

Science and Sustainability – A Digital Workshop

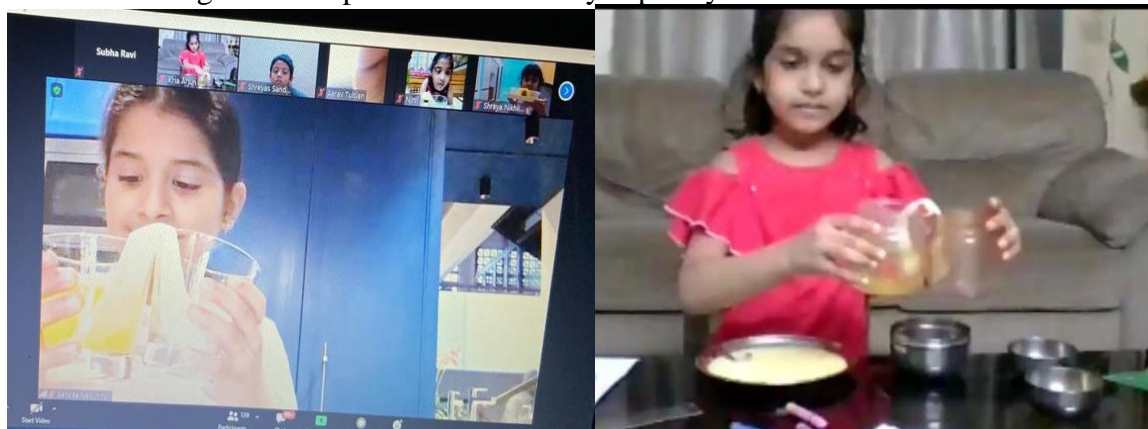
“Sustainability is important as every individual is responsible to nourish our planet”. Science is everywhere. Sustaining it is our duty. This was the theme of the digital workshop ‘Science and Sustainability’ organised by the Goethe Institute, Chennai for the Science Film Festival via zoom platform from 5th December to 17th Dec. Students of elementary, primary and middle school of PSBB T Nagar participated in the workshop series with full enthusiasm.

The workshop aimed to kindle the curiosity in children through scientific exploration set in the context of the Sustainable Development Goals. The movies and activities had been carefully curated keeping the virtual nature of the workshop in mind. It intended to inspire, impart ideas and give children the opportunity to try out science experiments at home using easily available materials. The hands-on activities incorporated fundamental scientific principles to understand some of the complex environmental issues affecting the planet while offering ideas on sustainable lifestyle choices that can be adopted by all of us. And of course, all this learning happened in a fun and engaging manner as appropriate for the different age groups.

The Workshop was digitally conducted by **Yoshida Menon** and **Preveena Nandakumar**, officially trained mentors by the leading Science Educator **Dr. Stuart Kohlhagen** at the **Science film Festival 2020**.

Std 1, 2 and 3 students participated at the elementary level of this workshop. Their activities included:

- Leaf Rubbing – To study patterns of veins and shapes of leaves.
- Walking Water Experiment – To study capillary action.



- Magic Milk Experiment – To observe colour changing patterns when food colours mixed with gel are added to milk. Higher level inference is to note that the reaction depends upon the concentration of proteins and fats in milk.

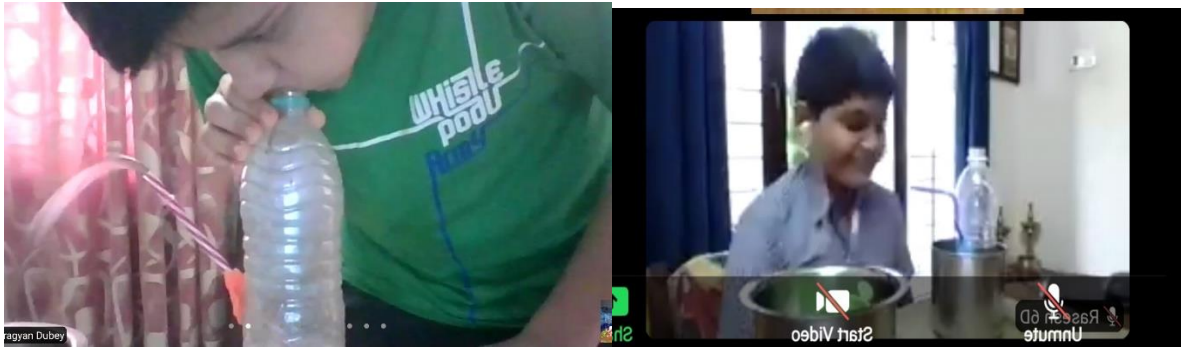


Our tiny tots doing activities with milk and food colours



Students of class 6 took part in all activities enthusiastically at the primary level of the workshop. Their activities included:

- Balloon Powered Water Pump -to understand the force of moving air and to prove air exerts pressure.



- Banana Leaf Packaging- To compare the environmental impact of banana leaf and plastic packaging. To extend this idea to burying different materials and comparing their decomposition times.



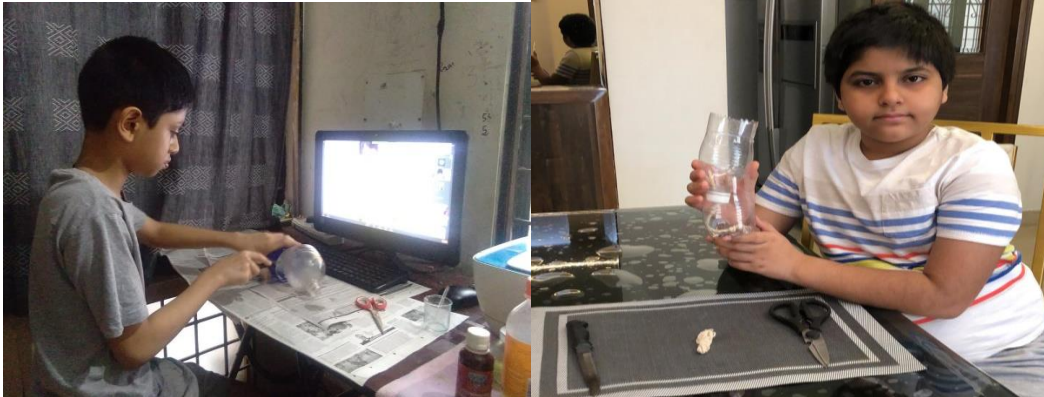
- Apple Browning -to observe and learn about enzymatic browning of apples on exposure to oxygen. This activity serves as a precursor to exploring different types of food preservation techniques.

Students of class 8 performed interesting hands-on activities as follows at the secondary level of this workshop.



Students of std 8 attending the session

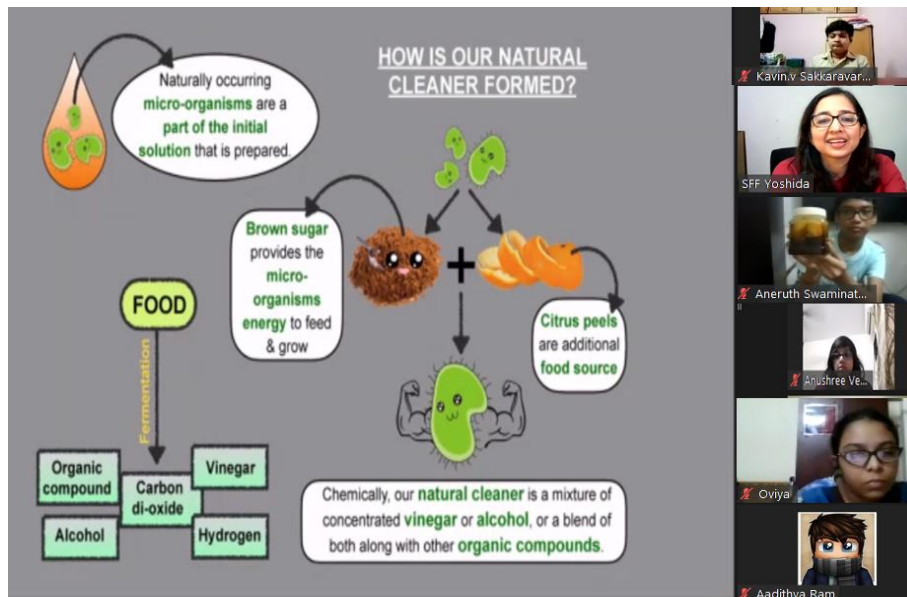
- Self-watering Planter – to learn about osmosis, cohesion, adhesion and capillary action by upcycling a plastic bottle into a self-watering planter in order to save water.



- Making a pH indicator and testing the pH of household chemicals.



- Making an Eco Cleaner – To use citrus peels, brown sugar and water to make an eco-friendly cleaner. The key scientific concept learnt here is that fermentation of fresh citrus fruit wastes results in a complex solution that includes acetic acid.



Importance of Natural Cleaners- std 8 activity

The workshop finally ended with a huge sense of satisfaction. Children had a feel of their responsibility in resource conservation .

IVY SCRIBES – Media Club

PSBB T. Nagar