

Eco-friendly Efforts to Reduce Carbon Dioxide

1. Motivation behind Research Paper

For my global research project, I chose the topic of global warming. I have studied about global warming for two years now. According to Musashimurayama city, global warming is caused by the large emission of greenhouse gases by human activity. This results in raised temperatures and breaks the balance of nature affecting various creatures and the environment. If global warming worsens, the global climate would change drastically. The effects of global warming are already becoming a huge problem. For example, global warming causes disasters such as typhoons, heavy rain, and dangerous heat levels. If we do not do anything to stop this, the earth could become a dangerous and inhabitable place to live in. While I was aware that some of these problems existed, I wanted to delve deeper to find some practical solutions.

2. Introduction

One solution that my group and I came up with was to reuse chalk at schools as a countermeasure against global warming. Teachers tend to throw away small pieces of chalk. In addition, I also noticed that there was a lot of chalk residue that could possibly be reused. I thought that all of the chalk powder that was just being thrown away was a waste. I wanted to reuse the chalk efficiently somehow so my group and I conducted an experiment that allowed us to reuse chalk and save the

environment. Reusing chalk can decrease waste and carbon dioxide emissions. I believe that this environmental approach was necessary for schools to take. Now, I would like to introduce the experimental methods we used. Firstly, my group and I crushed short pieces of chalk. Second, we measured the amount of chalk powder and water that was necessary to make chalk. Third, we mixed the chalk and water solution together. Finally, we made a beautiful piece of chalk form and dried it for three days.

3. Results and Analysis

In the first experiment, I measured some chalk and water. I measured 20 grams of chalk and 10 grams of water. They were mixed together until it became a runny solution. When it was formed, it was a little cracked. In the second experiment, I measured 30 grams of chalk and 10 grams of water. Because I increased the amount of chalk, the chalk was harder than the first one. Same as the first time, the surface was cracked. In the third experiment, I measured 40 grams of chalk and 10 grams of water. In the fourth experiment, I measured 40 grams of chalk and 10 grams of water. Unlike the third experiment, a straw was used to make a beautiful cylindrical shape. Then, I compared how well the chalk wrote. The first and second pieces of chalk could write well on the blackboard but it broke when I wrote strongly on the blackboard. When too much force was applied, it was not durable like regular chalk. The third chalk was distorted. The third piece of chalk was stronger than the first and the second time. Finally, it was easy to write using the fourth piece of chalk, but I could not peel off the chalk well from its mold. The chalk was broken so I could not write with the chalk. I asked some teachers to use three pieces of chalk and took a survey. Some teachers said that positive things such as the chalk used were “easy

to write with” and “felt soft to the touch.”, while others said negative things such as “it felt like it was going to break.” and “it felt bad.” There were some pros and cons.

4. Conclusion and Future Problems

I tried to do an experiment that involved reusing chalk but the experiment fell through. The shape of the chalk was distorted and broke the chalk so I considered the solution. For example, using cling wrap or other things to make a more beautiful shape. I thought by detailing the amount of water and chalk, the experiment may succeed. I could not succeed in the experiment, so I want someone who hears and watches my experiment to think about how to reuse the chalk and to try it.

5. Reflection

I changed my thinking of global warming in my high school global exploration classes. I did not think that the project would be solved until now. But I know that if many people act now to help slow down the process of global warming, then it will lead to a solution. I would like to start by doing small actions. For example, I want to try using only eco-bags when I go shopping, carry around my personal water bottle and turn off the lights in unused rooms to help reduce the effects of global warming. I would also like to influence others to do the same.

6. Work Cited

“What's global warming?” Musashimurayama city. 18 Aug. 2022. Web. 20 Sep. 2022.