



WebQuest
Introductory level

We are what we Breathe





TITLE OF THE WEBQUEST:	We are what we Breath
LEVEL OF THE WEBQUEST	Introductory Level
INTRODUCTION	
<p>Our birth begins with a deep breath, and from that moment on, breath accompanies us throughout our lives. The air we breathe gives us life and health, and therefore it is very important that it is clean.</p> <p>Unfortunately, some gases like ozone, carbon monoxide, sulphur dioxide as well as some invisible particles pollute the air and make it dangerous for our health.</p> <p>Natural phenomena such as volcanic eruptions or forest fires may be responsible for air pollution, but mainly human activities such as the use of electricity, heating of buildings, traffic, operation of factories, construction activities and agriculture are responsible. In big cities where more people congregate, air pollution is greater and there is often a cloud of toxic gases that harm our health.</p> <p>In this web exploration, you will learn more about air pollution and you will specifically explore how it can have devastating effects on plants and cultural monuments. In addition, in the activities that follow, you will discover ways in which you yourself can help to improve the air we breathe.</p>	
TASKS	
<p>You are a pupil at a school in a small village by the sea. As you and your classmates go to recess, you are surprised to find that in the schoolyard, in poor condition, is a small ... cloud. She is covered in dust and soot, her body is mangled, and she looks seriously ill. Of course, you cannot let her suffer helplessly and together with your classmates you do everything you can to help her.</p> <p>Your task is to listen carefully to her story, follow the links she shows you as she tells it, and in turn make her story known to the whole world. If you succeed in moving people with your story and they in turn change their behaviour towards the environment, the cloud will recover and become again the beautiful and happy cloud it once was.</p>	





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PROCESS

Hello,

My name is Little Cloud. I was born many, many years ago on a sweet autumn day when my mother, the Sea met a ray of sunshine sent by my father, the Sun. I rose high into the sky and since then I have wandered the world sometimes white and light, sometimes pencil and rain laden, cooling and quenching the thirst of nature. I do not mean to toot my own horn, but I am beautiful! In fact, one night while I was playing with the stars and twirling among them, a famous painter saw me and made my portrait. You too can admire my portrait if you ever visit the Metropolitan Museum in New York.



STEP 1. Pollution over the city

But alas, all this is now lost. Now I feel seriously ill. One day, while flying over the great city and admiring the works of men from above, I flew over the smokestack of a factory. My body was immediately flooded with soot and dizzily I slid out of the sky and landed on the city highway. And there, before I had even recovered, hundreds of cars passed me, overblowing my once clean and cottony body with an even greater dose of exhaust fumes.



Photo by [C Dustin](#) on [Unsplash](#)

My situation was getting worse. I could no longer breathe and felt that my body was heavy and immobile. My only hope was the hospital, which I saw some distance away. I dragged my heavy body to the main entrance of the hospital and made my way to the emergency room with as much strength as I had left, hoping that a doctor would see me and give me first aid. There was a lot of commotion in the hospital, and everyone was talking about "air pollution" and "photochemical smog". So, I was tempted to look at the hospital computer that was lighting up the room. There I saw the whole bitter truth about me:





Photochemical cloud: <https://www.renovablesverdes.com/el/smog-fotoquimico/>

“Smoking” cities: <https://www.kathimerini.gr/life/environment/979521/oi-poleis-poy-kapnizoyn/>

The increase in air pollution reduces the happiness of the inhabitants of a city: <https://kede.gr/i-afxisi-tis-atmosfairikis-rypansis-meionei-tin-eftychia-ton-katoikon-mias-polis/>

Air pollution aggravates the symptoms of rhinitis: https://www.alfavita.gr/epistimi/310272_i-rypansi-toy-aera-epideinonei-ta-symptomata-

The world pollution from fossil fuels is responsible for 1 in 5 deaths: <https://kede.gr/yfefthyni-gia-1-stous-5-thanatous-ston-kosmo-i-rypansi-apo-tin-energeia-orykton-kafsimon/>

Image Source: "<https://www.vecteezy.com/free-vector/web>"

With the words "carbon dioxide," "nitrogen dioxide," "ozone," and all the dangerous chemical compounds ringing in my ears, I realized two things: that I was seriously ill, and that if I remained there, I was endangering the people who breathed in the harmful elements that had entered my body.

Desperate, I passed through the windows of the hospital, trying to get through the streets of the city as quickly as possible so as not to cause any more harm.

STEP 2. Acid rain destroys the monuments of civilization

The road led me high up the hill above the city, where its ancient inhabitants had erected marvellous marble monuments. There the emotions choked me up, and I let my tears flow in streams.

I wept inconsolably for a long time until I heard a loud voice: "Go away, do not drop your rain here! Your water is poisonous, it will destroy the monuments!"



Startled by the voices, I hastily left and descended from the back of the hill, making a quick pass through the archaeological museum that was on my way. There, my eyes fell on something on the computer screen that made me freeze, because, I found out, it was about me and the destruction I was causing to the monuments:

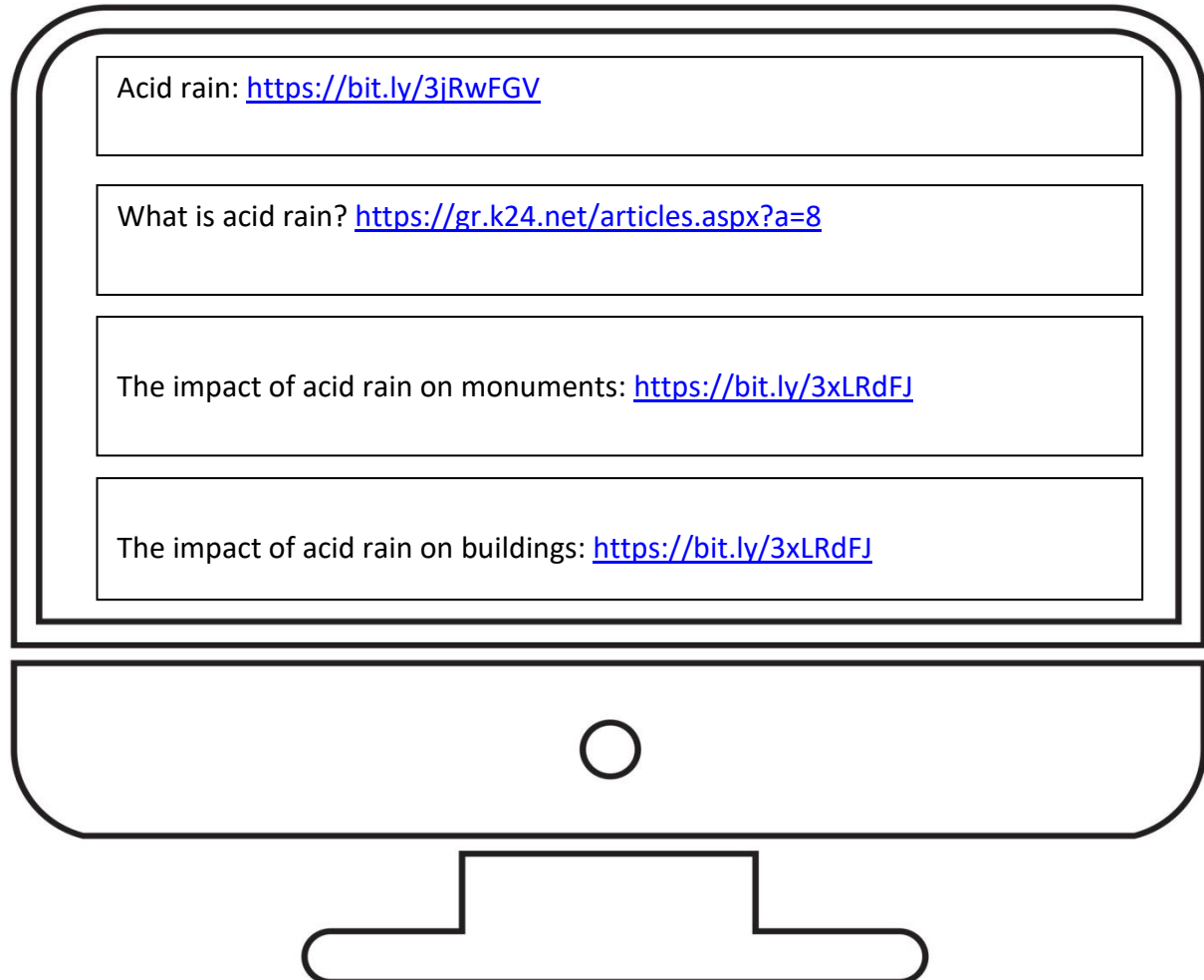


Image Source: "https://www.vecteezy.com/free-vector/web"

"It is not possible that such a thing should happen to me!" thought I. "Where can I go? Where can I hide?"

STEP 3: The danger of acid rain for nature



Fortunately, as if he had answered my prayers, a gentle breeze gathered my parts and gently pushed me away from the city, taking me across the meadows and the pond. There I burst into sobs once more.

"No, no cloud, do not rain on us! You are poisonous and will destroy our crops and pollute our waters!" some peasants shouted. "We were informed by the townspeople that you were coming, and we have seen the damage you can do!" they shouted, waving their cell phones around. I could not resist looking at the addresses on their phones:

Image Source:

Causes of poor air quality:

https://ec.europa.eu/environment/archives/youth/air/air_causes_el.html

Consequences of poor air quality:

https://ec.europa.eu/environment/archives/youth/air/air_effects_el.html

Air pollution affects the ocean ecosystem:

<https://www.naftemporiki.gr/story/1750616/-atmosfairiki-rupansi-epireazei-to-oikosustimaton-oceanon>

Why is acid rain harmful?

https://www3.epa.gov/acidrain/education/site_students/whyharmful.html

The effects of acid rain on ecosystems:

<https://www.epa.gov/acidrain/effects-acid-rain>

"https://www.vecteezy.com/free-vector/smartphone-icon"

The blows of fate were now accumulating. Not only did I feel gravely ill, but I was a great danger to people, the creatures of nature, the monuments of civilization. I no longer knew where to flee to...

My mother, the sea, heard my lamentation and took me in her arms with a gentle breeze. She comforted me and told me to have faith, for everything could change for the better. My treatment, she told me, would come from none other than the children, and with her waves she led me to a fishing village by the sea. There he touched me gently in the courtyard of the little school...





Photo by [Pawel Nolbert](#) on [Unsplash](#)

STEP 4: Action for the cloud





Mother Sea was right. Only children can hear the clouds. So, the children of that little school heard my story and sensed the difficult situation I had found myself in. And because adults cannot hear the voice of the clouds, they said they would tell them my story. As they explained to me, the adults do not hear cloud's voices mainly because they themselves are responsible for their situation and do not want to admit it. I was also told that many other clouds in the world are suffering as I am.

Here are some of the digital tools they used to get my story across. These are the tools you can use too:

- <https://sway.office.com/>
- <https://www.adobe.com/express/>
- <https://bookcreator.com/>
- <https://storybird.com/>
- <http://edu.glogster.com/>
- <https://madmagz.com/>
- <https://www.canva.com/>
- <https://timeline.knightlab.com/>

Whatever path they chose, they were determined to spread their message far and wide, to join with the messages and voices of all the children of the world fighting for a better environment, for cleaner air. And they would even talk to the world about what they had to do from now on to protect me:

- Reduction of air pollution: <https://bit.ly/2VWzjTN>
- Measures to combat air pollution: <http://www.env-edu.gr/Chapters.aspx?id=71>
- Tackling air pollution: <https://bit.ly/3shxs7W>

EVALUATION

Test the knowledge you have gained from this web search by taking the quiz found at the link:

<https://quizizz.com/join?gc=22661142>





CONCLUSION

The years passed. The children succeeded in telling my story around the world. It was read by scientists, artists, politicians and ordinary people. Since then, the world has changed. Everyone recognized the need to change lifestyles and adopt habits that protect the environment and the atmosphere they breathe. New environmental regulations and laws were enacted, and so I slowly purged myself of all the pollutants I carried in my body. I could now proudly travel the length and breadth of the earth, generously distributing clean water. And as for the children? They continue to fight for the environment because they hear the voice of nature better than the grown-up. Some Fridays when they are not in school, and some fall afternoons or summer mornings, they meet me in the squares, chat with me, and I create shapes for them to guess and play hide-and-seek with them as I dissolve behind the rays of sunlight and leap over the mountaintops. I will be forever grateful to them.





GRETA

Challenge-based Learning in Primary Schools for Climate Change Awareness



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