



Y4 design technology overview 2021-22

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 Creating	Responding Evaluating	Designing
Responding	<ul style="list-style-type: none"> To develop an ability to discuss observed art pieces To learn to follow guidance from a tutor (techniques, top-tips) To learn to experiment with own compositions To learn to 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 the history and origins of artists, designers, craft-makers, architects 	<ul style="list-style-type: none"> Through class teacher led presentations with children note-taking Group research on history and /or origins and of masterpieces from masters in their fields 	TERM1: Unit 4a Structures: 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"> To develop an ability to research appropriately great artists, craft makers, designers To develop an ability to explore sketch books of professional designers To learn how to make comparisons between different genres To develop a skill of investigating the historical and cultural development of design through provided opportunities 	<ul style="list-style-type: none"> Class/group tuition with reference to historical information, images 	<ul style="list-style-type: none"> 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 					
Designing/ Technical knowledge	<ul style="list-style-type: none"> To learn to keep and use a sketch book (creative journal, visual diary) to record observations To learn how to strengthen, stiffen and reinforce complex structures To learn how to use mechanical systems in their products [eg gears, pulleys, cams, levers and linkages] To learn how to use electrical systems in their products [eg series circuits incorporating switches, bulbs, buzzers and motors] To learn how to apply their understanding of computing to program, monitor and control their products To learn how to plan/ explore/ experiment with designs 	<ul style="list-style-type: none"> Class/group sketching activities and provided sources to enable discovering of a variety of sketch books from over time and globally 	<ul style="list-style-type: none"> Understanding the history of design forms and purpose for creations Understanding how design reflects a community or culture 	<ul style="list-style-type: none"> Through involvement in workshops in groups or as a class Through presentations to class/or in whole school worship sessions Through class, then group or individual opportunities to create compositions 	TERM2: Unit 4b Mechanisms			
Creating	<ul style="list-style-type: none"> To learn how to compose own composition or construction following planned design To learn how to generate, develop, model To learn how to compose in more than medium (food, textile, paper, clay, metal, wood) 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 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 	<ul style="list-style-type: none"> Class, then group opportunities for field studies and internal compositions from stimuli 	<ul style="list-style-type: none"> Understanding as to how design keeps traditions alive Understand how design in cultures is used (for example in dance, spiritual, worship, rites of passage, and in wellbeing) 					
Critically Observing/ Evaluating	<ul style="list-style-type: none"> To learn how to investigate and analyse a range of existing products To learn how to research key events and individuals in DT have helped shape the world To learn how to observe someone else's chosen design piece/other constructions To learn how to critically evaluate own composition or construction against design criteria To learn how to 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 		<ul style="list-style-type: none"> Through chosen pieces being presented to class for observation with reasons as to why they have been chosen Through discussion around the background to the selected pieces 	TERM3: Unit 4c Control: electrical			
SMSC	<ul style="list-style-type: none"> To learn to work with others of different religious, ethnic and socioeconomic backgrounds, according to given briefs wider knowledge of Y4 DT curriculum To be able to resolve conflicts and differing opinions with skill should these arise To develop an enjoyment of DT To learn to use their imagination and creativity To learn to reflect on tasks To learn to investigate and offer views on ethical issues in art studied To learn to explore and understand art from a variety of cultural backgrounds To display a willingness to explore and understand DT from a variety of cultural backgrounds 	<ul style="list-style-type: none"> Setting of research opportunities using given websites and researching finding own information Setting of opportunities and briefs that require engagement with others of differing backgrounds 						