

## Y5 design technology overview 2023-24

| DT<br>Activity                         | Building Skills and Disciplinary Knowledge   | Approaches to Developing<br>Skills and Disciplinary<br>Knowledge   | Building Substantive<br>Knowledge and<br>Understanding  | Approaches to Developing<br>Substantive Knowledge<br>and Understanding  | Curricula<br>Materials                                     | Assessed through (T1 T2 T3) |   |   |
|--|--|--|---|---|--|-----------------------------|---|---|
|  |  |  |   |   |  |                             | Responding<br>ating Evalua                                      |   |
| Responding                             | <ul> <li>Ability to discuss observed design pieces</li> <li>Ability to follow guidance from a tutor (techniques, top-tips)</li> <li>Ability to experiment with own compositions</li> <li>Ability to communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul>  | Class/group tuition with technical guidance  | <ul> <li>Understanding the history<br/>and origins of artists,<br/>designers, craft-makers,<br/>architects</li> <li>To know about different<br/>techniques that a variety of<br/>designers used to create<br/>their design pieces and<br/>understand why they chose<br/>or explored these techniques</li> <li>Understanding the history of<br/>design forms and purpose for<br/>creations</li> <li>Understanding how design<br/>reflects a community or<br/>culture</li> <li>Understanding as to how<br/>design keeps traditions alive</li> <li>Understand how design in<br/>cultures is used (for example<br/>in dance, spiritual, worship,<br/>rites of passage, and in<br/>wellbeing)</li> </ul> | <ul> <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> <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> | TERM1:<br>Unit 5c:<br>Control:<br>mechanisms               |                             | Some children will<br>not yet be able<br>to(working<br>towards) | Some children are<br>confidently able<br>to (exceeding) |
| Exploring                              | <ul> <li>Ability to research appropriately great artists, craft makers, designers</li> <li>Ability to explore sketch books of professional designers</li> <li>Ability to make comparisons between different genres</li> <li>To develop skill to investigate the historical and cultural development of design technology through provided opportunities</li> </ul>   | <ul> <li>Class/group tuition with<br/>reference to historical<br/>information, images</li> </ul>   |   |   | - moving<br>toys   |                             |   |   |
| Designing/<br>Technical<br>knowledge   | <ul> <li>To keep and use a sketch book (creative journal, visual diary)</li> <li>To be able to record observations through annotating</li> <li>To be able to plan/ explore/ experiment with designs</li> <li>To note-take in their sketch books</li> <li>To be able to apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>To be able to use mechanical systems in their products [eg gears, pulleys, cams, levers and linkages]</li> <li>To be able to use electrical systems in their products [eg series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>To be able to apply understanding of computing to program, monitor and control products</li> </ul> | <ul> <li>Class/group sketching<br/>activities and provided<br/>sources to enable<br/>discovering of a variety of<br/>sketch books from over<br/>time and globally</li> </ul>   |   |   | TERM2:<br>Unit 5b<br>Food: bread                           |                             |   |   |
| Creating                               | <ul> <li>To be able to plan/ explore/ experiment with designs</li> <li>To be able to compose own composition or construction following a planned design</li> <li>To be able to generate, develop, model</li> <li>To be able to compose in more than one medium (food, textile, paper, clay, metal, wood)</li> <li>To be able to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</li> <li>To be able to select from and 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> <li>Class, then group<br/>opportunities for field<br/>studies and internal<br/>compositions from stimuli</li> </ul>   |   |   |  |                             |   |   |
| Critically<br>Observing/<br>Evaluating | <ul> <li>To be able to investigate and analyse a range of existing products</li> <li>To be able to research key events and individuals in design and technology and understand how they have helped shape the world</li> <li>To be able to observe someone else's chosen design piece/ other constructions</li> <li>To be able to critically evaluate own composition or construction against design criteria</li> <li>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> </ul>   | Observational     opportunities to be part of     each lesson  |   | <ul> <li>Through chosen pieces<br/>being presented to class for<br/>observation with reasons as<br/>to why they have been<br/>chosen</li> <li>Through discussion around<br/>the background to the<br/>selected pieces</li> </ul>  | TERM3:<br>Unit 5a<br>Structures:<br>musical<br>instruments |                             |   |   |
| SMSC                                   | <ul> <li>To be able to work with others of different religious, ethnic and socioeconomic backgrounds, according to given briefs wider knowledge of Y5 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 be able to use their imagination and creativity</li> <li>To be able to reflect on tasks</li> <li>To be able to investigate and offer views on ethical issues in art studied</li> <li>To be able 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> <li>Setting of research<br/>opportunities using given<br/>websites and researching<br/>finding own information</li> <li>Setting of opportunities and<br/>briefs that require<br/>engagement with others of<br/>differing backgrounds</li> </ul> |   |   |  |                             |   |   |