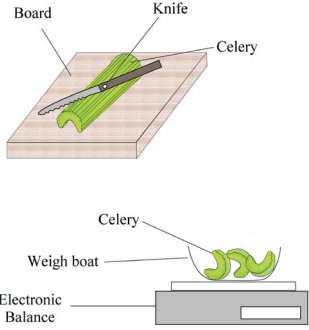


4.4 (b) To investigate the effect of temperature on catalase activity

1

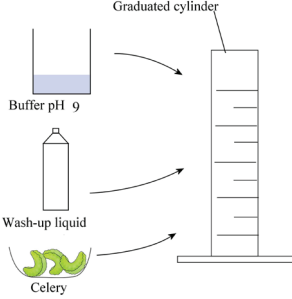


Board Knife Celery

Celery Weigh boat Electronic Balance

Finely chop the celery.
Weigh 5g of the chopped celery.

2



Graduated cylinder

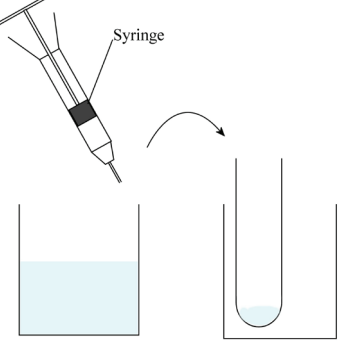
Buffer pH 9

Wash-up liquid

Celery

Add 20 ml of buffer pH 9, one drop of washing-up liquid and 5g of celery into a graduated cylinder.

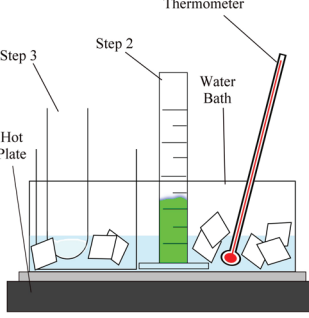
3



Syringe

Add 2 ml of hydrogen peroxide to a boiling tube.

4



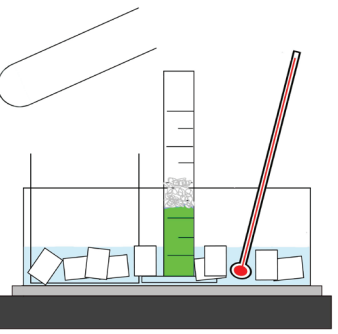
Thermometer

Step 3 Step 2 Water Bath

Hot Plate

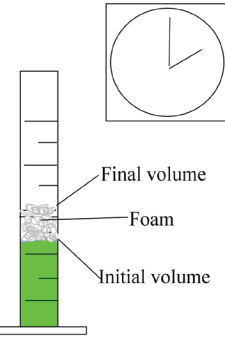
Place the graduated cylinder and the boiling tube in an ice bath. Leave until the desired temperature of 4°C is reached.

5



Add the hydrogen peroxide into the graduated cylinder and record the volume immediately.

6



Final volume

Foam

Initial volume

Time for 2 minutes and record the final volume.

7

**Repeat the steps for
water baths at different
temperatures
e.g. 20°C, 30°C, 45°C, 60°C,**

Table of Results

Temperature (OC)					
Initial volume (ml)					
Final volume (ml)					
Volume of foam produced (ml)					

Always remember – Leave time to tidy up

This page can be printed in colour from the accompanying DVD