Design and Technology – Skills to be met

Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Background Research – Lesson 1 Exploring context and existing products	Understand what a product is and who it is for Understand how a product works and how it is used Identify where you might find this product	Understand what a product is and who it is for Understand how a product works and how it is used Identify where you might find this product Identify the materials used to make the product Express an opinion about the product	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from Evaluate the product on design and use Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from Evaluate the product on design and use Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from and how environmentally friendly the materials are Evaluate the product on design, appearance and use Identify the cost to make the product Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from and how environmentally friendly the materials are Evaluate the product on design, appearance and use Identify the cost to make the product and whether it has any other purposes eg. Leading innovation of the time, trend setting Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product
Design Criteria – Lesson 2 Understanding their intended users and their own product	Explain what product they will be designing and making Explain who their product will be used by Describe what their product will be used for	Use own experiences and existing products to develop ideas Explain what product they will be designing and making Explain who their product will be used by Describe what their	Brain Builders: Understand and gather information about what a particular group or people want from a product Describe the purpose of their product and how it will work Identify design features that will appeal to	Brain Builders: Understand and gather information about what a particular group or people want from a product Describe the purpose of their product Identify design features that will appeal to intended users	Brain Builders: Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc Describe the purpose of their product Identify design features that will appeal to	Brain Builders: Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc Describe the purpose of their product Identify design features that will appeal to

		product will be used for and how it will work Explain why their product is suitable for the intended user	intended users Explain how parts of their product works Generate realistic ideas that meet needs of user	Explain how parts of their product works Develop their own design criteria and use for planning ideas Generate realistic ideas that meet needs of user and take into account availability of resources	intended users Explain how parts of their product will work Develop their own design criteria and use for planning ideas Generate innovative ideas that meet needs of user and take into account availability of resources	intended users Explain how parts of their product will work Create a design description for their product Highlight the impact of time, resources and cost within their design ideas Generate innovative ideas that meet needs of user
Planning – Lesson 3	Discuss what their steps for making could be	Discuss what their steps for making could be	Share and discuss ideas with others	Share and discuss ideas with others	Share and discuss ideas with others	Share and discuss ideas with others
Communicating ideas and creating prototypes for	Represent ideas through talking and drawing	Represent ideas through talking, drawing and computing – (where	Order the main stages of making	Order the main stages of making	Record a step by step plan for making	Record a step by step plan for making
product		appropriate) Choose materials to use based on suitability of	Choose materials to use based on suitability of their properties	Choose materials to use based on suitability of their properties	Produce lists for the tools, equipment and materials they will be using	Produce lists for the tools, equipment and materials they will be using
		their properties Create templates/pattern pieces and explore materials whilst	Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate)	Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate)	Choose materials to use based on suitability of their properties and aesthetic qualities	Choose materials to use based on suitability of their properties and aesthetic qualities
		developing ideas	Create pattern pieces and prototypes	Create pattern pieces and prototypes	Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate)	Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate)
					Create pattern pieces and prototypes	Create pattern pieces and prototypes
	<u>Across KS1:</u> Use materials -	Across KS1: Use materials -	<u>Across KS2:</u> Use materials -	<u>Across KS2:</u> Use materials -	<u>Across KS2:</u> Use materials -	<u>Across KS2:</u> Use materials -

	construction materials and	construction materials and	construction materials and	construction materials and	construction materials and	construction materials and
<u> Making –</u>	kits, textiles, food and	kits, textiles, food and	kits, textiles, food,	kits, textiles, food,	kits, textiles, food,	kits, textiles, food,
<u>Lesson 4-5</u>	mechanical components	mechanical components	mechanical and electrical	mechanical and electrical	mechanical and electrical	mechanical and electrical
			components	components	components	components
Selecting the tools and	Choose suitable tools for	Choose suitable tools for				
applying the practical skills	making	making whilst explaining	Choose suitable tools for			
and techniques		why they should be used	making whilst explaining	making whilst explaining	making whilst explaining	making whilst explaining
	Follow safety and food		why they should be used			
	hygiene procedures	Follow safety and food	Use design criteria whilst			
		hygiene procedures	making	making	making	making
	Measure, mark, cut and					
	shape materials and	Measure, mark, cut and	Follow safety and food			
	components	shape materials and components	hygiene procedures	hygiene procedures	hygiene procedures	hygiene procedures
	Join, assemble and		Measure, mark, cut and			
	combine materials and	Join, assemble and	shape materials and	shape materials and	shape materials and	shape materials and
	components	combine materials and	components with some	components with some	components accurately	components accurately
		components	accuracy	accuracy		
					Join, assemble and	Join, assemble and
		Use finishing techniques,	Join, assemble and	Join, assemble and	combine materials and	combine materials and
		including skills learnt in Art	combine materials and	combine materials and	components accurately	components accurately
			components with some	components with some		
			accuracy	accuracy	Demonstrate problem	Demonstrate problem
					solving skills when	solving skills when
			Use finishing techniques,	Use finishing techniques,	encountering a mistake or	encountering a mistake or
			including skills learnt in Art	including skills learnt in Art	practical problem	practical problem
			with some accuracy	with some accuracy		
					Use finishing techniques,	Use finishing techniques
					including skills learnt in Art	that involve a number of
					accurately	steps, including skills
						learnt in Art accurately
	Talk about their design	Talk about their design	Use design criteria to			
Evaluation –	ideas and what they have	ideas and what they have	evaluate product –	evaluate product –	evaluate product –	evaluate product – looking
Lesson 6	made	made	identifying both strengths	identifying both strengths	identifying both strengths	at quality of end product
2033011 0			and areas for development	and areas for development	and areas for development	and design and whether it
Referring to planning and	Make simple judgements	Make simple judgements	and a cas is acreiopinelle	and a cas is acreiopinent	and a cas is a development	is fit for its intended
initial ideas in evaluating	of how the product met	of how the product met	Consider the views of	Consider the views of	Consider the views of	purpose
their product	their design ideas	their design ideas	others, including intended	others, including intended	others, including intended	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	0		user, whilst evaluating	user, whilst evaluating	user, whilst evaluating	Consider the views of
		Suggest how their product	product	product	product	others, including intended
		could be improved				user, whilst evaluating
		•				product

	T			
	Across KS1:	Lower KS2:	Upper KS2:	
Teaching cooking and	ACTOSS KS1:	Lower K32:	Opper K32:	
nutrition	Understand that food	Understand which foods	Understand which foods	
<u>natificin</u>	comes from plants or	are reared, caught, or	are reared, caught, or	
Understanding food and	animals	grown and that this	grown and that this	
food preparation	ailillais	happens in the UK and	happens in the UK and	
1000 preparation	Understand that food has	across the globe	across the globe	
	to be farmed, caught, or	across the globe	across the globe	
	grown	Understand that recipes	Understand that the	
	S.O.W.I	can be changed by adding	seasons can affect food	
		or taking away ingredients	produce	
		or taking away ingreaterits	produce	
		Understand that the	Understand that	
		seasons can affect food	sometimes raw ingredients	
		produce	need to be processed	
		p. oddoc	before they can be used in	
			cooking (eg. De-feathering	
			a chicken)	
			Understand that recipes	
			can be adapted to change	
			the appearance, taste and	
			aroma of a dish	
	Across KS1:	Lower KS2:	Upper KS2:	
Teaching cooking and				
<u>nutrition</u>	Sort foods into the 5	Sort foods into the 5	Sort foods into the 5	
	groups using The Eatwell	groups using The Eatwell	groups using The Eatwell	
Food preparation, cooking	Plate	Plate and identify that this	Plate and identify that this	
and nutrition		makes up a healthy diet	makes up a healthy diet	
	Identify that people should			
	eat at least 5 portions of	Identify that food and	Identify that food and	
	fruit and vegetables a day	drink are needed to	drink provide certain	
		provide energy for a	nutritional and health	
	Prepare simple dishes	healthy and active lifestyle	benefits which support a	
	hygienically and safely		healthy lifestyle	
	without a heat source	Identify that people should		
		eat at least 5 portions of	Identify that people should	
	Use cooking techniques	fruit and vegetables a day	eat at least 5 portions of	
	such as: cutting, peeling		fruit and vegetables a day	
	and grating	Prepare simple dishes		

hygienically and safely, where needed with a heat source	Prepare simple dishes hygienically and safely, where needed with a heat
Use cooking techniques such as: chopping, peeling, grating slicing, mixing, spreading, kneading and baking	source Use cooking techniques such as: chopping, peeling, grating slicing, mixing, spreading, kneading and
, Samuel	baking