| CHEMISTRY <br> MATERIALS | EYFS | Year 1 | Year 2 | Year 3 <br> Year 4 |  | Year 5 <br> Year 6 |  |
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|  | Understanding the World | AUTUMN 2 SPRING 1 DESCRIBING MATERIALS | AUTUMN 2 CHANGING MATERIALS | AUTUMN 2A ROCKS and SOILS | SPRING 1B SOLIDS,LIQUIDS and GASES | SPRING 2A MAKING NEW SUBSTANCES | AUTUMN 2B MIXTURES and SEPARATING THEM |
| Vocabulary | Hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, wood, plastic, metal, water, fabric, | Properties, metal, rock, fabric, wood, plastic, ceramic, suitable, purpose, hard, soft, stretchy, stiff, dull, rough, smooth, bendy / not bendy, waterproof / not waterproof, absorbent, opaque | Changed, Physical force, absorb, crumbly, property, drag, suitable Strongest, Flexible, Waterproof, Squashing, bending | Rocks, igneous, metamorphic, sedimentary, anthropic, permeable, impermeable, chemical fossil, body fossil, trace fossil, Mary Anning, cast fossil, mould fossil, replacement fossil, extinct, organic matter, topsoil, sub soil, base rock. | Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour, energy, precipitation, collection, | Hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing Material, conductor, dissolve, insoluble, suspension, chemical, physical, irreversible, solution, reversible, separate, mixture, insulator, transparent, flexible, permeable, soluble, property, magnetic, hard. | Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour, energy, precipitation, collection, |
|  | Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world | Learn about describing materials. <br> Know that there are many different materials that have different observable properties. <br> Explore the properties of materials that can be grouped into metals, rocks, fabrics, wood, | Explore how materials can be changed by physical force (twisting, bending, squashing and stretching). <br> Explain how the properties of a material determine whether they are suitable for a purpose. | Compare and group together different kinds of rocks based on their appearance and simple physical properties <br> Describe in simple terms how fossils are formed when things that have lived are trapped within rock | Compare and group materials together, according to whether they are solids, liquids or gases. <br> Observe that some materials change state when heated or cooled, and measure and research the temperature at which this happens in degrees Celsius. | Compare and group together everyday materials based on their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. comparative and fair tests, for the uses of | Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. <br> Know that some materials will dissolve in liquid to form a solution and describe how to |


|  | around them understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. This vocabulary will support later reading comprehension. Name everyday materials including wood, plastic, metal, water, fabric and rock Describe simple properties of everyday materials Sort objects | plastic and ceramics (including glass). |  | Recognise that soils are made from rocks and organic matter | Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. | everyday materials, including wood, metals and plastic. Demonstrate that dissolving, mixing and changes of state are reversible changes. <br> Explain that some changes result in the formation of new materials, and this kind of change is usually not reversible, including changes associated with burning and the action of acid on bicarbonate of soda | recover a substance from a solution. <br> Use knowledge of solids, liquids, and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. |
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