



Y4 design technology overview 2019-20 [Structures: textiles](#); [Mechanisms: Thames Travellers](#); [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	Responding	Designing
						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 	<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 	TERM1: Unit 4a Structures: textiles <ul style="list-style-type: none"> Develop a greater level of understanding and skill in working with textiles Model their ideas, tested appropriate fabrics and justified choices; have Decorate the product choosing from a range of decorative techniques Make accurate drawings and identified the stages of making their design criteria; have Work independently in designing and making a money container that is well finished, works well and is suitable for the identified user RE DT /ART DAY WHOLE SCHOOL: Prayer Spaces: Wire sculpturing	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"> 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 	<ul style="list-style-type: none"> Understanding history of art forms and purpose Understanding how design technology reflects a community/culture 	<ul style="list-style-type: none"> Workshops in groups / as a class Presentations to class/assemblies Class, then group/individual opportunities to create compositions 	TERM2: Unit 4b Mechanisms video clips <ul style="list-style-type: none"> Produce step-by-step plans for the production of their chosen designs Combine several types of mechanisms within their book pages Evaluate their ideas systematically and make on-going modifications Create a product that functions well and is visually effective RE ART DAY WHOLE SCHOOL: Prayer of Thanks: Plants of our Garden			
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 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 	<ul style="list-style-type: none"> 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"> Chosen piece to present to class for observing with reasons why it has been chosen and a background to piece selected 	TERM3: Unit 4c Control: electrical video clips <ul style="list-style-type: none"> Consider a wider range of specialist functions for the torch they make eg means of storage, improved reflection for the light bulb, water-proof qualities and produced a torch that is innovative, aesthetically pleasing and ergonomically sound RE ART DAY WHOLE SCHOOL: Worship: Music instrument			
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 [cutting, shaping, joining and finishing], accurately Select from/ use a wider range of materials and components, incl 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 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 DT 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 Y4 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/ 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 						