

THE SALT METER

BEFORE STARTING THE EXPERIMENT READ THROUGH THE INSTRUCTIONS CAREFULLY

AIM

The aim of this experiment is to find the concentration of the sample of salty water.

WHAT TO DO

Set up the circuit shown in the diagram below.

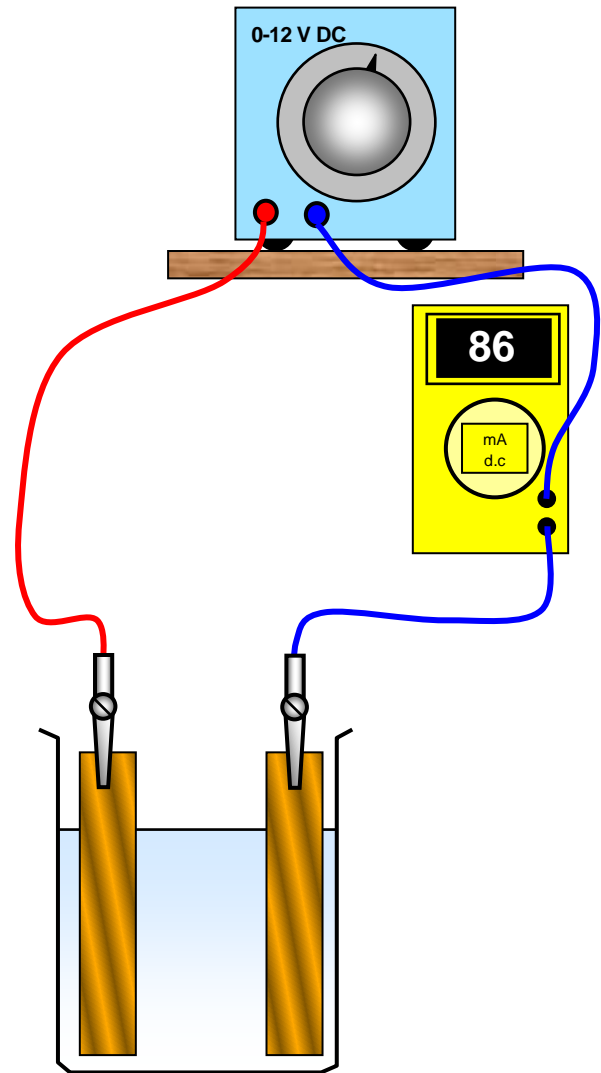
Dissolve 50g of salt in 1 litre of water, put some of it in the small beaker and pass a current through it. Adjust your power supply until the current flowing through the solution gives a current through the solution of no more than 100 mA.

Record the current and concentration (50g/litre).

Repeat the experiment for seven other weaker concentrations.

Plot a graph of current against concentration.

Now measure the current through the sample of salty water provided and use your graph to find its concentration.



Write up your experiment carefully, mentioning any problems that you had, where you think errors might have occurred and including any ideas for improving the experiment.

Why do you think that the current should be kept to a low value?