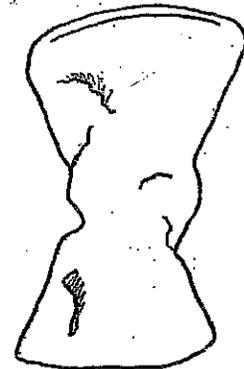
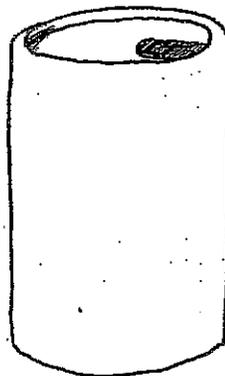


CAN CRUSHING DEMONSTRATION (Should be completed after crushing cans).

1. As the small amount of water in the can began to boil, the air was forced out. What gas forced the air out of the can?
2. Which takes up more space? water as a liquid, or water as a gas.
3. Before the can was inverted into the cool water the atmosphere was putting pressure on the outside of the can. Why didn't the atmosphere crush the can at that time?
4. As the can was inverted into the cool water, what happened to the water gas (vapor) in the can?
5. Why did this cause a sudden decrease of the pressure inside?
6. The can was not collapsed because of "suction". Instead, it was crushed by the pressure of the atmosphere. Explain how normal atmospheric pressure was able to do this.

7. Did the can explode or implode?

8. Using arrows, illustrate the pressure situation inside and outside of the can both before it collapsed and during its collapse.



9. A fully inflated basketball taken outside on a cold day will seem less "bouncy". Explain why cooling the gases in the ball will result in lower pressure.

10. The pressure inside tires increases on a hot day. Explain why.