WENSLEY FOLD CE PRIMARY ACADEMY

PROGRESSION THROUGH TOPICS

SCIENCE SCHEME OF WORK

CHEMISTRY – EVERYDAY MATERIALS/PROPERTIES and CHANGES OF MATERIALS		
Early Learning Goal		
Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.		
Year 1	Year 2	Year 5
• I can distinguish between an object and the material it is made from. • I can explain the materials that an object is made from. • I can name wood, plastic, glass, metal, water and rock. • I can describe the properties of everyday materials. • I can group objects based on the materials they are made from.	• I can identify and name a range of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard. • I can suggest why a material might or might not be used for a specific job. • I can explore how shapes can be changed by squashing, bending, twisting and stretching. 	• I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets). • I can describe how a material dissolves to form a solution; explaining the process of dissolving. • I can describe and show how to recover a substance from a solution. • I can describe how some materials can be separated. • I can demonstrate how materials can be separated (e.g. through filtering, sieving and evaporating). • I know and can demonstrate that some changes are reversible and some are not. • I can explain how some changes result in the formation of a new material and that this is usually irreversible. • I can discuss reversible and irreversible changes. • I can give evidenced reasons why materials should be used for specific purposes.
KS3		

Chemical reactions as the rearrangement of atoms. Representing chemical reactions using formulae and using equations. Combustion, thermal decomposition, oxidation and displacement reactions. Defining acids and alkalis in terms of neutralisation reactions. The pH scale for measuring acidity/alkalinity; and indicators