

## Y3 design technology overview 2019-20 Control mechanisms: moving monsters; Structures: photo frames; Architectural structures: V&A

DT	Desired Skills	Approaches to	Desired	Approaches	Curricula Materials	Assessed through (T1 T2		
Activity		Developing Skills	Knowledge and	Developing		Exploring	Responding	Designing
			Understanding	Knowledge and Understanding		Creating Evaluating		
Responding	<ul> <li>Discuss observed pieces</li> <li>Follow guidance from tutor (techniques, top-tips)</li> <li>Experiment with own designs, compositions and constructions</li> <li>Communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul>	<ul> <li>Class/group tuition with technical guidance</li> </ul>	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> <li>Class teacher led presentations with children note-taking</li> <li>Group research on history/ origins etc and masterpieces from masters in their fields</li> <li>Workshops in groups / as a class</li> <li>Presentations to class/assemblies</li> <li>Class, then group/ individual opportunities to create compositions</li> </ul>	TERM1:  Unit 3c Control: mechanisms: moving monsters (link to English: traditional tales)  Develop an understanding of simple pneumatic systems relating their work in the classroom to products in the wider world  Work as part of a team to design and make a model of a monster that incorporates two or more moving parts controlled effectively by pneumatic systems, taking account of available resources  RE DT /ART DAY WHOLE SCHOOL: Prayer Spaces: Wire sculpturing  TERM2:  Unit 3d Structures: photo frames (link to art topic) video clips of examples  Consider a great range of ways of making structures stable, justified their choices when making their frames and created a frame that matches their design criteria  Consider a variety of ideas for shape, finish and appearance and will have drawn some of these before making  Evaluate their frames in relation to their design criteria RE ART DAY WHOLE SCHOOL: Prayer of Thanks: Plants of our Garden  TERM3:  Architectural structures V&A video clips/ images of masterpieces  Materials for group composition (i-Pads, collage materials, pencils/ink drawing)  Research websites for project/ visit to museum  Sketch books  RE ART DAY WHOLE SCHOOL: Worship: Music instrument	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> <li>Know about great artists, craft makers, designers, architects, engineers</li> <li>Explore sketch books of professional designers.</li> <li>Make comparisons between genres</li> <li>Understand historical and cultural development of design technology</li> </ul>	<ul> <li>Class/group tuition with reference to historical information, images</li> </ul>						
Designing/ Technical knowledge	<ul> <li>Keep sketch book (creative journal, visual diary)</li> <li>Record observations</li> <li>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>understand and use mechanical systems in their products [eg gears, pulleys, cams, levers and linkages]</li> <li>understand and use electrical systems in their products [eg series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>apply their understanding of computing to program, monitor and control their products</li> <li>Plan/ explore/ experiment with designs</li> <li>Compose own composition/construction following planned design</li> </ul>	Class/group sketching activities      Class, then group						
	<ul> <li>Generate, develop, model</li> <li>Compose in more than medium (food, textile, paper, clay, metal, wood)</li> <li>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>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>	opportunities for field studies and internal compositions from stimuli						
Critically Observing/ Evaluating	<ul> <li>Investigate and analyse a range of existing products</li> <li>understand how key events and individuals in design and technology have helped shape the world</li> <li>Observe someone else's chosen design piece/ constructions</li> <li>Critically evaluate own compositions/ construction against design criteria</li> <li>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>Chosen piece to present to class for observing with reasons why it has been chosen and a background to piece selected</li> </ul>				
SMSC	<ul> <li>Research in pairs or individually according to given briefs wider knowledge of Y3 design technology curriculum</li> <li>Enjoyment and relaxation design technology can offer</li> </ul>	Research using given websites and finding own information						