DETERMINATION OF ABSOLUTE ZERO

Print NAME _____ Period _____

PURPOSE: To find a value for Absolute Zero using Charles' Law.
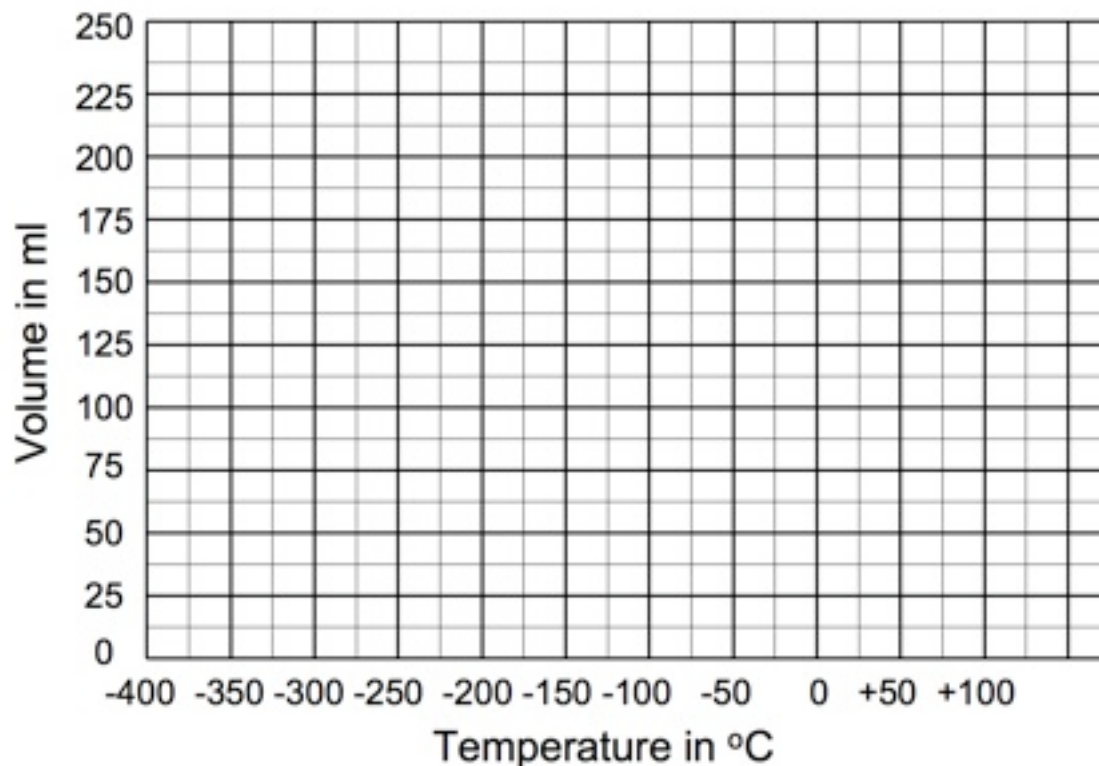**Charles' Law:** The volume of a gas varies directly as the absolute temperature.
PROCEDURE:
1. Snugly insert stopper assembly into flask.
2. Using a flask clamp, immerse flask into boiling water for 5 minutes.
3. Hold finger over tube, invert flask, and hold under ice water.
4. Release tube and allow water to enter the flask.
5. Cover tube, remove flask, and measure volume of water therein _____ mL.
6. Fill the flask brim-full with tap water, insert stopper assembly, allowing excess water to squirt out.
7. Measure the volume of water in the flask _____ mL.
8. The volume at 100°C = #7. _____ mL.
9. The volume at 0°C = #7 - #5. _____ mL.
10. Extrapolate the line down to volume zero and note that temp. _____ °C.

That is Absolute Zero!

11. Write a critique for this lab.

12. Critique: