



| Section 1: Key Vocabulary |   |
|---------------------------|---|
| Key Word                  | Definition  |
| Solute                    | The solid or gas that dissolves in a liquid                       |
| Solvent                   | The liquid in which a solid or gas dissolves                      |
| Solution                  | A mixture of a liquid with a solid or gas                         |
| Dissolve                  | The particles of solute are evenly spread through the solvent     |
| Solubility                | The mass of a substance that dissolves in 100g of water           |
| Soluble                   | A substance that will dissolve                                    |
| Insoluble                 | A substance that will not dissolve                                |
| Mixture                   | Made up of substances that are not are chemically joined together |
| Saturated Solution        | A solution in which no more solute can dissolve                   |
| Filtering                 | Separating a solid from a liquid by pouring through filter paper  |
| Filtrate                  | The liquid that passes through the filter paper                   |
| Distillation              | Separates liquids from a solution.                                |
| Chromatography            | Separate mixtures of liquids that are soluble in the same solvent |

| Section 2: Quick Questions                                   |  |
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| <b>What factors the amount of solute that will dissolve?</b> | Increasing the temperature, the amount of solvent or stirring will increase the amount that will dissolve                            |
| <b>What does filtration separate?</b>                        | Filtration separates insoluble solids from a liquid or solution  |
| <b>How does filtration work?</b>                             | Filter paper contains countless tiny holes that the solvent can fit through but the insoluble solid cannot                           |
| <b>What does evaporation separate?</b>                       | Evaporation separates soluble solids from a liquid or solution, leaving the solid behind   |
| <b>How does evaporation work?</b>                            | The solvent is heated until it evaporates, leaving the solute behind, which has a higher boiling point                               |
| <b>How does distillation work?</b>                           | Different liquids have different boiling points. The solution until one liquid starts to boil, which is then collected and condensed |
| <b>How does chromatography work?</b>                         | Different inks or colours have different solubility - they will fall out of the solution at different parts.                         |

### Section 3: Helpful Diagrams

### Section 4: Video Links

<https://www.youtube.com/watch?v=pFYG7jxjGHs>  
<https://www.bbc.com/bitesize/guides/zgvc4wx/revision/1>  
<https://www.bbc.com/bitesize/clips/z7mcd2p>  
<https://www.youtube.com/watch?v=pFYG7jxjGHs>