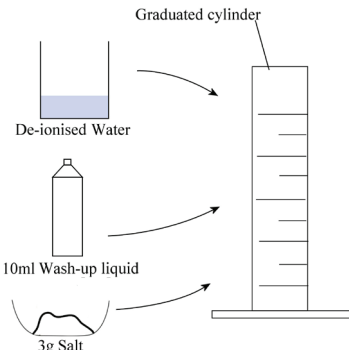


## 4.10 To isolate DNA from a plant tissue

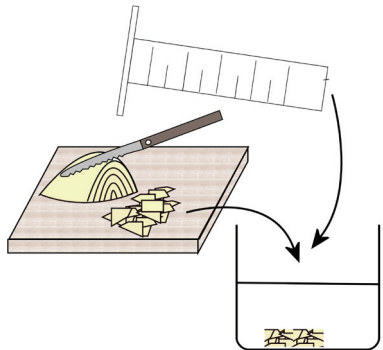
**1**



Graduated cylinder  
De-ionised Water  
10ml Wash-up liquid  
3g Salt

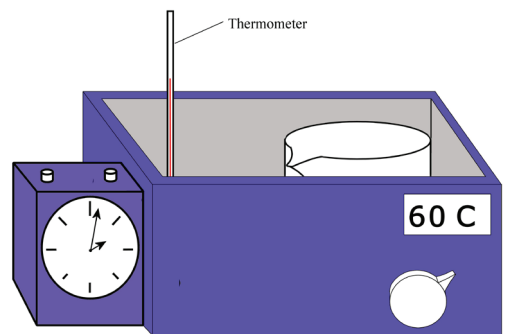
Add 10 ml washing-up liquid and 3 g salt to a graduated cylinder. Make up to 100 ml and stir.

**2**



Add chopped onion to a beaker. Pour in the salty washing-up liquid solution and stir.

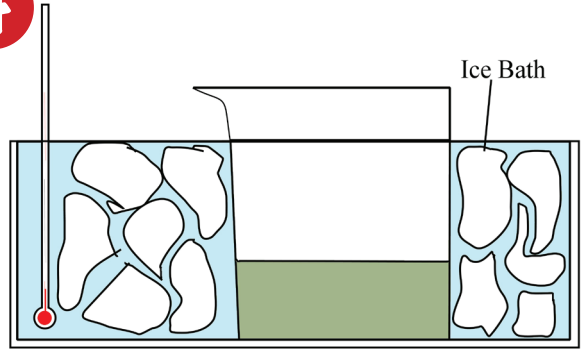
**3**



Thermometer  
60 C

Stand the beaker in a water bath at 60°C for 15 minutes.


**4**



Ice Bath  
0 C

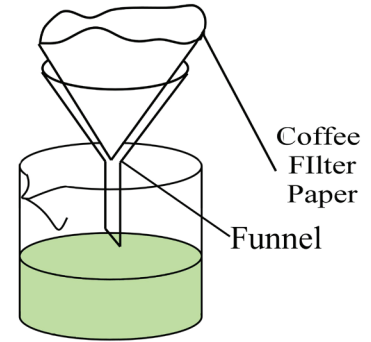
Cool the mixture by standing the beaker in an ice bath for 5 minutes.

**5**



Blend the mixture for no more than 3 seconds.

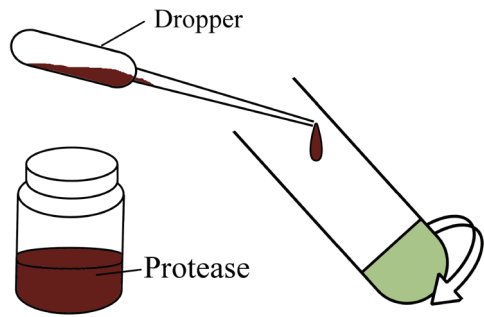
**6**



Coffee Filter Paper  
Funnel

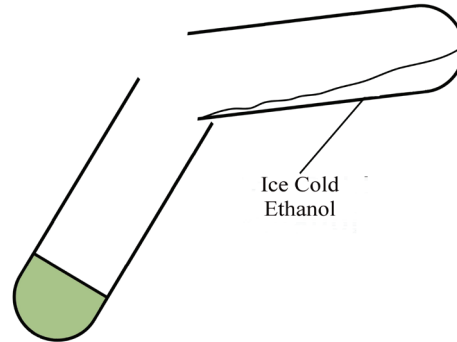
Filter the blended mixture through coffee filter paper.

7



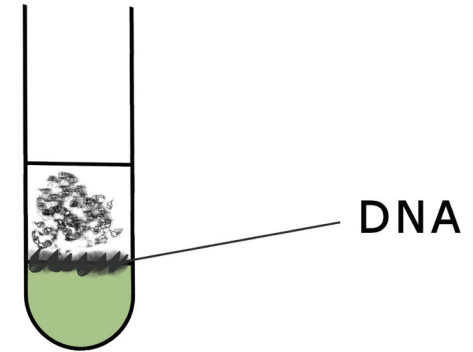
Add 2-3 drops of protease enzyme to 10 ml of the onion extract.

8



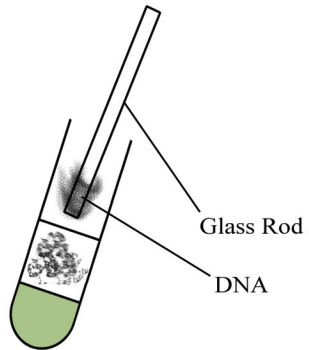
Very carefully, pour 10 ml of ice cold ethanol onto the surface of the onion extract.

9



DNA forms at the interface of the ethanol and extract.

10



Draw the DNA out of the solution by wrapping it around a glass rod.

**Always remember – Leave time to tidy up**

*This page can be printed in colour from the accompanying DVD*