



## Y4 design technology overview 2022-23

| DT Activity                         | Building Skills and Disciplinary Knowledge   | Approaches to Developing Skills and Disciplinary Knowledge   | Building Substantive Knowledge and Understanding  | Approaches to Developing Substantive Knowledge and Understanding   | Curricula Materials                                     | Assessed through (T1 T2 T3)                   |   |  |
|-------------------------------------|--|--|---|--|---|---|---|--|
|                                     |  |  |   |  |   | Exploring<br>Creating                         | Responding<br>Evaluating                                  | Designing  |
| Responding                          | <ul style="list-style-type: none"> <li>To develop an ability to discuss observed art pieces</li> <li>To learn to follow guidance from a tutor (techniques, top-tips)</li> <li>To learn to experiment with own compositions</li> <li>To learn to communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul>  | <ul style="list-style-type: none"> <li>Class/group tuition with technical guidance</li> </ul>  | <ul style="list-style-type: none"> <li>Understanding the history and origins of artists, designers, craft-makers, architects</li> </ul>   | <ul style="list-style-type: none"> <li>Through class teacher led presentations with children note-taking</li> <li>Group research on history and /or origins and of masterpieces from masters in their fields</li> </ul>  | <b>TERM1:</b><br><br>Unit 4a<br>Structures:<br>textiles | Most children will be able to... (working at) | Some children will not yet be able to...(working towards) | Some children are confidently able to... (exceeding) |
| Exploring                           | <ul style="list-style-type: none"> <li>To develop an ability to research appropriately great artists, craft makers, designers</li> <li>To develop an ability to explore sketch books of professional designers</li> <li>To learn how to make comparisons between different genres</li> <li>To develop a skill of investigating the historical and cultural development of design through provided opportunities</li> </ul>   | <ul style="list-style-type: none"> <li>Class/group tuition with reference to historical information, images</li> </ul>   | <ul style="list-style-type: none"> <li>To know about different techniques that a variety of designers used to create their design pieces and understand why they chose or explored these techniques</li> </ul>                            |  |   |   |   |  |
| Designing/<br>Technical knowledge   | <ul style="list-style-type: none"> <li>To learn to keep and use a sketch book (creative journal, visual diary) to record observations</li> <li>To learn how to strengthen, stiffen and reinforce complex structures</li> <li>To learn how to use mechanical systems in their products [eg gears, pulleys, cams, levers and linkages]</li> <li>To learn how to use electrical systems in their products [eg series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>To learn how to apply their understanding of computing to program, monitor and control their products</li> <li>To learn how to plan/ explore/ experiment with designs</li> </ul>  | <ul style="list-style-type: none"> <li>Class/group sketching activities and provided sources to enable discovering of a variety of sketch books from over time and globally</li> </ul>   | <ul style="list-style-type: none"> <li>Understanding the history of design forms and purpose for creations</li> <li>Understanding how design reflects a community or culture</li> </ul>   | <ul style="list-style-type: none"> <li>Through involvement in workshops in groups or as a class</li> <li>Through presentations to class/or in whole school worship sessions</li> <li>Through class, then group or individual opportunities to create compositions</li> </ul> | <b>TERM2:</b><br><br>Unit 4b<br>Mechanisms              |   |   |  |
| Creating                            | <ul style="list-style-type: none"> <li>To learn how to compose own composition or construction following planned design</li> <li>To learn how to generate, develop, model</li> <li>To learn how to compose in more than medium (food, textile, paper, clay, metal, wood)</li> <li>To learn how to select from and use a wider range of tools and equipment to perform practical tasks [cutting, shaping, joining and finishing], accurately</li> <li>To learn how to select from/ use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>   | <ul style="list-style-type: none"> <li>Class, then group opportunities for field studies and internal compositions from stimuli</li> </ul>   | <ul style="list-style-type: none"> <li>Understanding as to how design keeps traditions alive</li> <li>Understand how design in cultures is used (for example in dance, spiritual, worship, rites of passage, and in wellbeing)</li> </ul> |  |   |   |   |  |
| Critically Observing/<br>Evaluating | <ul style="list-style-type: none"> <li>To learn how to investigate and analyse a range of existing products</li> <li>To learn how to research key events and individuals in DT have helped shape the world</li> <li>To learn how to observe someone else's chosen design piece/other constructions</li> <li>To learn how to critically evaluate own composition or construction against design criteria</li> <li>To learn how to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> </ul>   | <ul style="list-style-type: none"> <li>Observational opportunities to be part of each lesson</li> </ul>  |   | <ul style="list-style-type: none"> <li>Through chosen pieces being presented to class for observation with reasons as to why they have been chosen</li> <li>Through discussion around the background to the selected pieces</li> </ul>                                       | <b>TERM3:</b><br><br>Unit 4c<br>Control:<br>electrical  |   |   |  |
| SMSC                                | <ul style="list-style-type: none"> <li>To learn to work with others of different religious, ethnic and socioeconomic backgrounds, according to given briefs wider knowledge of Y4 DT curriculum</li> <li>To be able to resolve conflicts and differing opinions with skill should these arise</li> <li>To develop an enjoyment of DT</li> <li>To learn to use their imagination and creativity</li> <li>To learn to reflect on tasks</li> <li>To learn to investigate and offer views on ethical issues in art studied</li> <li>To learn to explore and understand art from a variety of cultural backgrounds</li> <li>To display a willingness to explore and understand DT from a variety of cultural backgrounds</li> </ul> | <ul style="list-style-type: none"> <li>Setting of research opportunities using given websites and researching finding own information</li> <li>Setting of opportunities and briefs that require engagement with others of differing backgrounds</li> </ul> |   |  |   |   |   |  |