**Homework Menu Grid – C1 Particles**

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** |
| **The particle model** | Here are three keywords: Atom, Substance, molecule. Write a question where the keywords are the answer | Draw and label an atom | Describe the difference between pure substances and mixtures | Explain why an atom is neutral? | Make a model of an atom using whatever resources you have. Find a way to label each part. |
| **States of Matter** | Draw a flow diagram showing the changes of state of water | Draw the particle diagram of a solid liquid and gas and give examples of each one. | Describe the properties of solids, liquids and gases. Describe two properties each. | Explain why a change of state occurs, what is happening to the particles? | Draw a poster explaining to Olaf why water can be a solid liquid and gas. Include lots of diagrams!  |
| **Melting/Freezing** | Write down definitions for melting and freezing | Draw a flow diagram to show what happens to particles during melting | Describe what happens when an ice cream melts. Talk about the particles!  | Explain why water freezes, what is happening to the particles? | Write a letter to Willy Wonka explaining what would happen to his chocolate factory if the temperature is too high. Explain why knowing the melting point of chocolate is important! |
| **Boiling/Evaporation**  | Write down definitions for boiling and evaporating | Draw a particle diagram showing what happens to the particles when a kettle is boiled. | What is the difference between boiling and evaporating? Explain the difference and give an example of each. | Draw a Venn diagram comparing the similarities and differences between boiling and evaporating. | Research what distillation is and how it is used in industry. |

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| **Condensing** | Define what condensation is and give an example. | Draw a particle diagram showing what happens to particles during condensation | Draw a comic strip explaining to a group of friends why droplets of water appear outside a glass of coke. | Write a blog post explaining why when you breath on a car window it steams up during winter? | 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. |
| **Diffusion** | Give five everyday examples of diffusion. | Write the definition for diffusion and come up with a pneumonic to remember it. | Explain why Robinsons squash will go orange faster if it’s in warm water. | Explain why sharks can detect blood from hundreds of miles away | Design an experiment to investigate how temperature effects diffusion. Include a hypothesis, a step-by step method, an equipment list and a results table. |