



Y6 design technology overview 2019-20 [Structures](#); [Structures: textiles](#); [Control: electrical](#)

| DT Activity | Desired Skills | Approaches to Developing Skills | Desired Knowledge and Understanding | Approaches Developing Knowledge and Understanding | Curricula Materials | Assessed through (T1 T2 T3) | | |
|----------------------------------|---|--|--|---|---|---|---------------------|------------|
| | | | | | | Exploring Designing | Responding Creating | Evaluating |
| Responding | <ul style="list-style-type: none"> Discuss observed pieces Follow guidance from tutor (techniques, top-tips) Experiment with own designs, compositions and constructions Communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology | <ul style="list-style-type: none"> Class/group tuition with technical guidance | <ul style="list-style-type: none"> Understanding history/origins of artists, craft makers, designers, architects, engineers Understanding history of art forms and purpose Understanding how design technology reflects a community/ culture Understand it keeps their traditions alive Understand how design technology in cultures/ communities is used (functional, spiritual, worship, rites of passage, wellbeing) | <ul style="list-style-type: none"> Class teacher led presentations with children note-taking Group research on history/ origins etc and masterpieces from masters in their fields | <p>TERM1: Unit 6a Structures (link to Parliament Week?)</p> <ul style="list-style-type: none"> Research websites for masterpieces of structures Have thorough understanding of materials used and methods of construction Set out a step-by-step approach to how their structure will be made and listed tools and materials to be used Make their structure using a wide range of materials and techniques Identify what is and what is not working well with their chosen method <p>RE DT /ART DAY WHOLE SCHOOL: Prayer Spaces: Wire sculpturing</p> <p>TERM2: Unit 6b Structures: Textiles Slipper design</p> <ul style="list-style-type: none"> Work independently and systematically to design and make a slipper of high quality, drawing on their evaluation of existing products and trialling of their own ideas Give clear reasons for choosing a specific idea, taking into account construction methods, appearance and function of slippers Identify in their evaluation why they made changes to their design as it developed <p>RE ART DAY WHOLE SCHOOL: Prayer of Thanks: Plants of our Garden</p> <p>TERM3:</p> <ul style="list-style-type: none"> Unit 6c Control: electrical video clips/ images of masterpieces Analyse possible designs to some depth against the design criteria, displaying an awareness of constraints and the implications of changes Produce a working model which can rotate at different speeds and may include other rotating mechanisms within the model Produced a model whose appearance and finish is of a high standard Communicate their design ideas clearly and implemented improvements <p>RE ART DAY WHOLE SCHOOL: Worship: Music instrument</p> | <p>Most children will be able to... (working at)</p> <p>Some children will not yet be able to...(working towards)</p> <p>Some children are confidently able to... (exceeding)</p> | | |
| Exploring | <ul style="list-style-type: none"> Know about great artists, craft makers, designers, architects, engineers Explore sketch books of professional designers. Make comparisons between genres Understand historical and cultural development of design technology | <ul style="list-style-type: none"> Class/group tuition with reference to historical information, images | | | | | | |
| Designing/ Technical knowledge | <ul style="list-style-type: none"> Keep sketch book (creative journal, visual diary)/record observations apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [eg gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [eg series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products Plan/ explore/ experiment with designs | <ul style="list-style-type: none"> Class/group sketching activities | | | | | | |
| Creating | <ul style="list-style-type: none"> Compose own composition/construction following planned design Generate, develop, model Compose in more than medium (food, textile, paper, clay, metal, wood) Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 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 | <ul style="list-style-type: none"> Class, then group opportunities for field studies and internal compositions from still-life/ stimuli | | | | | | |
| Critically Observing/ Evaluating | <ul style="list-style-type: none"> Investigate and analyse a range of existing products understand how key events and individuals in design and technology have helped shape the world Observe someone else's chosen design piece/ other constructions Critically evaluate own compositions/ construction against design criteria evaluate their ideas and products against their own design criteria and consider the views of others to improve their work | <ul style="list-style-type: none"> Observational opportunities to be part of each lesson | | | | | | |
| SMSC | <ul style="list-style-type: none"> Working with others of different religious, ethnic and socioeconomic backgrounds, according to given briefs wider knowledge of Y6 DT curriculum Resolve conflicts and differing opinions should these arise Enjoyment and relaxation DT can offer Use of imagination and creativity Reflect on tasks Investigating and offering views on ethical issues in DT studied Opportunities to and willingness to explore and understand DT from a variety of cultural backgrounds | <ul style="list-style-type: none"> Research using given websites and finding own information | | | | | | |