

ORGANIZATION

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SCRIPT

Vittorio Hi students, have you ever asked yourself what happens on our planet while the climate change is happening?

First of all, what is climate change? Well, Climate change is a change in the usual weather found in a place. There have been various types of climate changes in the past like the glaciations. This climate change is considered more dangerous because it's happening faster than the others, so many species can't adapt easily to the new hotter climate. The main cause of this climate change is CO₂. CO₂ is released in the atmosphere by burning fossil fuels, industries and by respiration, and a lot of CO₂ causes problems like the increase of greenhouse gasses and making the planet hotter. Did you know that CO₂ affects water as well? With CO₂ water gets more acidic and this is a huge problem for sea life and we will show you now in our experiment how.

Diego Wait a minute, before showing you the experiment we have to understand a little bit more about acidity. Acidity is the level of acid in a substance, and it's measured with the pH scale. The pH scale is a scale which goes from 1 to 14.

From 1 to 7 the substance is acidic and is represented by these colors, and from 7 to 14 is basic and is represented by these colors. So, the lower the number is, the more acidic the substance is.

Now we can proceed with the experiment.

Aurora and Nicolò Now we are going to show you our experiment to represent how dangerous acid water is. Now my colleague Aurora will blow with a straw CO_2 in a glass of water, so that it can represent the CO_2 that goes into the ocean. First of all we are going to measure the pH of water before blowing in it.

Now we can see how the pH has changed. Now we are going to put a shell in vinegar which has a 2,5 pH level so that the process can be faster, it would work with acid water as well but it would take more time.

Michele In conclusion we can see how the vinegar has corroded the shell. Now think how this could affect sea life with all the fishes, corals ecc. As well this would really damage the seaweeds which are one of the bigger producers of oxygen for us to live. Water couldn't reach the same pH level as vinegar, but it could deal the same damage as vinegar.