

STAY AT HOME WITH STEM-POT DESIGN WITH RECYCLING MATERIALS

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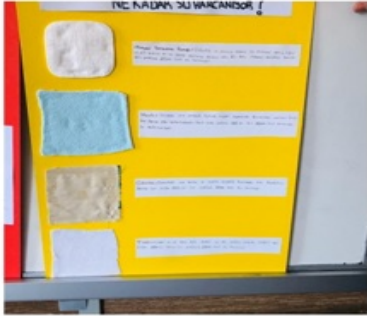
Related to 2020 STEM Discovery Campaign Activities, we wanted to emphasize the importance and necessity of “recycling” with our students. In the recent past, we wanted to raise awareness of serious environmental issues affecting the world. In order to achieve these goals, TEMA Foundation Turkey (Turkey Combating Soil Erosion, for Reforestation and the Protection of Natural Resources Foundation), we conducted jointly with the studies.

As one of these works, we designed flower pots from recycling materials. When the working process is examined, we have prepared a work plan with the students first. In line with this plan, we made a distribution of tasks among students. Every week, a group of students completed their preparations and fulfilled the assigned tasks. First, students created an awareness board on the environment and recycling. This board was prepared as other students in the school can see. There are interesting articles and pictures on the board.



Later, a different group of students prepared a presentation on water consumption in nature. Students made their presentations in the classroom. In the presentation, the problems related to water consumption, the amount of water required for each consumption material and the importance of the water cycle were mentioned. During the presentation, the students

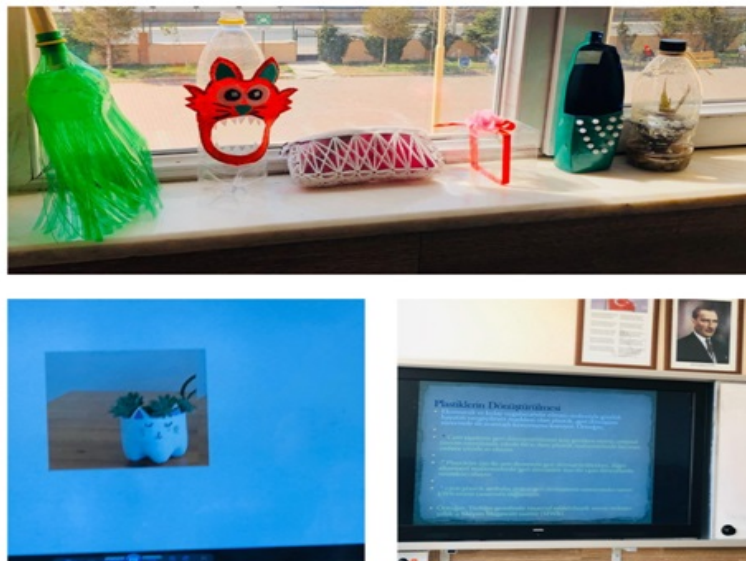
answered questions from other students. In addition, awareness tables about the amount of water required for each consumer item were created and various places in the school were hung.



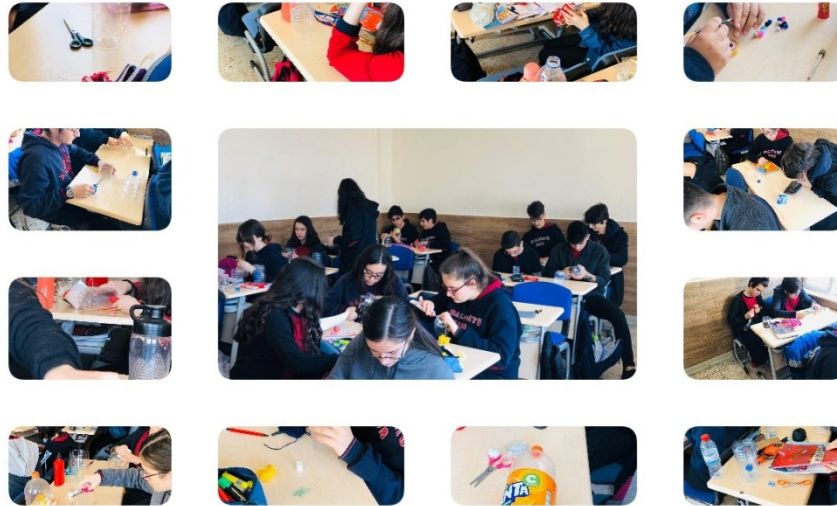
As the next week's work, the students made a presentation about the contents of the consumables. They shared their presentations in the classroom. In the presentation, the students gave information about the chemical contents and their harm to the environment. In particular, they gave hints of being a conscious consumer.



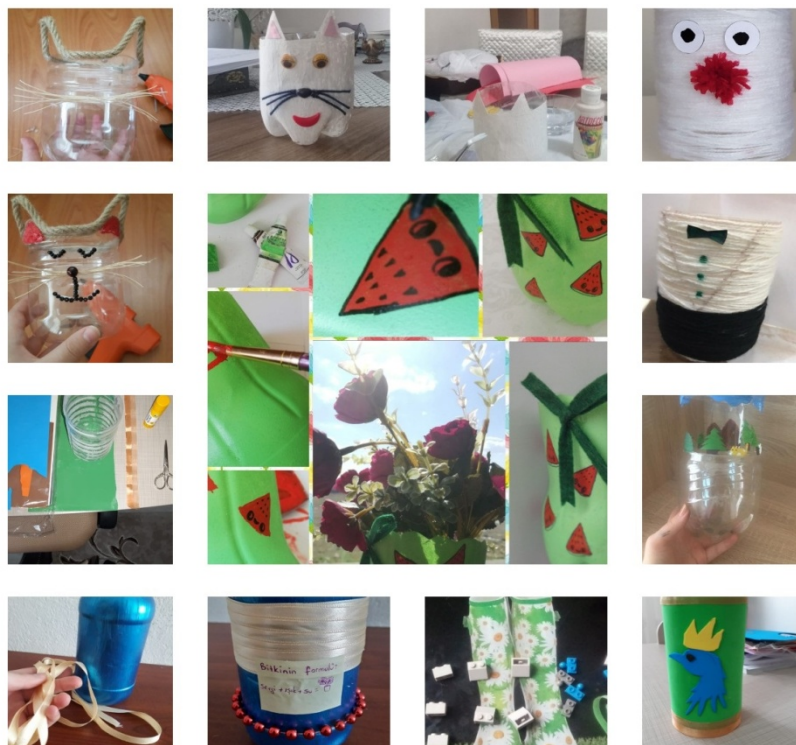
As a fourth week study, a group of students made a presentation to the classmates about the importance of plastic recycling. They gave several examples to recycle plastic into the environment. They presented the sample materials they made earlier in the classroom.



From the case studies, potting of plastic materials was determined as a workshop. The necessary materials and how to make the product were explained to the class by the students. The following week, students were asked to bring the materials to the class. Classroom environment was organized for the workshop. Students made their designs with the materials they brought.



Studies continued during the “Pandemic period”. Online interviews were made with the students. The students carried out their work at home and shared it with other friends.



In addition to all these studies, students produced fertilizers from their natural wastes in their homes. They recorded the fertilizer production stages and shared them with their friends.



At the end of the study, students used the pot designs and natural fertilizers they created from plastic materials. Using these materials, he has planted various plants in his pots.



In this study, it is aimed to contribute to the scientific creativity of the students during their stay at home. For this purpose, STEM training strategy was used. In their designs, in accordance with STEM education; growing conditions (science) of a plant; design calculations (mathematics); examination of design examples (technology); introducing the design (engineering); disciplines are taken into consideration. In addition, the designs created by students contributed to the development of their scientific creativity. At the same time, students were provided to develop sensitivity towards their environment and to raise awareness about the importance of recycling. Study activities are shared on the [school website](#).