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| CHEMISTRY |
| EYFS | KS1  | LKS2  | UKS2  |
| **40-60 months**• I look closely at similarities, differences, patterns and change**Early Learning Goal**• I know about similarities and differences in relation to objects and materials• I can talk about changes**Exceeding statements**• I know the properties of some materials and can suggest some of the purposes they are used for | Year 1**Everyday materials**• I can describe an object including the material it is made from• I can identify and name a variety of common materials inc. wood, plastic, glass, metal, water and rock• I can talk about and describe the properties of different materials• I can compare materials and sort them into groups, explaining my reasons. | Year 2**Everyday materials**• I identify and compare the suitability of materials for particular uses inc. wood, metal, plastic, glass, brick, rock, paper and cardboard• I can describe the changes to some materials by squashing, bending, twisting and stretching.• I can begin to describe ways to sort materials *e.g. gas/liquid/solid.*• I can begin to recognise that some changes can be reversed (reversible) and others cannot(non-reversible) | Years 3 and 4**Rocks**• I can compare and group rocks according to their appearance and simple physical properties• I can describe in simple terms how fossils are formed (living things trapped betweenrocks)• I can explain that soils are made from rocks and organic matter**States of matter**• I can classify and describe materials according to whether they are solids, liquids or gases• I can describe the differences between the properties of different materials.• I can say how some materials change state when they are heated or cooled• I know that different substances melt at different temperatures• I can measure or research the temperature at which a specific material changes state in degrees Centigrade• I know how evaporation and condensation play a part in the water cycle• I know how the rate of evaporation in the water cycle is linked to temperature• I can make predictions about whether changes are reversible or not.• I know how to separate some simple mixtures e.g. filtering, sieving, evaporation | Year 5**Properties and changes of materials**• I can compare and group materials according to their properties inc. hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets• I can describe the properties of a range of solids including metal• I can explain the relationship between liquids, solids and gases.• I can identify a range of contexts in which condensation and evaporation take place.• I can name some materials that will dissolve in liquid to form a solution• I can describe how to recover a substance from a solution• I can use scientific knowledge of solids, liquids and gasses to decide how mixtures could be separated, including through filtering, sieving and evaporating• I can give scientific reasons based on comparative and fair tests for the uses of everyday materials• I can demonstrate some changes such as dissolving, mixing or changes in state are reversible• I can discuss some irreversible changes and explain that some changes result in the formation of new materials |