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*Help for Hurricane Victims: Creating Fresh Water Using Solar Power*

This project was designed to find a more efficient way to evaporate water because solar-powered desalination is not very efficient. Different colored materials were tested in absorbing sunlight to desalinate water. It was expected that black (B) would absorb more sunlight than metallic silver (A) or colorless (C) because the dark particles that made up the black paint were expected to attract the radiation from the sun more quickly than the other two materials. To perform the experiment, three desalination setups were created using plastic storage tubs, straws, funnels, cups, and plastic wrap. The design was made so the salt water in the tub would evaporate onto plastic wrap covering it and fall into a funnel, through a straw, and into a collection cup. They were left near a sunny window to absorb the sun's radiation and desalinate the water for nine days. At the end of the nine days, the amount of water in each collection cup was measured. At the end of the experiment, the hypothesis was accepted; setup (B) did collect the freshest water. Setup (A) collected 13.59 grams of water, setup (B) collected 38.84 grams, and setup (C) collected 25.31 grams. The purpose of the project was to find a more efficient way to evaporate salt water, so victims of all the recent hurricanes can desalinate seawater and obtain fresh water faster. It is possible that the results of this project can somehow help increase the efficiency of solar powered water desalination.