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| **Year:** | | **8** | **Unit:** | **What’s the matter?** | |
| **Subject:** | | **Science** | **Assessment:** | **Exam and Scientific report** | |
| **LG**  **and Timing** | **LEARNING GOALS and SUCCESS CRITERIA** | | | | **I feel confident with this… (Date/Ref)** |
| **1**  **6 lessons** | **SC1** | I can define the terms : matter, atom, elements, molecule and compound | | |  |
| **SC2** | I can create a timeline to model how the concept of an element has changed over time | | |
| **SC3**  **SC4** | I can identify and explain why elements are represented by symbols on the periodic table. (must know the first 20 plus Fe, Cu, Zn, Ag, Au)  I can explain why molecules and compounds are represented by symbols including both 2D and 3D models | | |
| **LG1** | ***Students can classify matter as elements, molecules or compounds and compare different representations of these.*** | | |  |
| **2**  **3 Lessons** | **SC5** | I can recognise that a pure substance is represented by a chemical formula but a mixture is represented by a percentage composition | | |
| **SC6** | I can classify common mixtures as solutions, suspensions or colloids | | |  |
| **SC7** | I can explain how the properties of a mixture can vary depending on the percent composition of the substances in it (e.g milk, cement,steel) | | |  |
| **LG2** | ***Students can classify matter as pure substances or mixtures and compare different representations of these.*** | | |  |
| **3**  **5 Lessons** | **SC8** I can explain the differences between a physical and a chemical change  **SC9** I can perform simple chemical reactions to identify the indicators of chemical change such as gas production, colour change and temperature change  **LG3 *Students can compare physical and chemical changes and identify indicators of energy change in chemical reactions*** | | | |
| **4**  **12 Lessons** | **SC10** I can plan and conduct reproducible investigations to answer questions and test hypotheses including identifying variables and assumptions  **SC11** I can select and construct appropriate representations, including tables and graphs to organise and process data  **SC12** I can analyse data to describe patterns, trends and relationships and identify anomalies  **SC13** I can analyse methods, conclusions and possible sources of error  **LG4 *Students conduct scientific investigations using science inquiry skills, including investigating the effect of temperature on rate of dissolving (solvation)*** | | | |