

## LAB SHEET

1. Take the thermometer. What temperature is it? .....°C.
2. Put the thermometer inside the cup with the ice cubes. What happens with the temperature?
  - a. The temperature rises.
  - b. It goes down.

3. Which process is happening to the ice cubes?
  - a. Boiling.
  - b. Melting.
  - c. Solidification.
  - d. Condensation.

4. What's the lowest temperature you see in the thermometer? ..... °C. That's the melting point of water.

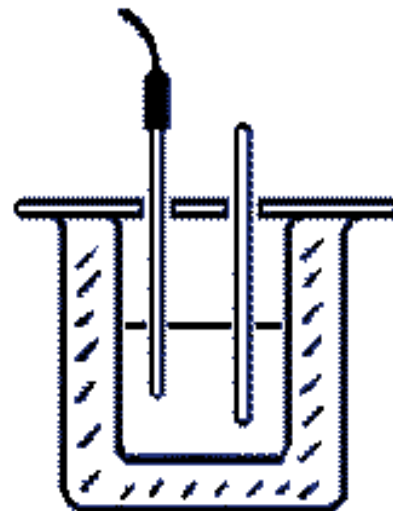
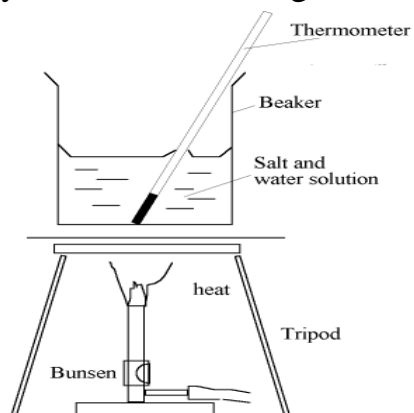


Fig. 2 Experimental Calorimeter

5. Spill some salt on the ice cubes. What happens to the temperature?
  - a. It's the same.
  - b. It rises.
  - c. It goes down.
6. What's the melting point of salty water? .....°C
7. Why do they throw salt on the roads in winter?
  - a. To get white roads for Christmas.
  - b. To melt ice on the road.
  - c. To improve visibility.
  - d. To prevent the growth of grass.
8. Yesterday we filled a glass with 80 millitres of water and then we put it into the freezer. Now, what's the volume? .....
9. What would happen if you put a bottle full of water in your freezer?
  - a. Glass turns into liquid.
  - b. Ice turns into solid.
  - c. The bottle breaks.
  - d. Water melts.

Most of substances have a smaller volume when they cool but when water is frozen it dilates, the volume increases. This fact is known as the anomalous dilatation of water.

10. We are going to heat water and to look at the thermometer every thirty seconds. You have to write your data on the table on the left (later on you will draw a diagram on the right).



11. Water temperature is rising continuously and then it stops. What temperature is it? .....°C. This temperature corresponds to ..... point of the water.

12. Using the same device, get the boiling point of alcohol: .....°C

Time minutes	Temp. °C
0.5	
1	
1.5	
2	
2.5	
3	
3.5	
4	
4.5	
5	
5.5	
6	
6.5	
7	
7.5	
8	
8.5	
9	
9.5	
10	
10.5	
11	
11.5	
12	
12.5	
13	
13.5	
14	
14.5	
15	
15.5	
16	
16.5	
17	
17.5	

Time (minutes)