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Ice is Nice

The purpose of my experiment was to determine if ice melts faster when you add an additive to it or just let the ice melt on its own. By using a constant amount of ice and adding an additive to each bowl of ice for a specified amount of time, I was able to measure the amount of ice that melted from each additive. The additives I used were: Table Salt, Sea Salt, Pepper, Sugar, and Sand. I also used plain ice as a control to compare the difference. My results showed that the ice cubes melted fastest when Sea Salt was added to the ice cubes. The average of melted water was 12.67 grams or 27.54% of the original ice cubes. I also learned that some of these additives were soluble while others were insoluble and that contributed to the results too. The test results and analysis of the data indicate that my hypothesis was wrong. I guessed that the sand would melt the ice cubes fastest by coating the ice. By looking at my control (the ice melting alone), I could see that all the soluble additives (sea salt, table salt, and sugar) melted the ice cubes faster than the insoluble additives (sand and pepper). The soluble additives looked like they “ate” the ice and broke it down faster. Next time I try this experiment, I would like to see what the most effective additives do to the plants when used publicly to melt the streets or sidewalks.