

Ethelbert Road Primary school – Knowledge, Skills and understanding breakdown for Design and Technology **Upper Key stage 2**

Elements of Art & Principle of Design	Year 5	Year6	<u>Vocabulary</u>
Developing, planning and communication ideas.	<ul style="list-style-type: none"> • Can they come up with a range of ideas after they have collected information? • Do they take a user's view into account when designing? • Can they produce a detailed step by step plan? • Can they suggest some alternative plans and say what the good points and drawbacks are about each? 	<ul style="list-style-type: none"> • Can they use a range of information to inform their designs? • Can they use market research to inform plans? • Can they work within constraints? • Can they follow and refine their plan if necessary? • Can they justify their plan to someone else? • Do they consider culture and society in their designs? 	
Working with tools, equipment, materials and components to make quality products.	<ul style="list-style-type: none"> • Can they explain why their finished product is going to be of good quality? • Can they explain how their product will appeal to the audience? • Can they use a range of tools and equipment expertly? 	<ul style="list-style-type: none"> • Can they use tools and materials precisely? • Do they change the way they are working if needed? 	
Evaluating processes and products.	<ul style="list-style-type: none"> • Do they keep checking that their design is the best it can be? • Do they check whether anything could be improved? • Can they evaluate appearance and function against the original criteria? 	<ul style="list-style-type: none"> • How well do the evaluate and test their final product? • Is it fit for purpose? • What would improve it? • Would different resources have improved their product? • Would they need more or different information to make it even better? 	

Cooking and nutrition	<ul style="list-style-type: none"> • Can they describe what they do to be both hygienic and safe? • How have they presented their product well? 	<ul style="list-style-type: none"> • Can they explain how their product should be stored with reason? • Can they set out to grow their own products with a view to making their own dish taking account the time required to grow different foods? 	Healthy, sustainable, economic, grate, chop, blend, resourceful, carbon foot print, environment, locally sourced, storage, conserve, green house.
Textiles	<ul style="list-style-type: none"> • Do they think what the user would want when choosing textiles? • How have they made their product attractive and strong? • Can they make up a prototype first? • Can they use a range of joining techniques? 	<ul style="list-style-type: none"> • Have they thought about how their product could be sold? • Have they given considered thought about what would improve their product even more? 	Fabric, popper, fastening, felt, dyed, embroidery, piquet, blanket stitch, thread.
Electrical and Mechanical components	<ul style="list-style-type: none"> • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics? 	<ul style="list-style-type: none"> • Can they think of different ways in which adding a circuit would improve their product even more? 	Construct, design, annotate, compromise,
Stiff and flexible sheet materials	<ul style="list-style-type: none"> • Are their measurements accurate enough to ensure that everything is precise? • How have they ensured that their product is strong and fit for purpose? 	<ul style="list-style-type: none"> • Can they justify why they selected specific materials? • Can they work within a budget? • How have they ensured that their work is precise and accurate? • Can they hide joints so as to improve the look of their product? 	Mailable, pliable, performance
Mouldable materials	<ul style="list-style-type: none"> • Are they motivated enough to refine and improve their product? • Do they persevere through different stages of the making process? 	<ul style="list-style-type: none"> • Did they consider the use of the product when selecting materials? • Does their product meet all criteria? 	Recyclable, appropriate, retest, criteria,