

## **DESIGN TECHNOLOGY PROGRESSION MAP –**

## **DISCIPLINARY KNOWLEDGE (ways to gain knowledge)**

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	Demonstrate knowledge of contexts, users and purposes							
Designing	Ask questions about different products	Understand that some products are made for a specific person.  State what product they are designing and making  Say whether the product is for themselves or someone else	Understand that some products are created for specific purposes e.g. protection or play  Describe what their product is for  Say how their products will work  Say how to make their product suitable for their intended user Identify a purpose for what they intend to design and make.	Understand that some products are created for specific purposes e.g. protection, business or play.  Work in a range of contexts  Describe the purpose of their product  Gather information about the needs and wants of particular individuals and groups	Understand that some products are created for a specific audience e.g children and adults.  Work confidently in a range of contexts  Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose.	Understand that some products can have more than one purpose.  Understand that some products are created for specific audiences e.g. themselves, parents, market traders, gardeners and mountaineers.  Carry out research, using surveys, interviews, questionnaires and webbased resources  Indicate the design features of their products that will appeal to intended users  Explain how particular parts of their products will work	The audience and purpose are important for my product design.  Asking questions of intended users provides valuable information for a design.  Use research using surveys, interviews, questionnaires and web-based resources to develop a design specification for a range of functional products.  Identify the needs, wants, preferences and values of particular individuals and groups  Consider time, resources and costs when considering ideas.	
	Demonstrate knowledge of generating, developing, modelling and communicating ideas							
	Talk about what they have done or are going to do.  Say who their product is for.	Name materials that could be used.  Generate a simple design criterion  Create a design to meet simple design criteria using	Generate and communicate their ideas through a range of different methods including drawing and labelling parts to help to visualise how to make something  Begin to develop their design	With growing confidence generate ideas for an item, considering its purpose.  Identify a purpose and establish criteria for a successful product including appeal, function and specific	Confidently generate more than one idea, considering the audience and purpose for which they are designing. Identify the purpose and establish criteria for a successful product linked intended users.	Begin to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.  Start to generate, develop,	Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.  Generate, develop, model	
		their own experiences.  Start to suggest ideas and explain what they are going to do.	ideas through discussion and observations.  Develop, model and communicate their ideas	user.  Make increasingly accurate annotated drawings by beginning to measuring and label materials and joins	Use annotated sketches and cross-sectional diagrams to test and communicate their ideas.	model and communicate their ideas through discussion, annotated sketches, exploded diagrams, drawings from	and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes and pattern pieces	

Begin to develop their ideas	through talking, mock-ups and	clearly when designing a	different views and pattern	
through talk and drawings	drawings.	product.	pieces.	Effectively plan the order of
				their work and identify
		Start to order the main		areas where problems may
		stages of making a product,		arise.
		planning their choice of		!
		materials.		

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
	Demonstrate knowledge of planning								
	Talk about what they are going to do	Talk about the main stages and steps for making  Create templates in order to know the stages of what to make	Plan by suggesting what to do next  Choose materials according to their properties  Build mock-ups from materials to test whether the product is likely to succeed	Plan the main stages of making  Choose materials according to their properties  Develop prototypes from given resources	Order the main stages of making  Choose material according to its suitability and functional property.  Develop prototypes using a range of resources	Produce detailed lists of equipment and materials relevant to the task.  Explain their choice of materials and components according to functional properties and aesthetic qualities.  Develop a detailed prototype fit for purpose  Write a step-by-step plan, including a list of resources required.	Formulate a step-by-step plan to guide making, listing tools, equipment and components  Develop a prototype and refine as a result of evaluation  Choose materials based on their function, appeal and suitability of their properties		
			Demonstrate knov	ı vledge of practical ski	lls and techniques	required.			
	Follow procedures for	Follow procedures for safety	Follow procedures for safety	Follow procedures for safety	Follow procedures for safety	Follow procedures for safety	Follow procedures for		
<b>∞</b>	safety and hygiene.	and hygiene.	and hygiene.	and hygiene.	and hygiene.	and hygiene.	safety and hygiene.		
Making	Use a range of materials including food, textile and construction.  Use a variety of tools and techniques.  Explore using construction kits.	Select the appropriate tool, utensil or equipment for a simple practical task.  Explore using tools safely. e.g. scissors and a hole punch  Glue, sellotape and stitch to combine materials statically.  Select and use a range of materials, beginning to explain their choices.	Select the appropriate tools, equipment, skills and techniques for a task and explain their choice.  Explore how to assemble, join and combine materials in different ways to make a product.  Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.	Measure, mark out, cut, and assemble some key components with more accuracy.  Measure to the nearest ½ cm  Choose the most appropriate way to assemble, join and combine materials.  Select and use finishing techniques suitable for the product they are creating.	Choose from a range of materials, showing an understanding of their different characteristics including ingredients, construction and electrical components.  Measure, mark out, cut, score, shape, combine and assemble most of the components with accuracy.  Measure to the nearest mm.	Select and combine materials with precision.  Re-measuring with a ruler will ensure accuracy.  With support, identify components that need to be re-measured and re-cut to ensure accuracy.  Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment.	Choose the best materials for a task, showing an understanding of their working characteristics.  Independently identify components that need to be re-measured and re-cut to ensure accuracy.  Use finishing and decorative techniques to strengthen and improve the appearance of their product using a range of equipment		
			With help measure and cut with some accuracy.  Measure to the nearest cm.  Use simple finishing techniques suitable for the products they are creating.		Carefully follow their plan in order to assemble, join and combine their materials.		including ICT.		

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	Demonstrate knowledge of how to evaluate own idea and product							
50	Share their creations and explain what they have used.	Evaluate their ideas throughout and finished products against design criteria, including intended user and purpose	Explain how closely their finished products meet their design criteria and say what they could do better in the future.	Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account.  Test their product against the original design criteria and with the intended user.	Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements.  Test and evaluate their own products against design criteria and the intended user and purpose.	Test and evaluate products against a detailed design specification and make adaptations as they develop the product.  Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. Consider the views of others to improve their work	Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.  Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.  Test the product to demonstrate the intended purpose	
atir			Demonstrate knowle	edge of how to evalua	te existing products			
Evaluating	Talk about what they like and dislike about a product	Describe the similarities and differences between two products.  Name and explore a range of	Compare different brands of the same product and explain their similarities and differences.	Explain how an existing product benefits the user.  Disassemble an existing product to be able to identify	Create and complete a comparison table to compare two or more products.	Explain how the design of a product has been influenced by the culture or society in which it was designed or made.	Create a detailed comparative report about two or more products or inventions.	
		everyday products and describe how they are used.	Identify the strengths and weaknesses of a product.	how it works				
		Describe why a product is important.	Explain how an everyday product could be improved.					
	Demonstrate knowledge of how to evaluate key events and individuals							
				Explain why a designer or inventor is important.	Explain how and why a significant designer or inventor shaped the world.	Describe the social influence of a significant designer or inventor.	Describe, interpret and explain the work, ideas and practices of some significant	
				Explain the similarities and difference between the work of two designers.	Name the individuals in design and technology that have impacted us.		designers and architects, taking account of the influence of the different historical, cultural and social	
				Describe how key events in design and technology have shaped the world.	,		contexts in which they worked	