



# 102 - Climate Change Challenge WebQuests

*Low-Plastic Diet*



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

## I02 – Climate Change Challenge WebQuests

WebQuest Theme: Low-Plastic Diet

<b>TIME ALLOCATED:</b>	3 weeks
<b>TITLE OF THE WEBQUEST:</b>	Sustainable Plate: 3-Course Irish Menu
<b>INTRODUCTION</b>	
<p>Millions of tonnes of plastic pollution enter our oceans each year – approximately 12 million metric tonnes to be precise (Condor, 2020). This plastic can have a devastating effect on marine life and on seabirds. Experts estimate that more than one million seabirds and 100,000 marine animals die each year because of plastic in the ocean. Human beings are also not exempt from the dangers of this plastic contamination. An international group of scientists has requested that governments declare plastic as hazardous waste and today we read more and more about how plastic is entering our food-chain. I think it is time we kick our plastic habit, don't you?</p> <p>Plastic is all around us. Stop what you are doing right now and look up. Do you see any plastic nearby? Not only does it come in the form of bottles and food containers, but plastic is also used to manufacture straws, single use cutlery and disposable cups. Even polystyrene glass has a plastic coating that is known as "clamped plastic". The most harmful plastics that exist are Single Use Plastics (SUP's), which only have one life cycle. By generating these plastics, we are generating the millions of tonnes of plastic waste each year which end up in our ocean. Today we find plastic in practically everything. Food and hygiene products have plastic containers, your car, your phone, and your computer are made of plastic and, even if you eat chewing gum regularly you will be putting plastic in your mouth. It is important that we start to identify the types of plastic that surround us, and that we use every day and take the necessary measures to ensure that we reduce the amount of plastic in our lives, and where we do use plastic, to ensure that they are reused where possible, or recycled properly.</p> <p>There are many actions we can take to lower our "plastic diet". Even by starting with our own home or community, we can begin to generate palpable changes that contribute to the formation of a more sustainable culture with better chances of survival.</p>	



## TASK

You have noticed that your community generates a lot of plastic waste and you think it is a good idea to encourage people to reduce their plastic consumption. You want to make them aware of the dangers that plastics pose to the environment, and how single-use plastics continue to harm the human race, biodiversity and the planet itself. You think it would be a good idea to do some research on plastic waste and to raise awareness about how it can be recycled. When you have completed your research, you and your friends can produce a short film about your own plastic consumption, and upload it to YouTube to raise awareness of the plastic waste we generate every day, consciously or unconsciously.

You want to work as a team with your peers to learn more about the environmental impact of plastic waste. You want to investigate the different types of plastics that exist and identify the type of material that the containers and packaging of the products we consume daily are made of, and you want to promote positive interventions to help to save our oceans and sea-life; as well as all the ecosystems and animals that are affected by the fragments of plastics that we discard. You have a basic understanding of how plastic is a hazardous waste, but you think it is important to make people aware of the problem of plastic pollution, and you also want to raise awareness among local companies, large and small, that generate or use a large volume of single-use plastics.

You and your friends will get together and produce a short film called 'My Low-Plastic Diet'. This film should share a video diary about how you and your friends evaluated your relationship with plastic, and then kicked your plastic habit. Once you have produced your short video, upload it to YouTube and share it in your community!

## PROCESS

### Step 1: Research: What is plastic waste & misuse?

As a first step in this challenge, you will need to begin with some research to understand the environmental impact of plastic pollution, but also the different types of plastics that exist. What you uncover through this research, can be used at the start of your video to introduce the topic of how to reduce packaging waste – your first step to a low-plastic diet!

To get some introductory facts about plastic pollution, click on the links below:



- How long it takes for plastic to biodegrade: <https://healthyhumanlife.com/blogs/news/how-long-it-takes-for-plastic-to-biodegrade>
- Five Ways That Plastics Harm the Environment: <https://bit.ly/3ocQIAX>
- 7 Types of Plastic that You Need to Know: <https://waste4change.com/7-types-plastic-need-know/>
- Facts about plastic pollution: <https://bit.ly/3jdOw8z>

It is important that you fully understand why plastic pollution such an important issue is, so that you can raise awareness about in through you video. You can use the links above as a guide for your research, but also try talking to some of your peers in your youth group to gain their insights into our plastic addiction, and to gather ideas for what you could share through your video. Make sure that all the information you collect comes from reliable sources!

### Step 2: Evaluate your plastic diet!

To share insights into your relationship with plastic, the first thing you need to do is to evaluate how much plastic you consume. To do this you need to calculate the daily plastic consumption for your household. Tracking your daily consumption each day in a diary or journal will allow you to plan for how you will make the change to a low plastic diet. Seeing as you and your friends are making a short film to promote your 'low plastic diet', why don't you vlog about it and create a short video each day to log your plastic consumption – this way you can use this footage in your film!

To get started, together with your team, think about how you will evaluate your plastic consumption. You might find the following links to be a good starting point.

For information on how to calculate your plastic consumption, click on the links below:

- Plastic Calculator: <https://www.earthday.org/plastic-pollution-calculator-2/>
- Plastic Footprint Calculator: <https://www.omnicalculator.com/ecology/plastic-footprint>
- Calculate your plastic waste: <https://bowercollective.com/pages/waste-calculator>

Once you have a handle on your plastic waste, the next step is to create some vlog entries about your plastic consumption. At this point, you are not trying to change your behaviours, you are just aiming to log and track how much plastic you typically consume!





Try and create one entry to your video diary every day for one week. All members of your team should do the same – by the end you should have a lot of footage showing just how much plastic you consume on a regular basis!

### Step 3: Time to compare results!

Now that you and your team-mates have each vlogged about your plastic consumption for one week, it is time that you each share your video footage with one another and compare your plastic habits. For this, you can create a private channel on YouTube or Vimeo or set up a Google Drive folder to share your footage. If you are not quite sure how to do this, the following links will help you:

- Set up Drive for your team: <https://support.google.com/a/answer/6085538?hl=en>
- [VIDEO] Edit Video Settings with YouTube Studio: <https://youtu.be/zDHStdBNbXM>
- How to Build a Private YouTube Channel: <https://www.techwalla.com/articles/how-to-build-a-private-youtube-channel>
- [VIDEO] Private sharing on Vimeo: <https://vimeo.com/92060046>

Once you have shared your video footage with one another, the next step is for you all to brainstorm together and to decide how you will reduce your plastic intake and start your 'low-plastic diet'. You might find the following links to be useful, in case you are stuck for some ideas:

- 7 Things You Didn't Know About Recycling Plastic: <https://bit.ly/3kf0uAo>
- Reduce your plastic consumption and lessen its impact on the environment: <https://bit.ly/37wLhgy>
- What can I recycle? (Ireland): <https://repak.ie/recycling/what-can-i-recycle/>
- 20 Ways to Reuse and Recycle Plastic Bottles: <https://www.budgetdumpster.com/blog/diy-plastic-bottles-recycling/>
- The Importance of Reusing Plastics: <https://bit.ly/2IHQ1iQ>

Once you have a list of changes that you will make, your next step is more vlogging! Adapt to a 'low-plastic diet' for one week, and again vlog your entries every day. In your video entries, discuss how you are adapting to the change in your habit, and if you are finding it difficult to follow a 'low-plastic diet', explain why?



#### Step 4: Editing and The Director's Cut!

Once you have gathered your footage, the next step for your team is to review all the footage and start to edit your film together. Remember, your theme is 'low plastic diet' so you want to show what your habits were before, what changes you made and how you have adapted to your new low-plastic diet. Do not forget to include some information to introduce the film and to share the research that you complete at the start of the quest! For this, you and your team may want to write a short script, and some of your team-mates might also want to speak to camera to introduce the film and to share what you have found out about plastic pollution with your community.

You do not need any special equipment to record this part of your video, you can always use your phone or a handheld camera. But you will need to practice before recording the piece to camera, and you will have a lot of footage to trawl through, so it is important that you all work together as a team.

For advice on how to shoot your video, click on the links below:

- How To Shoot Better Video With Your Phone:  
<https://www.youtube.com/watch?v=7YlKcv69HQU>
- 8 tips on recording professional video with your phone: <https://bit.ly/31uFez1>
- How to Film YouTube Videos on Your Phone:  
<https://www.youtube.com/watch?v=JwhsPdN2RNq>

For tips on how to edit your video, click on the following links:

- Video Editing Tips: <https://www.adorama.com/alc/video-editing-tips-for-beginners>
- The 14 Best Free Video Editing Software Programmes:  
<https://www.shopify.ie/blog/best-free-video-editing-software>
- 13 Creative Editing Techniques: <https://blog.pond5.com/11099-13-creative-editing-techniques-every-video-editor-should-know/>
- Video Editing Project Ideas: <https://learn.corel.com/video-tutorials/video-editing-tutorials/video-editing-project-ideas/>

Once you have a first edit of your film, you can share it with your peers for feedback! You could also include a 'Director's Cut' at the end, where you and your team talk about your 'low-



plastic' project and share insights into why you did it, what you found most rewarding and what parts you found to be most difficult.

### Step 5: Upload it YouTube!

After all your team's hard work, it is time to share your video with the world! In this final step, share your 'low plastic diet' film on social media, by uploading it to YouTube. This will ensure that your message reaches a wider audience. Remember to write about your video in your bio – here you can highlight what you learned about plastic pollution through your research, what changes you made and how easy or difficult you found the 'diet'. Remember to end your description with a 'Call to Action' – here you can invite other young people, families, or communities to take the 'low plastic diet' challenge and share their own experiences online!

For tips on how to upload or edit a video to YouTube, click on the links below:

- Tips to upload videos to YouTube: <https://www.businessinsider.com/how-to-upload-a-video-to-youtube?r=US&IR=T>
- The Beginner's Guide to Editing YouTube Videos: <https://blog.hubspot.com/marketing/how-to-edit-youtube-vidoes>

## **EVALUATION**

As part of the assessment of this WebQuest, young people will not only develop their awareness of why problematic plastics are such a huge threat to the environment, they will also develop their digital media skills by producing a short video to log their 'low plastic diet', as such this is a good activity for young people to collaborate on. Young people may not be aware of how much their life revolves around plastic consumption – plastic is everywhere, so it should be no surprise why it ends up polluting our oceans so badly. In creating this video, young people will be asked to evaluate their plastic addiction and take steps to wean themselves off plastic consumption. This should be a very interesting experiment for the young people to conduct, and the video can be used to promote an awareness of plastic consumption in their communities.

**As a self- assessment exercise for this WebQuest,** young people can write a short self-reflection of approximately 300 words about how you found the experience of working in a



small team to developing your short film about your 'low plastic diet'. The following questions will guide your self-reflection exercise:

- How did you personally feel after you analysed your own plastic consumption?
- Did you find it interesting to discover the different types of plastics that exist?
- Name 5 creative ways to reuse plastic without throwing it away.
- Do you think this information could help you to change your habits in the future and help change the habits of others?
- Name 3 things / skills that you learned though this challenge.

## CONCLUSION

Congratulations! You and your team have worked together to conduct this 'low-plastic diet' experiment, capture the results on video and share your experience with the world! Your experience helps to showcase just how much plastic we consume unconsciously each day. If you were not to complete this challenge, you would still be consuming plastic on a regular basis each day without even noticing.

We all know that we have a dangerous plastic addiction, and we all know that our oceans and sea-life are on 'life support'. We are literally choking marine life and seabirds with our unhealthy plastic habit – and not only that, but we are also not doing our own health any favours. Plastic consumption and especially single-use plastics are associated with fast-food and processed food. Consuming these foods can be damaging to our health, just like regular plastic consumption is damaging to the planet. But through completing this challenge, you and your team have taken the first step to a healthier life for you, and the environment!

To create a positive impact we must inform, understand and be proactive about problematic plastics. Your final task is to share the following fact with five people – and help to spread the word that we need to end our love affair with plastic!

***“Plastic packaging takes 2 seconds to make, 30 minutes to use and over 450 years to biodegrade.”***







*Photo by Brian Yurasits, on Unsplash*

## 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"> <li>• Basic knowledge of plastic pollution and why it is bad for the environment</li> <li>• Basic knowledge of how to reduce plastic packaging waste</li> <li>• Basic knowledge of how to recycle plastic properly</li> <li>• Basic knowledge of how plastic can be reused</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss why plastic pollution is threatening for the environment</li> <li>• Describe ways to reduce plastic waste</li> <li>• Discuss what can be done to minimise plastic pollution</li> <li>• Describe how to recycle properly</li> <li>• Evaluate one's own plastic habits</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness of the environmental impact of plastic pollution</li> <li>• Willingness to self-evaluate one's own plastic consumption habits</li> <li>• Willingness to change behaviours to follow a 'low-plastic' diet</li> <li>• Appreciation of what can be done</li> </ul>



<ul style="list-style-type: none"> <li>• Basic knowledge of the impact of plastic on the environment</li> <li>• Basic knowledge of the different kinds of plastic</li> <li>• Factual knowledge of one's own plastic consumption rate</li> <li>• Factual knowledge of the plastic consumption of a household</li> <li>• Factual knowledge of how much plastic is in our oceans</li> <li>• Factual knowledge of how to follow a low-plastic diet</li> <li>• Factual knowledge of how to record, edit and share a video</li> <li>• Theoretical knowledge of teamwork in a creative project</li> </ul>	<ul style="list-style-type: none"> <li>• Take the challenge to follow a 'low plastic diet'</li> <li>• Give examples of how plastic waste can be reused</li> <li>• Apply critical thinking to shop responsibly and avoid purchasing products in plastic packaging</li> <li>• Evaluate their own diet and estimate the plastic-cost of the foods consumed</li> <li>• Develop collaboration and teamwork skills</li> <li>• Participate in group work activities to produce a short video</li> <li>• Work together as part of a team to achieve a positive outcome</li> </ul>	<p>to limit plastic waste</p> <ul style="list-style-type: none"> <li>• Willingness to encourage others to change their plastic consumption habits</li> <li>• Willingness to share what they have learned with peers, family members and their community</li> </ul>
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**Questions that a youth worker or teacher might use in a whole class discussion to debrief this WebQuest:**

- How did you get on with your low plastic diet? Are you proud of what you have achieved?
- What did you learn about your consumption habits when following a 'low plastic' diet?
- Mention 3 positive and 3 negative things that you have learned in carrying out this challenge.





- Do you think that challenges like this are best performed as a team or individually?  
Explain your answer
- What aspect of your behaviour or actions do you think you could improve to achieve a less polluted planet?
- Do you think encouraging others to reduce their plastic consumption can positively impact in the environment? Why? Why not?
- Do you think this WebQuest taught you about how to cut down on your plastic consumption?



# SOLUTION NOT POLLUTION



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