



Technical considerations – Filtration

Using traditional methods involving filter paper inserted into funnels is not always efficient with such small volumes of liquids. Alternative methods can be used, which may not be used in examination questions and yet the principles are the same. This might be a good

area of discussion during revision. Here are three techniques that can be used, and more can be devised. Methods 1a and 1b are similar to the traditional method of using filter paper in a funnel. Method 1c is similar to vacuum filtration.

<p>The Pasteur pipette with a cotton wool plug</p>	<p>A small piece of cotton wool is forced down the Pasteur pipette (pipettes with broken tips can be use (WARNING: The end will be sharp!)).</p>	
<p>The 2-cm³ syringe with filter paper</p>	<p>Using a No5 cork borer on a wooden support, a circle of filter paper is cut out. This is placed in the syringe and, holding vertically, the plunger is used to push the filter paper down.</p>	
<p>The 2 ml syringe with an attached silicone tube with cotton wool</p>	<p>Cotton wool is inserted into silicone tubing that is fitted on the end of the nozzle of the 2-cm³ syringe. To use, add the plunger, insert the end of tubing into the liquid and pull the plunger up.</p>	