

A close-up photograph of a white ceramic bowl filled with strawberry ice cream. A large, rounded scoop of ice cream is piled on top of the other scoops. The ice cream is a pale pink color, speckled with small, dark red strawberry pieces. The background is slightly blurred, showing other similar bowls and a red surface.

A Tasty Project

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3rd grade

Mrs. Sreibers Class

What Type of Container Makes Ice Cream Melt the Slowest?

My mom and I just bought some tasty ice cream from a store. We were going to a party with my friends and decided to give everybody ice cream. Sounded like the best idea ever, BUT ice cream melts fast in the sunlight. My mom decided to put them in a container. Ice cream in a container melts fast too, right? Then, a question came in my mind: What type of container makes ice cream melt the slowest?

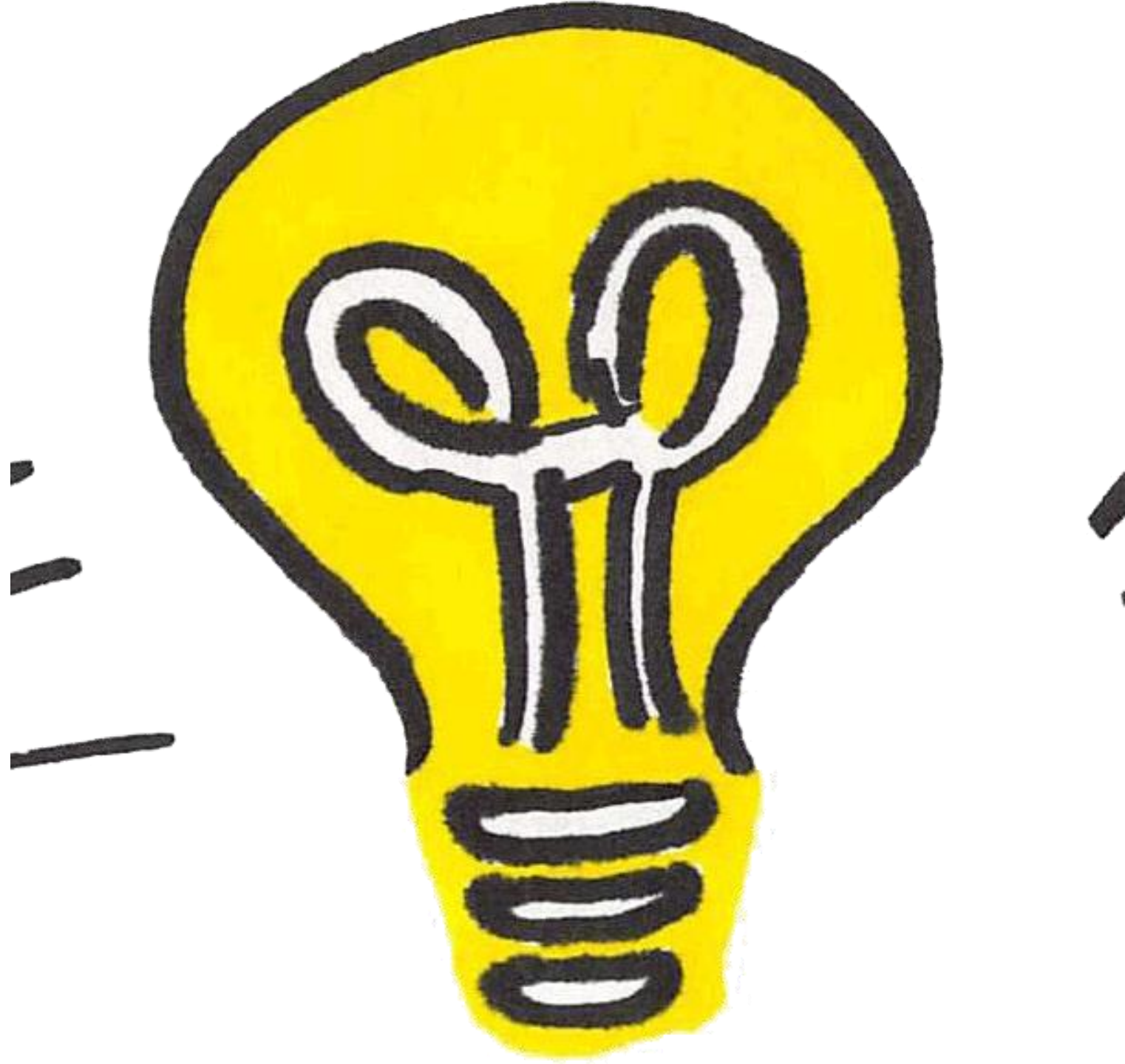
I finally made a choice of doing an experiment on this question.



Hypothesis

I decided that the first container is glass, the second is plastic, and the last is foil. Foil is thin, measuring to about 0.2mm. According to my research, materials that are thin, like foil, reduces heat.

My Hypothesis: I think the foil container will make the ice cream melt the slowest.



Materials Used

1. A big glass container
2. A big plastic container
3. A big foil container
4. Some ice cream scoops



Procedures

1. First, put one scoop of ice cream in each different container.

2. Next, set them on a flat table and write observations.

3. Then, after ten minutes, write another observation.

4. Continue this until all three ice cream melt. Record which ice cream in the container melted last.

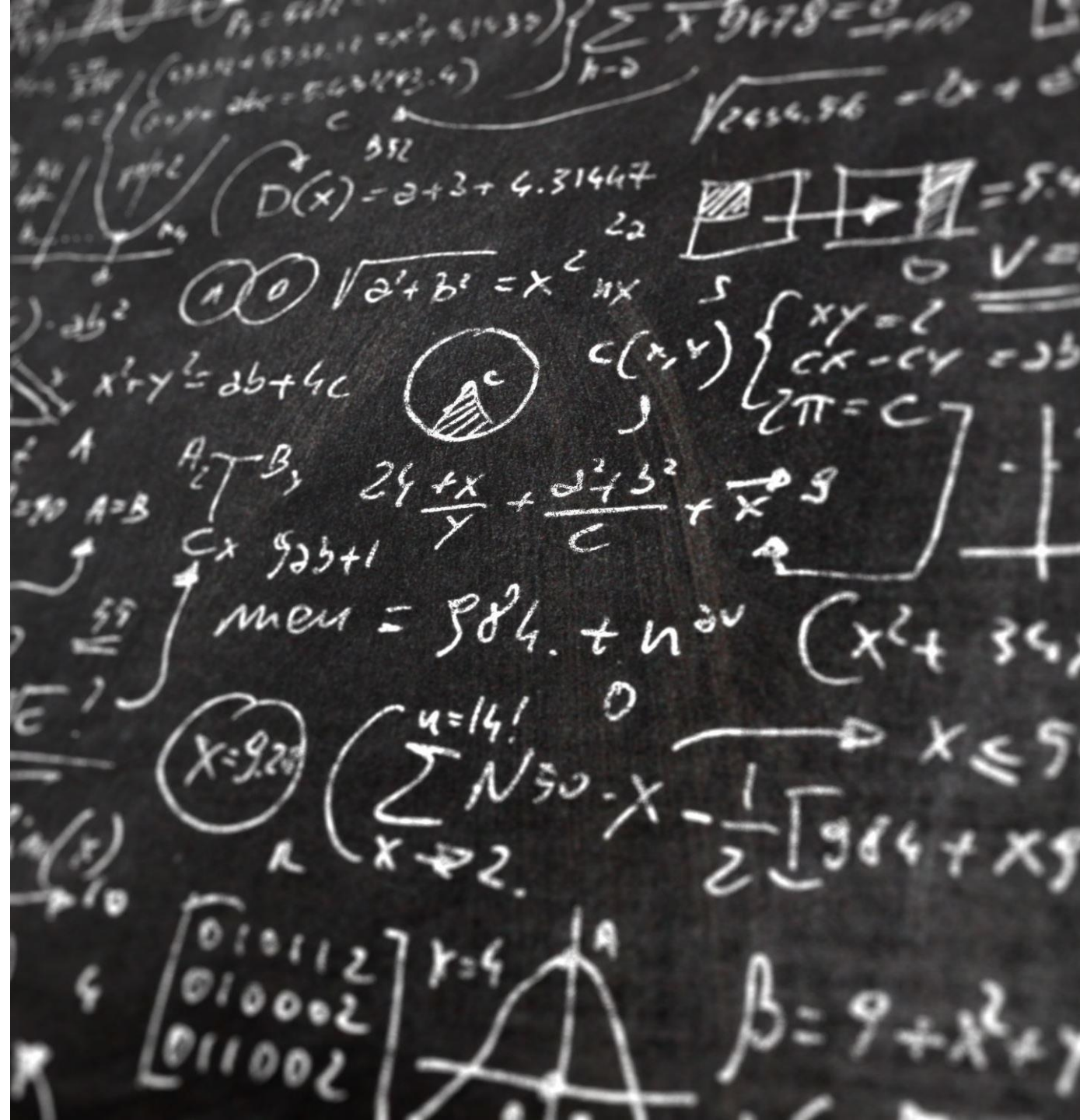


Variables

Manipulated Variables = (variables you control) I can control the place where I put the ice cream containers and how much scoops I put in each container.

Responding Variables = (variables you observe) I observe that the ice cream in each container melts whenever they get too warm and I cannot control the ice cream for when it melts.

Controlled Variables = (variables you keep the same) I always put two scoops of ice in each container and I keep the size of the container too.



Data and Observations

Starting	After 10 minutes	All ice cream melts
<p>8:45 The ice cream is still ice cold and looks tasty. Glass= It is melting slightly</p> <p>Plastic=The bottom is starting to get wet</p> <p>Foil= Bottom is starting to get wet</p>	<p>8:55 Glass= Almost 4 eighths is melted</p> <p>Plastic= The top is getting wet</p> <p>Foil= Bottom is getting wet The ice cream is getting creamy and there are almost no tiny bits of ice</p>	<p>9:21 Glass= Melts at 9:16</p> <p>Plastic=Melts at 9:21</p> <p>Foil=Melts at 9:18</p>

Pictures Place



Beginning



10 minutes later



20 minutes later



30 minutes later

Analyze Data

- My data says that the ice cream in the glass container melted the fastest, the foil container was in the middle and the plastic container was last.
- The ice cream in the glass container melted the fastest because a glass container can transfer heat the fastest from its environment than the plastic container would. The ice cream in the foil container melted second because a foil container can transfer more heat than plastic but less heat than glass.



Conclusion

- I can conclude that my hypothesis is incorrect that the ice cream in the foil container would make it melt the slowest. The ice cream did not melt the slowest in the foil container. The conclusion was that the ice cream in the plastic container melted the slowest and the ice cream in the glass container melted the fastest. According to my research, the glass container could transfer heat from the environment faster than the plastic container. So that is why the ice cream in the plastic container melted the slowest(UCSB Science Line, 2019). I would like to repeat the experiment again with a different amount of ice cream in each container...

