







# Colors of the Sea

As Hisar Middle School Science Sparks Club GSL team students, we wanted to draw attention to the protection of underwater life. Our aim is to reduce the use of plastic and harmful chemicals to help the seas regain their colors.

Last year our city's shores experienced an enormous problem and its effects will last for years to come. Because of the deep sea discharge that has been going on for years and the chemicals being released to the sea in various ways, the Marmara Sea got so dirty that the microorganisms producing mucilage increased a lot and this caused a slimy layer to cover our seas and sea bottoms. This is a huge threat to underwater life.

At the same time, the pollution created by the accumulation of plastic waste in the oceans and seas makes it difficult for living things to find food, while at the same time, microplastics accumulate in the bodies of living things and cause damage to the ecosystem. There are chemicals harmful to sea creatures in almost everything that we use in our daily life. Millions of plastics are found in our seas. Every plastic that is thrown in the sea stays for over 1000 years and adds up to the plastic continent. The plastic in the sea affects all the living things in it. Plastics make sea creatures confuse them for food or jellyfishes and try to eat them, but this eventually kills them.

There are also other problems such as overfishing. This has affected countless animals underwater and over. This disrupts the food chain and the birds that live on fish can't find food. Reckless humans ruin the water and we could not take it anymore. We raised awareness, acted, and saved. Our goals were:

- 1. Raise awareness of the threats to underwater life.
- 2. Show people more ecofriendly ways to use in their daily lives
- 3. Produce our own materials both to use ourselves and to gift them to the ones in need
- 4. Get in contact with local authorities to learn about the ways to make bigger changes
- 5. Convince our school to switch to more eco-friendly and biodegradable cleaning products that don't harm the seas.

For these reasons we wanted to make a project to save underwater Due to the mucilage problem last year, we chose SDG 14 because we wanted to raise awareness of this issue. Also, we are collaborating with a School in Italy, Milan, called Istituti de Amicis and we thought that it would be a meaningful project to run because both our countries share the shores of the Mediterranean Sea.

We had meetings with them to shape our project with the help of our teachers. It is amazing to share our ideas with students from different countries because we all live in the same world and face the same problems. We can solve these problems and save the world together. Both schools' students will be working to achieve the same goal: Cleaner seas for life below water. We also decided to hold an art exhibition with the artwork that will be created both in our schools under the same theme: SDG 14: Life Below Water. These will be published on our school's digital art exhibition website.

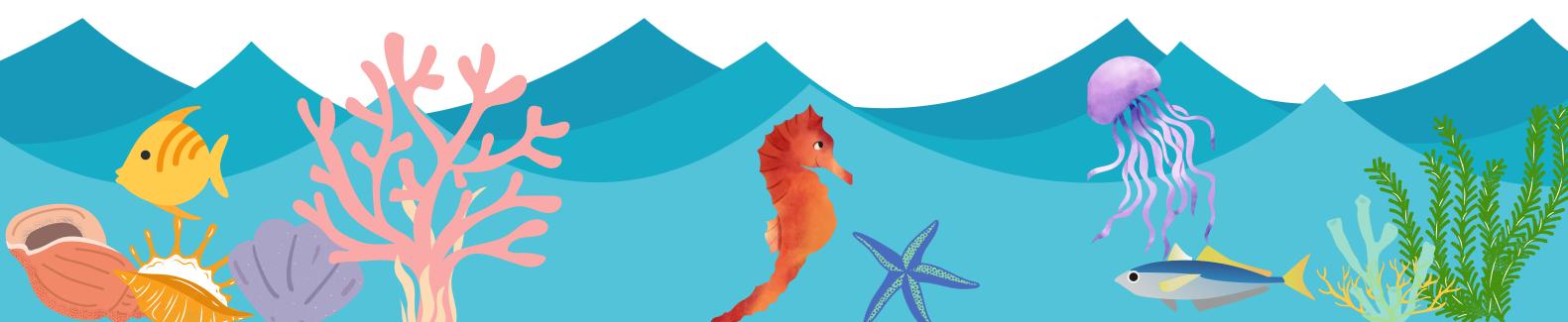






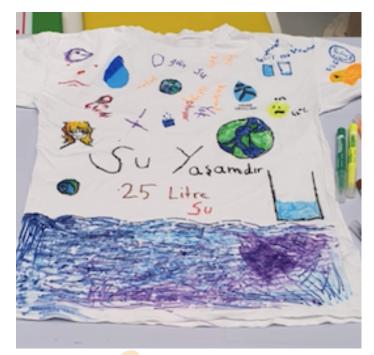






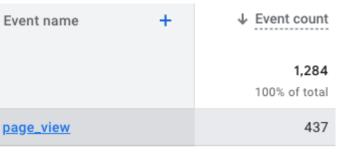


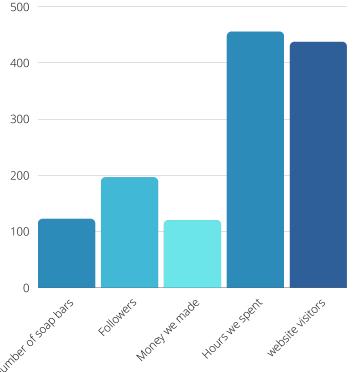














We did our projects with materials that didn't harm the seas. We raised awareness at our school. At the beginning of our project, we also contacted the city municipality's recycling centers to get their insight on our project, as well as the town municipality. We contacted Istanbul Metropolitan Municipality's Recycling Division İSTAÇ, told them about our project, and asked for their advice and collaboration. Also, we have contacted Eyüp Town Municipality's Zero Waste unit's authorities. They provided us with recycling bins and zero waste units.

# **Plastic Basket**

We designed a basket from the plastic bottles that have been used in our school due to the pandemic and placed it in the school corridor with a basketball hoop to attract attention. Now, our school has dropped the use of plastic bottles and there are water dispensers installed on every floor, and students are asked to bring their own reusable water bottles. We completely eliminated plastic water bottle usage in our schools. A bottle weighs 10 grams and we collected **22 kg** of plastic bottles, which means we have collected **2200** bottles to be recycled. Later, we gave these plastic bottles to a recycling company for **120 TL.** We are donating this profit to TEMA Foundation to plant **8 trees**.

### **Paint Palettes**

We have prepared paint palettes with the caps of these bottles to be used in art classes. We left these to our Visual Arts workshops and made them available to our friends. In this way, we have realized an upcycling project.

# **T-Shirt Painting Workshop**

On World Water Day, we held a workshop to upcycle T-Shirts. We made an announcement to all the students and asked them to bring old T-Shirts. We showed them how to turn those old T-Shirts into tote bags. We also colored them slogans about water. We told participants to calculate their water footprints by suggesting them an app and drew their attention to the number of chemicals and water usage in the textile industry. This was an event open to all 440 students in our school.

## **Organic Soaps**

The chemicals that contaminate the water and sea must be reduced so we wanted to begin from ourselves. We wanted to use less pollutant soaps so we made some for ourselves. We produced our own soaps, one of the most frequently used cleaning products, with olive oil in our school. Besides only being healthy for our Earth, we also designed these soaps in different shapes and sizes. We added color and fragrance to make our soaps even better.

We will gift these soaps together with the seed balls we prepared to the students at our sister school. After all, we have made **122 soap bars** that weighed **6,5 kg** altogether.

# **Organic Cleaning Products**

Lots of cleaning materials are polluting our environment. We produced cleaning materials from organic products that did not contain any chemicals. We made some research and used orange peels, white vinegar, soft liquid castile soap, coconut oil, sodium bicarbonate, and essential oils. We made window cleaners because the common ones harm the water badly, toothpaste from coconut oil and turmeric, surface cleaners from orange peels and vinegar and etc.

We also made a presentation to convince our school to use them. We showcased our cleaning products and brought samples to our school principal to tell her about our project and ask for her support, which we had in the end. We contacted our school's Founder's Representative General Director and told her about our project. She showed support and gave us an appointment to hear more about our project. We will ask her to make our school switch to biodegradable and organic cleaning products. Which is one of the main goals of our project.

### **Website Design**

We have designed and published a website about our project. We are keeping statistics to see how many people we have reached so far. We announced its launch from our Instagram account in which we have **196 followers** and also in our school to the whole academic staff and middle school students. Just in our school a total of 700 people were let known. On our website we had **1284 events** with **437** page views. Here's the link to it: https://sites.google.com/hisarschool.k12.tr/colors-of-the-sea/home

We have connected our project to SDG No:14, as well as No:12 because clean seas require the lesser use of plastics, No:15 and 6 because chemicals not only affect water but also affect the soil and groundwater. We also planted trees. We also connected it to No:17 because of our international collaboration and our efforts in making our school administration a part of our project. In the end, we spent at least 455 hours on our project, and 755 people were involved in the end. Both these numbers keep on increasing. This project helped us understand the idea of interconnectivity between all SDGs. It is not just about nature, when you clean the environment you also give ways to people to have equal rights, sanitation, quality education and take a step in reducing the inequalities. Let's not forget this and continue to work for the cleaning of our nature! We should never lose hope in this regard, and we must believe in every step we take and every project we do!