths about plastic pollution:

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- Tough truths about plastic pollution:
https://www.ted.com/talks/dianna_cohen_tough_truths_about_plastic_pollution#t-298987
- What If Plastic Was Never Invented? <https://insh.world/science/what-if-plastic-was-never-invented/>

More on the pressing environmental pollution as a result of non-reusable, disposable plastic overuse and its detrimental effects on the landfill and ocean can be found at the following links:

- Our planet is drowning in plastic pollution:
<https://www.unenvironment.org/interactive/beat-plastic-pollution/>
- The world's plastic pollution crisis explained:
<https://www.nationalgeographic.com/environment/habitats/plastic-pollution/>
- Shocking Ocean Plastic Statistics: The Threat to Marine life, The Ocean & Humanity (Source: <https://www.condorferries.co.uk/plastic-in-the-ocean-statistics>):
<https://www.condorferries.co.uk/plastic-in-the-ocean-statistics>

Greenhouse gas emissions from the plastic lifecycle threaten the ability of the global community to keep global temperature increases below 1.5°C. More than 90% of plastic is made from fossil fuel, and a recent report by CIEL estimates that by 2050, the greenhouse gas emissions from plastic could make up as much as 10-13% of the entire remaining carbon budget. If the overproduction and consumption of plastic continues uninterrupted, it could account for 20% of the total global oil consumption by 2050. Learn more about the hidden cost of a plastic planet at:

- Plastic & Climate: The Hidden Costs of a Plastic Planet:
<https://www.ciel.org/plasticandclimate/>

You have collected a lot of information regarding plastic pollution and how plastic waste can damage our environment. Now it's time to start reflecting with your peers on the causes and effects of plastic pollution and start an ideation process in order to come up with some ideas on how your FunPlastic Exit Plan Campaign will be structured. Keep in mind that this campaign will be in the form of a call-to-action that will motivate your community members to act against single-use plastics. But first you need to convince them why they have to do so by using numbers and facts!

Step 2: Observe yourselves and your surroundings!



Ending plastic waste is ambitious. But it is through collaboration and collective action that this complex problem can be solved. The first step to solving any problem is to measure it. It's about time your team measured your plastic footprint so that you can estimate your community's plastic footprint. You can observe and research your community's behaviour towards single-plastic use.

You've probably already heard of the term "carbon footprint": the way to measure how much your lifestyle contributes directly or indirectly to greenhouse gases that lead to climate change. The plastic footprint is a similar metric, only it's used to judge how much plastic your lifestyle will contribute to the worldwide trash pile.

When people talk about measuring plastic use impact, the conversation almost always focuses on disposal. Read the following article to learn that the impact of plastic bags begins long before its disposal:

- Measuring Plastic Bag Impacts: <https://1bagatime.com/learn/measuring-plastic-bag-impacts/>

Keep in mind that this stands not only for plastic bags but for every plastic package or material we use in our everyday lives.

Plastic Bank, as well as other organisations, developed some tools in order to help people estimate their daily plastic footprint. Plastic Bank's calculator provides you with the opportunity to estimate it based on the country you live:

- Plastic Footprint Calculator: <https://plasticbank.com/plastic-footprint-calculator>

Carbon Footprint developed a plastics quiz in order to help you find out how much plastic you consume:

- Plastic Calculator: https://www.carbonfootprint.com/plastic_calculator.html

Try both plastic footprint calculation tools and come up with your team's plastic footprint. Now take a step back and try to answer to the following questions:

1. What are the daily habits of your family and friends regarding plastic use?



2. What comes into your mind when you imagine your community members shopping in a supermarket? Have you ever observed if people are aware of the plastic pollution and if that is reflected on their purchases' choices?
3. Have you ever noticed any initiative taking place in a mall, or in a supermarket, or in a farmers' market, promoting the reduction of plastic waste?
4. Have you ever heard any discussion taking place publicly aimed at raising citizens' awareness about plastic pollution?

Take notes while answering these questions as a team because you will need them when you implement the fourth step of this process.

Before proceeding to step 3, try to estimate your community's plastic footprint, by deducing your team's footprint. You will need this data in order to show your community how their daily habits contribute to the increase of plastic waste.

Step 3: 5R's: Refuse, Reduce, Reuse, Repurpose, Recycle.

Now that you have understood the basics of plastic pollution and plastic waste and got aware of their detrimental effects on the planet and the human life, you need to do some research in order to get informed about what people can do to resolve this issue. Never forget that behind every problem there is an opportunity!

Before starting to deal with the solutions, let's have some fun! Your community is not only comprised of adults; there are also lots of children in your community and they are the future of our planet. Get inspired for developing your FunPlastic Exit Plan Campaign that should also be addressed to the young people of your city, by playing these 3 Anti-Plastic Pollution Video Games:

- Anti Plastic Pollution Games: https://www.koikiwi.com/anti_plastic_pollution_games.html

and by studying these activities:

- Games and Activities: <https://plasticpollutioncoalition.zendesk.com/hc/en-us/articles/224439428-Games-and-Activities>

While playing, write down any ideas that might come up that could be useful for your FunPlastic Exit Plan campaign.



Continue by visiting the following websites that shed light on the best practices applied worldwide to tackle plastic waste:

- The 5 R's of Waste Management: <https://www.learnz.org.nz/redvale181/bg-standard-f/the-5-r%27s-of-waste-management>
- 100 Steps to a Plastic-Free Life: <https://myplasticfreelife.com/plasticfreeguide/>
- 9 Ways to Reduce Plastic in your Workplace: <https://www.lessplastic.org.uk/planning-to-reduce-plastic-waste-in-your-business-in-2020/>
- Can we turn the tide of plastic packaging? <https://rethink.ft.com/videos/turn-tide-plastic-packaging/>
- Tips to Use Less Plastic: <http://www.greeneducationfoundation.org/nationalgreenweeksub/waste-reduction-tips/tips-to-use-less-plastic.html>
- The recycling dilemma: good plastic, bad plastic? <https://www.dw.com/en/the-recycling-dilemma-good-plastic-bad-plastic/a-52924206>
- Waitrose Extends 'Bring Your Own' Container Trial To Reduce Plastic Waste: <https://www.independent.co.uk/life-style/food-and-drink/waitrose-plastic-container-bring-your-own-trial-a8942876.html>

If you want to get updated about the efforts made in Germany, then, don't miss reading the articles that follow:

- Germany unveils 5-point plan to reduce plastic waste: <https://www.dw.com/en/germany-unveils-5-point-plan-to-reduce-plastic-waste/a-46455503>
- Germany to Ban Single-Use Plastic From 2021: <https://earth.org/germany-to-ban-single-use-plastic-2021/>
- German associations call for binding reusable packaging quotas: <https://www.euractiv.com/section/energy-environment/news/german-associations-urge-government-to-introduce-binding-reusable-quotas/>
- Wie kann die Plastikindustrie nachhaltiger werden? <https://www.dw.com/de/wie-kann-die-plastikindustrie-nachhaltiger-werden/a-50891481>

While you are reading the articles provided, keep taking notes to summarise what you have learned and to be ready to include them in your FunPlastic Exit Plan Campaign!



Step 4: Develop your FunPlastic Exit Plan!

After you've surfed through the web and have your notes in front of you, you are ready to build your engaging FunPlastic Exit Plan that is going to be the heart of your social media campaign.

Boost your creativity by taking a look at the campaigns below, which were created to raise awareness on the topics of plastic pollution and plastic waste:

- WWII bomb removal to force evacuation around Berlin's main station: <https://www.dailynewssegyp.com/2019/06/18/kefaya-plastic-online-campaign-raises-awareness-on-plastic-pollution/>
- The 5 Most Inspiring Advertising Campaigns That Fight Plastic Pollution: <https://www.cucocreative.co.uk/thoughts/the-5-most-inspiring-advertising-campaigns-that-fight-plastic-pollution/>
- Our culture depends on single-use plastics: https://www.plasticides.org/plastics101/?gclid=Cj0KCQiAk53-BRD0ARIsAJuNhptSkI-bhr9yq0TwRRHmlyZbLI9DSaQ0ED-INIDHz7276w7I7VGuHFcaAkgiEALw_wcB
- It's high time to Rethink Plastic: <https://rethinkplasticalliance.eu/campaign/>

Download the "My Little Plastic Footprint" App that can help you to reduce your plastic consumption by going on a plastic diet and by choosing sustainable alternatives. This app could serve as a source of creative ideas for you to produce the content and to design your plan in a user friendly and engaging way.

- Start reducing your plastic footprint: <https://www.mylittleplasticfootprint.org/>

Discuss as a team and decide about the final content to be used in your campaign and start developing your FunPlastic Exit Plan. The following links provide you with some hints and tips on how to develop your plastic waste reduction plan and become a plastic game changer:

- Plastic & Consumables Footprint: https://www.carbonfootprint.com/plastic_footprint.html
- 5 steps to become a plastic game changer: <https://www.lessplastic.org.uk/5-steps-to-become-a-plastic-game-changer/>

Proceed with the last step of the process and broadcast your FunPlastic Exit Plan on social media!



Step 5: Get vocal for Local!

Let's talk about the nitty gritty details of rocking a social media campaign. You are going to learn about tools and how-to boost your campaign on Facebook, Instagram, or on any other social media platform. This is your time to think big.

Read and watch the three step-by-step guides that are provided via the following articles carefully. These three resources can help you plan, create, and execute a social media campaign like a pro:

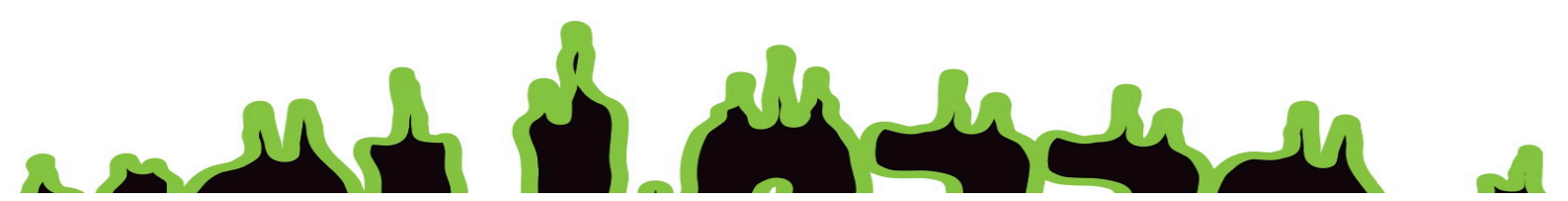
- How to Create a Social Media Campaign That Actually Works:
<https://blog.capterra.com/successful-social-media-campaign/>
- 10 Steps to Build a Successful Social Media Campaign for a Niche Audience:
<https://www.lyfemarketing.com/blog/social-media-campaign/>
- 8 Steps To Creating A Social Media Campaign That Gets Results:
<https://resources.mojomedialabs.com/blog/8-steps-to-creating-a-social-media-campaign-that-gets-results>

Develop a roadmap of your social media campaign based on the good practices you have learned and have the FunPlastic Exit Plan in front of you. Divide your plan in 5 sections that correspond to the 5-day social media campaign you have planned to implement. Create images or choose royalty free photos to use for your daily posts and develop the caption for each one of them, depending on the social media platform(s) you have decided to deploy. Remember that FunPlastic Plan is a call-to-action! The idea behind it is not only to attract your local community's attention to the issue of plastic pollution and its disastrous effect on the planet, but also to raise awareness about their consumer habits and to show them a clear path to reducing their single use of plastic!

EVALUATION

As a self- assessment exercise for this WebQuest, please answer the following questions and share your thoughts and insights with your teammates:

- What were some of the most interesting discoveries my teammates and I made while working on this project? About the problem? About myself? About others?
- What were some of my most challenging moments and how did I manage to overcome them?



- What were some of my most powerful learning moments and why?
- What skills did I acquire through this activity?
- How well did I and my team communicate overall?
- Were my milestones and goals mostly met, and how much did I deviate from them if any?
- What would I do differently if I were to approach the same problem again?

CONCLUSION

Congratulations! You have successfully finished all of your tasks and prepared an engaging social media campaign to address the problem of environmental deterioration caused by single-plastic use and plastic waste. You have unleashed the hidden cost of a plastic planet and you have managed to come up with a plan of a “Low-plastic Diet”.

In July 2017, the United Nations met on the implementation of Sustainable Development Goal 14 - Preserve and make sustainable use of oceans, seas and marine resources - and the world adopted a resolution: “Our Ocean, our future: call for action”. All countries agreed to intensify their efforts to prevent pollution of the oceans, among others by aiming to reduce plastics and microplastics. There was special attention for the reduction of Single Use Plastic (SUP), single use packaging plastics in particular (Plastic Soup Foundation).

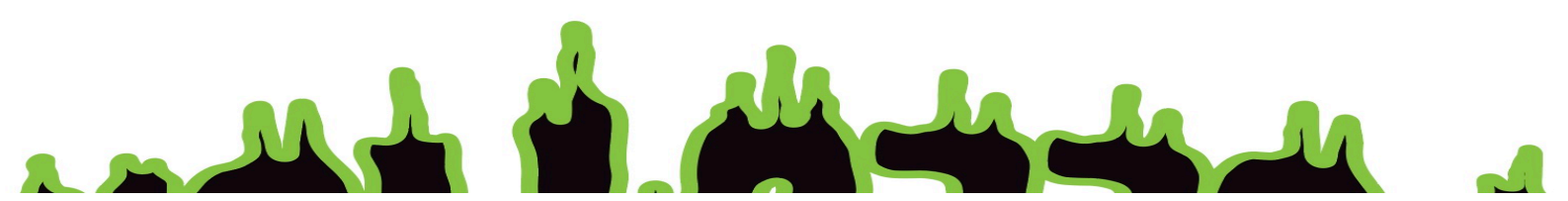
The fight against the plastic soup involves the prevention of plastic entering the environment, prevention of health risks and absolute reduction of plastic.

Ending plastic waste is achievable through innovative and impactful solutions, deployed at-scale whilst partnering with communities around the world.

Now it’s your time to make the world a better place! And don’t forget! Collective action drives change!

“Only we humans make waste that nature can’t digest.”

Charles Moore, oceanographer





TUTOR SECTION

On completion of this WebQuest, young people will have achieved the following learning outcomes:

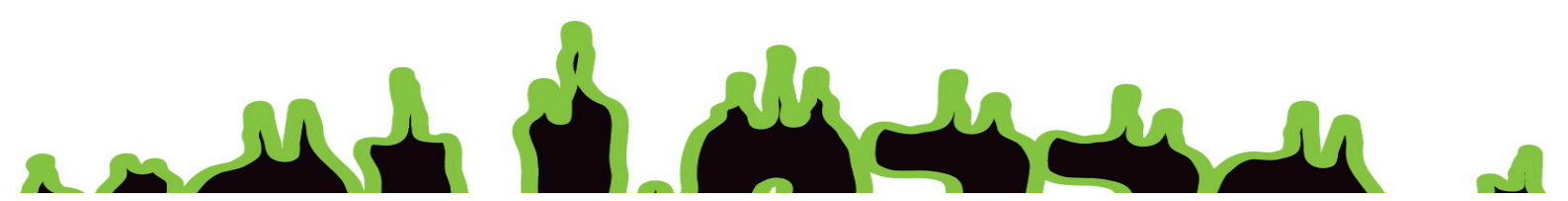
Knowledge	Skills	Attitudes
<ul style="list-style-type: none"> • Basic knowledge of plastic pollution on a global scale. • Basic knowledge of consumption habits and their impacts on the environment. • Basic knowledge of plastic packaging and carbon emissions. 	<ul style="list-style-type: none"> • Define the terms “plastic pollution” and “plastic waste”. • Discuss the environmental benefits of following a low-plastic diet. • Discuss the health benefits of reducing plastic waste. • Combine knowledge about conscious 	<ul style="list-style-type: none"> • Awareness of the environmental and health impacts of single-plastic use. • Willingness to share and promote a sustainable way of life with others, by following aspirations to combat plastic waste.



<ul style="list-style-type: none"> • Factual knowledge of the impact of plastic pollution on human health and the environment. • Basic knowledge of plastic upcycling and recycling. • Factual knowledge of estimating and calculating one's plastic footprint. • Factual knowledge of how to follow a low-plastic diet. • Factual knowledge of developing and implementing online campaigns. • Basic knowledge of effective communication and teamwork. 	<p>consumption habits and reducing one's plastic use.</p> <ul style="list-style-type: none"> • Reflect on personal consumption decisions. • Evaluate and effectively use data to tackle plastic waste. • Evaluate one's own plastic habits. • Reflect on personal plastic consumption decisions. • Design a Plastic-Exit Plan. • Design a social media campaign. • Use digital stories for stimulating critical thinking and communicating symbolism. • Apply certain communication techniques. • Research, gather and organise information. • Build team competence and performance. 	<ul style="list-style-type: none"> • Feeling of social responsibility and belonging by contributing to a greater global cause. • Self-empowerment and confidence about health, social and environmental benefits of avoiding plastic use. • Eagerness to be creative and innovative by using digital means/tools to stick to sustainable way of life. • Demonstrate ability of critical thinking when developing digital stories. • Motivate others to take part in making positive changes in their lives.
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Questions that a youth worker or teacher might use in a whole class discussion to debrief this WebQuest:

- What new knowledge and skills did you gain? Name the 3 most important ones.





- Did you enjoy the whole process of dealing with this WebQuest and developing your end product?
- Are you happy with the end product you have developed?
- What would you improve in your work if you had more time?
- Can you imagine using what you have learned in the future?
- Are you proud of your work?



SOLUTION NOT POLLUTION



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