Don't melt it freeze it!

purpose

How do different liquids affect the freeze time

Hypothesis

If we freeze 3 liquids then we think gatorade will freeze the fastest because its freezing temperature is the highest at 40 degrees fahrenheit.

research

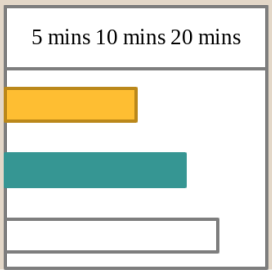
Water freezes at 32 degrees fahrenheit . Sprite freezes at 30 degrees fahrenheit. If gatorade is stored under 40 degrees fahrenheit the flavor emulsion may be damaged. Main ingredients in Sprite are water, high-fructose corn syrup, and natural lemon and lime flavors. It also contains citric acid, sodium citrate, and sodium benzoate, which act as preservatives. Main ingredients in gatorade are water, sugar, dextrose, citric acid, natural flavor, salt, sodium citrate, monopotassium phosphate, modified food starch, red 40, glycerol ester of rosin, and caramel color. Main ingredients in water are natural mineral water usually contains the following substances in varying degrees: sodium, potassium, calcium, magnesium, chloride, sulfate, hydrogen carbonate.

Materials

- cups
- water
- blue gatorade
- Canada dry

For my graph blue will gatorade yellow canada dry and white water.

What I did is that I put a 1/4 of a cup of each liquid then I put then in the freezer. The Canada dry froze first after 15 mins Garorade 17mins water 19 minutes

The results ended in Canada dry froze he fastest and water froze the slowest.

What I conclude from this project is that carbonation afects the freezing time because when we broke the pieces of ice into different pieces the Canada dry was like crsytalizied. The other liquids were solid ice. In the end our conclusion was wrong