



Water Maker

Grade Levels: 1-4

Background

When light goes into a car, it hits the seats and turns into heat. Light can go through glass, but heat cannot go out. That is why cars get so hot in the summer sun. We call anything that turns the sun's light into heat and then traps it a solar collector.

Question

Can you melt ice or snow to make water when the temperature is below freezing?

Possible Hypothesis

Ice or snow can/cannot melt when the temperature is below freezing.

Materials

- 3 Clear bowls—glass or plastic
- 12 Ice cubes
- Clear plastic
- Black plastic (garbage bag)
- A cold day where the temperature is below 32 degrees Fahrenheit

Procedure

1. Place four ice cubes in each bowl. Leave one bowl uncovered, cover one with clear plastic, and cover one with black plastic.
2. Place the bowls outside on a cold day (below freezing).
3. Check the ice cubes every 15 minutes for an hour and record your observations.
4. Try this experiment on a cold sunny day and on a cold cloudy day.

Analysis and Conclusion

Did any of the ice melt when the temperature was below freezing? Did the amount of sun make a difference? Can you explain your results?

