Integration of Cooling Compartments Into a Vest To Reduce Body Heat Caused by Global Warming

Pagan-Millan, Christian (School: Brigida Alvarez Rodriguez Mathematics and Science High School)

The purpose of this experiment is to integrate cooling compartments into a vest, using accessible, reusable, and safe materials, to reduce body heat caused by global warming. The following hypothesis was established: If cooling compartments are incorporated into a vest, then the body heat caused by global warming could be reduced. To carry out this experiment, a sewing machine was used to add compartments to the vest that would represent the experimental group. The initial temperature of the vests was taken. Four reused cooler bags were placed inside four plastic storage bags and were added to the vest that would represent the experimental group. The vests were labeled and placed both exposed to the sun. Temperatures were taken over a period of one, two and three hours. The test was repeated 3 times. It was observed how the cooling bags were able to decrease the temperature of the vest. In the second part of the experiment, 3 individuals were assigned to wear the vest with the cooling compartments for 3 hours outside to represent the experiment, a reduction in temperature could be observed in the experimental group. Based on the results of the research, the hypothesis was supported. Cooling compartments built into a vest can be used to reduce body heat caused by global warming.