**Year 8 Elements and Chemical Reactions (C1)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. I can recognise symbols for common elements
 | \* | ☺ | 😐 | ☹ |
| 1. I can use a range of descriptive words to describe the physical and chemical properties of the different elements
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe properties of metals and non-metal elements
 | \* | ☺ | 😐 | ☹ |
| 1. I can identify metals and non-metals from their properties
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe what an atom and an element are and how they are related
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can state the key features of the periodic table
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can describe the main patterns in the periodic table and how Mendeleev grouped elements (periods, groups, metals, non-metals)
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can use the periodic table to predict physical and chemical patterns in elements, groups & periods
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can explain why Mendeleev left gaps in his table
 | Ext | ☺ | 😐 | ☹ |
| 1. I can write the chemical symbols for the first 18 elements of the periodic table and can recognise symbols for the main elements in groups 1, 2, 6, 7 and 8 and some common metals
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can name elements in a compound given their chemical formula
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe what a compound and a molecule are
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can explain the relationships between atoms, elements, compounds and molecules
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can use particle diagrams to illustrate the relationships between atoms, elements, compounds and molecules
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can identify elements, molecules and compounds from particle diagrams or chemical formula
 | \* | ☺ | 😐 | ☹ |
| 1. I can name compounds given their chemical formula
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can compare chemical changes with physical changes and highlight the differences
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe the common rules for writing chemical formulae
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can write word equations for some simple chemical reactions
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can give examples of how elements react to form compounds
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can explain different types of reactions in terms of re-arrangement of the atoms and show this with a particle diagram
 | Ext | ☺ | 😐 | ☹ |
| 1. I can explain the principle of the conservation of mass in chemical reactions and use a particle diagram to show this
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can write balanced chemical equations for chemical reactions
 | Ext | ☺ | 😐 | ☹ |

I understand (and can spell) the keywords listed below and can use them in 1-23 above.

|  |  |
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| **Key Words** | **Definition** |
| dense |  |
| sonorous |  |
| conductor |  |
| malleable |  |
| MP /BP |  |
| Dalton |  |
| Mendeleev |  |
| magnetic |  |
| mixture |  |
| molecule |  |
| particle |  |
| element |  |
| Chemical formulae |  |
| separation |  |
| Chemical bond |  |
| Particle diagram |  |
| precipitate |  |
|  |  |