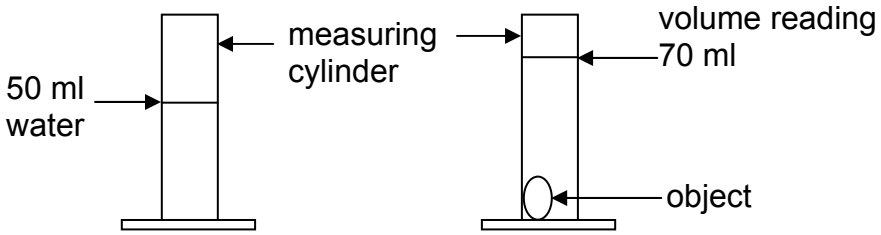
Senior Prep Revision Guide 1

1. We measure things using a variety of devices.

Thing to be measured	Units	Equipment used
length, height	metres (m) centimetres (cm)	ruler, metre stick
volume	litres (l) millilitres (ml) centimetres cubed (cm^3)	measuring cylinder
mass	kilograms (kg) grams (g)	beam balance, top pan balance
time	minutes (min) seconds (s)	stopwatch
temperature	degrees centigrade (^oC)	thermometer

2. Volumes of irregular shaped objects can be measured by displacement of water



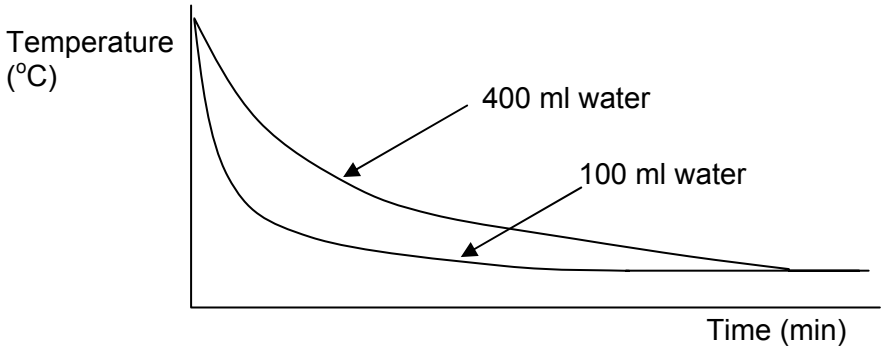
Volume of object = 70 – 50 = 20 ml

3. The period of a pendulum is the time it takes the pendulum to swing back to its starting position

4. The period of a pendulum is affected only by the length of string used. The longer the string the greater the period.

5. When objects cool down they do not cool at a constant rate.

A cooling curve



Remember:

When drawing tables

- Always use a ruler
- Columns must have headings
- The units should be in the headings

When drawing bar charts

- Always use a ruler
- Label both axes, including units
- Side axis must start at 0 and go up in a sensible scale
- Bars should have spaces between them.

When drawing line graphs

- Always use a ruler
- Label both axes, including units
- Both axes must start at 0 and go up in a sensible scale
- Draw a line of best fit, either a straight line with a ruler or a smooth curve as near to the points as possible.

When doing experiments

- The aim is what you are trying to find out.
- The plan is how you intend to do this.
- The method is a detailed description of what you did.
- The results are what happened (in a table).
- The conclusion is what your results tell you.