**Homework Menu Grid – C2 Separating Techniques**

Complete some of the tasks from the grid below to reach a total of points over this unit of work. Try and cover a variety of tasks over the unit so that you’re practicing different skills. Once you’ve completed a task, colour that box on the grid to keep a record of your points. Can you get the highest point score this unit?

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| **Topic** | **1 Point** | **2 Points** | **4 Points** | **6 Points** | **10 Points** |
| **Purity** | Write the definitions to the following keywords: element, compound, mixture and molecule. | Draw particle diagram to show the difference between an element, compound and mixture | Describe the difference between pure substances and mixtures | Write a letter to Evian Water explain why Evian water is not pure water. | Using smarties make a model to show the difference between a pure and impure substance |
| **SOL WORDS** | Give an example of a solute, solvent and solution. | Write a list of all the keywords you have used in this topic, along with their definitions. Make sure you learn them! | Explain why salt is added to roads when they’re icy. And why this is an impure substance. | Write a magazine page for a science magazine explaining why sugar dissolves in water but sand does not? | Research about scientists use solubility in the pharmaceutical industry |
| **Solubility** | Define the words soluble and insoluble and give examples of each. | Explain why salt dissolves in water | Write down three questions with mark schemes about solubility. | Explain how temperature effects solubility. | Design an experiment to investigating solubility of sugar. Include a hypothesis, a step-by step method, an equipment list and a results table. |
| **Filtration** | Draw and label the equipment used to separate sand and water. | Draw a flow map to show the stages of filtration | Describe how filtration can be used to separate a solution of sand and water | Write down three questions with mark schemes. | Research and produce an information leaflet on how filtration is used to clean our tap water. |

**Homework Menu Grid**

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| **Chromatography** | Define what chromatography is and draw a labelled diagram of the equipment. | Write a set of instructions on how we carry out chromatography | Draw a chromatogram and explain how we calculate the rf value. | Research on the uses of chromatography in the real world. | Write a revision quiz for the whole of this unit.  There must be at least 10 questions.  You must include a mark scheme with the answers. |
| **Distillation** | Sketch out the equipment used to carry out distillation and label it. | Describe how distillation can be used to separate ethanol and water | Write a letter to Bear Grylls explaining how distillation can be used to make drinking water | Imagine you have been stranded on a desert island explain what everyday equipment could you use to make drinking water from sea water. | Research what distillation is and how it is used in industry. |