Year 11 Chemistry

Structure and Matter Assessment Task 2022

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| **TOPIC**: Module 1 Structure and Matter – First-Hand Investigation | **MARKS:** / 40 |
| **SUBMISSION REQUIREMENTS:**  The investigation will be conducted in your one (1) hour Chemistry lesson in **Week 10**, **Friday 1st April, 2022** | **WEIGHTING:**  35 % |
| **OUTCOMES TO BE ASSESSED:**  **CH11-3** **Conducts** investigations to collect valid and reliable primary and secondary data and information  **CH11-4** Selects and **processes** appropriate qualitative and quantitative data and information using a range of appropriate media  **CH11-6 Solves** scientific problems using primary and secondary data, critical thinking skills and scientific processes  **CH11-8 Explores** the properties and trends in the physical, structural and chemical aspects of matter. | |
| **DIRECTIONAL VERBS:**  **Conducts** – to organise and carry out  **Explore** – to examine and investigate something  **Process** – to deal with something using a procedures  **Solve** – to find an answer to, explanation for, or means of effectively dealing with a problem | |
| **TASK DESCRIPTION:**  ***Inquiry question:*** What binds atoms together in elements and compounds?  Students are to **conduct** a first-hand investigation modelling task in class.  Students are to **explore** the nature of different types of structure and bonding, by creating a separate model for 4 specified molecules, using the materials provided.  With reference to the models they have created, students will answer questions that relate to the different types of structure and bonding represented. They are to **process** the features of their models in order to **explain** the structure and bonding.  Each model, and the written responses for that model will be allocated 10 marks. The mark allocation is:   1. Model 1 and related written responses **(10 marks)** 2. Model 2 and related written responses **(10 marks)** 3. Model 3 and related written responses **(10 marks)** 4. Model 4 and related written responses **(10 marks)** | |
| **ASSESSMENT CRITERIA:**  The first-hand investigation will be marked in accordance with a strict marking guideline, and feedback will be given to students based on this marking criterion, after completion of the task. | |