**8C3 Structure & properties**

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| Year 8: Chemistry – Structure & properties | Metals as materials | I can test materials to determine their properties. |  |
| I can state the location of metals in the periodic table. |  |
| I relate the properties of specific materials to how they are used. |  |
| I can explain some properties of metals using particle diagrams. |  |
| Properties of salts | I can describe the properties of salts, giving examples. |  |
| I can recall that salts are ionic compounds consisting of metal and non-metal particles. |  |
| I can explain that during ionic bonding metals lose electrons and non-metals gain electrons. |  |
| I can explain that the ionic bond is the electrostatic attraction between oppositely charged ions. |  |
| Simple covalent molecules | I can recall that molecules consist of two or more atoms chemically bonded. |  |
| I can recall that covalent compounds consist of only non-metal atoms. |  |
| I can describe the properties of simple covalent compounds. |  |
| I can explain that a covalent bond consists of shared pairs of electrons. |  |
| Polymers | I can describe polymers as molecules formed from many repeated small molecules called monomers. |  |
| I can recall examples of natural and synthetic polymers. |  |
| I can describe the common properties of polymers. |  |
| Diamond & graphite | I can recall some forms (allotropes) of carbon. |  |
| I can explain that carbon is able to form complex forms as it can make up to 4 covalent bonds with other atoms. |  |
| I can describe the properties of diamond and graphite. |  |
| Properties of materials | I can apply my knowledge of materials and their properties to scientific problems. |  |
| I can explain what composite materials are. |  |