

Science  
Weekend Assignment  
Separation Techniques

Name: \_\_\_\_\_(    )

Class: \_\_\_\_\_

Date: \_\_\_\_\_

**Methods of Purification**

Methods	To separate	examples	Substances obtained	Terms
Filtration	Insoluble solid + liquid		<ul style="list-style-type: none"> <li>▪ _____ in filter paper</li> <li>▪ _____ in beaker</li> </ul>	<ul style="list-style-type: none"> <li>▪ Solid trapped in filter paper is called the _____</li> <li>▪ Liquid that passed through paper is called the _____</li> </ul>
Crystallization	Solution (a soluble solid dissolved in liquid)		<ul style="list-style-type: none"> <li>▪ <u>Pure</u> _____</li> </ul>	<ul style="list-style-type: none"> <li>▪ Solid dissolved is called _____</li> <li>▪ Liquid is called the _____</li> </ul>
Fractional distillation	Mixture of 2 miscible liquids		<ul style="list-style-type: none"> <li>▪ Liquid with l _____ b _____ p _____</li> </ul>	<ul style="list-style-type: none"> <li>▪ Makes use of the physical property of _____</li> </ul>
Chromatography	Mixture of several soluble solids in a solution		<ul style="list-style-type: none"> <li>▪ Individual component in the mixtures are separated out</li> </ul>	<ul style="list-style-type: none"> <li>▪ Different coloured spots are obtained at the end of the experiment. The paper with the different coloured spots is called a _____</li> </ul>

Distillation	Solution		<ul style="list-style-type: none"> <li>P_____ l_____</li> </ul>	<ul style="list-style-type: none"> <li>Pure liquid obtained is called the _____</li> </ul>
Desalination (using distillation or reverse osmosis)	Pure water from sea water		Pure Water	<ul style="list-style-type: none"> <li>In reverse osmosis, sea water is forced through a p_____ p_____ m_____ under high pressure to sift out the salt and waste particles</li> </ul>