	Wortham Primary School EYFS Skills and Knowledge Progression Subject area: Design and Technology
Age 3 to 4	<ul> <li>Explore different materials freely, to develop their ideas about how to use them and what to make.</li> <li>Develop their own ideas and then decide which materials to use to express them.</li> <li>Join different materials and explore different textures.</li> <li>Create closed shapes with continuous lines and begin to use these shapes to represent objects.</li> <li>Draw with increasing complexity and detail, such as representing a face with a circle and including details.</li> <li>Use drawing to represent ideas like movement or loud noises.</li> <li>Respond to what they have heard, expressing their thoughts and feelings.</li> </ul>
Reception	<ul> <li>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</li> <li>Create collaboratively, sharing ideas, resources and skills.</li> </ul>
ELG	<ul> <li>Expressive Arts and Design - Creating with Materials</li> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</li> <li>Share their creations, explaining the process they have used;</li> </ul>

Skills and Knowledge	Wortham Primary School Skills and Knowledge Progression Subject area: Design and Technology						
Planning	experiences and research to help generate ideas. Begin to explore how products have been created. What they arefor and how they work.	eas. suggestions. W Understand how well products have been designed and created. made. Identify the materials used and consider their		Start to understand how how sustainable they ar	cross- sectional diagrams. v much products cost tomake and re. that products havebeyond their	communicate their ideas through discussion, research,annotated sketches, cross-sectional / prototypes.	
	they work. Begin to develop their ideas though talk and drawings including what tools and materials they will use. Talk about their design,how they will make it and who it is for. With support, begin to decide a suitable orderto complete tasks	Develop their ideas through drawing and modelling. Make clear designs with labe Begin to take into consider including purpose and audier Refer to the success criteria achieved. When planning, consider how making the product. Be able to explain their choic function and aesthetics of the	els whendesigning. ation their target group, nce for their product. and consider howthis will be w to order the stages of ces of materials, tools,	of their target audience Create class success / o knowledge and research and appealing products Consider the design crit view of others to improv	design criteria based on h to inform innovative, functional that are fitfor purpose. teria, their own evaluation and ve theirdesign. awings and showdifferent views of	Formulate a step-by-step plan to use as a guide, including details on the tools, equipment and materials needed. Suggest alternative methods if original plan fails. In the designing and planning stage link to maths and science.	

				Clearly, explain their design a research. Explain the process materials and processes they explain why, linkingto the fun- product.	s and know the tools, need to use and be able to ction and aesthetics of their	Clearly, explain their design and choices linked to their research and exploration. Explain the process and know the tools, materials and processes they need to use and be able to explain why. Be able to identify and discuss the strengths and areas for development in their and plan. Know how much products cost to make, how long theytake to make and their sustainability. Take this into consideration when designing their products.
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Making	Begin to use tools, with support if needed. Make their design by using appropriate techniques safely.	Begin to select tools, materials andtechniques. Explain their choice of tools and equipment inrelation to the desired purpose, skills and techniques they will be using.		With increasing confidence, select appropriatematerials, tools and techniques. Select from and use a wider range of materialsand components, according to their functional properties and aesthetic gualities also.		Confidently self - select and demonstrate the correct and safe use of appropriate tools, materials,

<ul> <li>With support, measure,mark out, cut and shape a range of materials safely.</li> <li>Begin to join, assembleand combine materials and components together using a varietyof temporary methods.</li> <li>Begin to use simple finishing techniques to improve the appearance of their product.</li> <li>Begin to build structures exploring how they can be madestronger, stiffer and more stable.</li> </ul>	<ul> <li>Work safely and accurately with a range of simple tools.</li> <li>Measure, mark out, cut, score and assemble components with accuracy.</li> <li>Choose the most appropriate techniques andmaterials to assemble, join and combine materials in order to make a product.</li> <li>Start to think about their ideas as they progress and be willing to change things if thishelps them to improve their product.</li> <li>Use finishing techniques to strengthen and improve the appearance of their product.</li> </ul>	Confidently demonstrate how to use skills in using different tools and equipment safely andaccurately to ensure a good-quality finish. Know how to measure, mark out, cut, score, shape and assemble a range of materials usingappropriate tools, equipment and techniques. Be able to join materials and combine materialsand components accurately using temporary and permanent ways. Make changes to their product as they progress to improve the quality of their product. Use finishing techniques to strengthen and improve the appearance of their product using range of equipment.	components and techniques. With growing independence measure, mark out, cut, score, shape andassemble, join and combine a range of materials using appropriate tools, equipment and techniques. Continually make adaptions in the making process to improve the assembly and qualityof the product. Understand how complex electrical circuits and components work and use these in their products. Use and explain the finishing techniquesto strengthen and improve the appearance and quality of their product.
---	---	---	---

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating	When looking at existing products explain what they like and dislike about them and why, identify what the product is, what it ismade from and who / what they have been made for.         Start to evaluate their product by discussing what works well in relation to the design criteria.         Begin to evaluate their products by identifying strengths and areas that could be improved.	Look at a range of existing they like and dislike about reasons why. Evaluate how they work ar Evaluate their own and oth design criteria, explaining	products and explain what theproducts giving relevant and where they mightbe used. hers' products against the why theyhave identified eas that could be improved and	Evaluate existing products made, consider the compo- sustainable / recyclable the disassemble a product tow how it works. Evaluate the quality of the for purpose of their product using the design/success	where they were designed and ponents,the cost and how e product is. Be able to work out how it was made and e design, manufactureand fitness ets and those made by their peers, criteria. and designers related to the	Evaluate existing products by also considering its wide impact. Critically evaluate the quality of the design, manufacture and fitness for purpose of their products and those made by their peers. Know and discuss key inventors, designers, engineers and manufactures who have developed ground- breaking products and evaluate the impact these have had on the world.
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technical Knowledge	Know how structures, including free standing structures, can be made stronger, stiffer and more stable using		ding levers, sliders, wheels and ns and understand they create	Understand that mechanic process and output. Understand and use mech linkages, cams, pulleys an	nanical systems suchas levers,	Know electrical circuits and components can be used to create functional products.

	techniques such as rolling, folding and layering.			reinforce a 3D structure.	structures andstrengthen and	Know how to program a computerto monitor the changes and controltheir products.
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Food & Nutrition	<ul> <li>Begin to understand that all food comes from plants or animals.</li> <li>Identify the five food groups from 'The Eat Well Plate' and understand we need to have a healthy balanced diet.</li> <li>Know that everyone should eat at least fiveportions of fruit and vegetables every day.</li> <li>Know how to preparefood safely and hygienically. Use techniques such as cutting, peeling and grating.</li> <li>Choose appropriate ingredients for a product and begin to explain their choices.</li> </ul>	<ul> <li>Begin to understand that food wheat and potatoes), reared and caught (fish) across the word wide).</li> <li>Know that food is processed eaten or used in cooking.</li> <li>Understand that a healthy dia and balance of different food 'The Eat Well Plate.' Explain provides to keep us healthy.</li> <li>Know that to be healthy and needed to provide the body of Prepare and cook food safely.</li> <li>Use a range of techniques sicutting, mixing and baking.</li> <li>Begin to weigh and measure accuracy (dry ingredients and safely in the safely into the safely into</li></ul>	(pigs,chickens and cattle) world (UK, Europe and into ingredientsthat can be et is made up froma variety and drink as shown in the what each food type active food and drink are energy. y and hygienically. uch as spreading,kneading, ingredients withmore	<ul> <li>their understanding ofwhat it to be healthy.</li> <li>Begin to understand that did different substances – nutrit that are needed for health.</li> <li>To know that we have sweet An understanding of how see which available.</li> <li>Understand 'seasonality'.</li> <li>To know that people have of vegetarian/vegan/allergies/in</li> <li>Begin to understand that ce other.</li> </ul>	Well Plate' and drawing upon each food groups provide us fferent food and drink contain ents,water, fibre and minerals et and savoury foods. easons may affect the food different diets ntolerances ertain foodscomplement each and hygienically prepare and atelysavoury dishes using a d.	

			Independently weigh and measure ingredientswith accuracy (time, dry ingredients and liquids).	
	Year 1	Year 2 Year 3	Year 4 Year 5	Year 6
Textiles	To explore and sort textiles (e.g., felt, velvetand cotton) identifying different colours, textures, sizes, shape, including thick and thin materials. Using a template, cut and shape fabric using scissors/snips Explore ways of joining materials, including sewing, gluing and stapling Apply decoration using beads, buttons, feathers etc. To know how to thread a needle and complete a running stitch	Change and modify threads and fabrics byknotting, fraying, fringing, pulling threads, twisting & plaiting Apply techniques to create a product Measure, cut and shape fabric usingscissors/snips To use interfacing to strengthen Create tassel/cord/plaits for decoration To confidently thread a needle and use a running stitch	Understand that there are different stitches fordifferent purposes and begin to select these. Learn how to use a cross stitch Continue to develop skills in stitching,measuring, cuttir and joining. Experiment with a range of media to overlapand layer creating interesting colours and textures and effects (Applique) Combine and apply techniques to make aproduct Measure, cut and shape fabric usingscissors/snips	Use fabrics to create 3D textile product Use a prepared pattern