

(Edited version for public review)

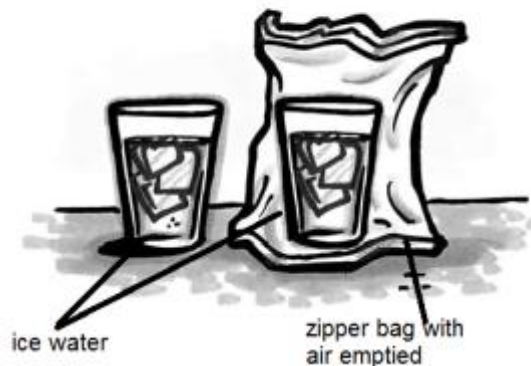
1.3 Act 3

Cooling Closure

You just completed an activity where you investigated different systems that were cooling. Answer the question(s) related to each system with your best interpretation of what is happening.

Experiment 1:

Compare the outside of the two cups 5-10 mins after sealing the second cup in the zipper bag.



The cup exposed to more air should have had more water on the outside.

1. Why do you think there was a difference (if you observed a difference)?
2. Where do you think the water on the outside of the cup(s) came from—inside the cup? Outside the cup?

Experiment 2:

What happens to the inside of the top cup?



3. You should have observed water droplets forming on the inside of the top cup. Where do you think these water droplets came from? (Outside the cup? Inside the cup?) Explain or draw a diagram.

Experiment 3:

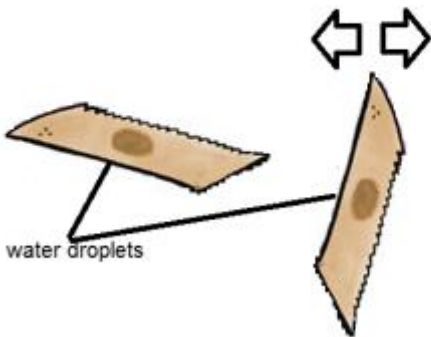
Compare the two top cups after 2-3 minutes. Wipe off any melted ice water from the first cup. It may help to have a magnifier.



4. Does cooling the system decrease, increase, or keep the same the rate at which fog forms? What is your evidence?
5. Which cup had bigger drops of water form? Why do you think this occurred?

Experiment 4:

Hold one paper towel still and wave the other back and forth for ~30 seconds. Observe the water spot. Is it the same for both paper towels?



6. Why does moving air over a wet surface ...

(Additional materials available in members' resources)

Experiment 5:

(Additional materials available in members' resources)

7. Use your computer or a printed dictionary to look up ...

(Additional materials available in members' resources)

8. Another scientific term describes how water "fog"

(Additional materials available in members' resources)