Name: _____ Group: _____ Date: _____

LAB 8
TECHNIQUE

MEASURING THE MELTING POINT

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Goal

Apply a technique for measuring melting point.

Materials

- 150-mL beaker
- hot plate
- test tube (18 mm × 150 mm)
- test-tube rack
- container of powdered solid
- spatula
- ring stand
- universal clamp
- thermometer clamp *or* universal clamp and perforated cork stopper
- thermometer

Procedure

1. Pour about 100 mL of distilled water into the beaker.
2. Place the beaker on the hot plate. This setup will serve as a double-boiler.
3. Add solid to the test tube to height of 3 to 4 cm.
4. Secure the test tube to the ring stand with the universal clamp and insert the test tube into the beaker so the level of the water exceeds the level of the solid.
5. Insert the thermometer into the test tube and clamp it so the bulb is covered completely by solid and not touching the test tube.
6. Heat at medium temperature.
7. Record the temperature at which almost all of solid becomes liquid.
8. Turn off the hot plate.
9. Clean up and put away materials.

Results

Record your results in the table below. Give the table a title.

Title:

Solid	Experimental melting point (°C)	Reference melting point (°C)

Reflecting on the lab technique

Compare the melting point obtained during the experiment with that of tables of characteristic properties. Are they similar? If not, explain why.