



	Design	Make	Evaluate
EYFS	 Select appropriate resources Use gestures, talking and arrangements of materials and components to show design Use language of designing and making (join, build, shape, longer, shorter, heavier) 	 Construct with a purpose, using a variety of resources Use simple tools and techniques Build/construct with a wide range of objects Select tools and techniques to shape, assemble and join Replicate structures with materials/components Discuss how to make an activity safe and hygienic Record experiences by drawing, writing, voice recording Understand different media can combine for a purpose 	 Adapt work if necessary Dismantle, examine, talk about existing objects/structures Consider and manage some risks Practise some appropriate safety measures independently Talk about how things work Look at similarities and differences between existing objects / materials / tools Show an interest in technological toys Describe textures
Year 1	 Have own ideas Explain what I want to do Explain what my product is for and how it will work Use pictures and words to plan my ideas Design a product for myself following design criteria Research similar existing products 	 Explain what I'm making and why Consider what I need to do next Select tools/equipment to cut, shape, join, finish and explain choices Measure, mark out, cut and shape with support Chose suitable materials and explain choices Try to use finishing techniques to make products look good Work in a safe and hygienic manner 	 talk about my work, linking it to what I was asked to do talk about existing products considering: use, materials, how they work, audience, where they might be used talk about existing products, and say what is and isn't good talk about things that other people have made begin to talk about what could make product better
Year 2	 Have own ideas and plan what to do next Explain what I want to do and describe how I may do it Explain purpose of product, how it will work and how it is suitable for the user Describe design using pictures, words, models, diagrams, being to use ICT Design products for myself and others following a design criteria 	 Explain what I am making and why it fits the purpose Make suggestions as to what I need to do next Join materials/components together in different ways Measure, mark out, cut and shape materials and components with support Describe which tools I'm using and why Choose suitable materials and explain choices Using finishing techniques to make products look good Work safely and hygienically 	 describe what went well, thinking about design criteria talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion evaluate how good existing products are talk about what I would do differently if I were to do it again and wh
Year 3	 Begin to research others needs Show design meets a range of requirements Describe purpose of products 	 Select suitable tools/equipment, explain choices; begin to use them accurately Select appropriate materials fit for purpose 	 look at design criteria while designing and making use design criteria to evaluate finished product





Steen Primary			
Year 4	 Follow a given design criteria Have at least one idea about how to create a product Create a plan which shows order, equipment and tools Describe a design using an accurately labelled sketch and words Make design decisions Explain how my product will work Make a prototype Begin to use computers to show design Use research for design ideas Show design meets a range of requirements and is fit for purpose Begin to create own design criteria Have at least one idea about how to create product and suggest improvements for design Produce a plan and explain it to others Include an annotated sketch Make and explain design decisions considering availability of resources Make a prototype Explain how my product will work Begin to use computers to show design availability of resources Make a prototype 	 Work through plan in order Consider how good product will be Begin to measure, mark out, cut and shape materials/components with some accuracy Begin to assemble, join and combine materials and components with some accuracy Begin to apply finishing techniques with some accuracy Select suitable tools/equipment, explain choices in relation to required techniques and use them accurately Select appropriate materials fit for purpose; explain their choices Work through plan in order Realise if product is going to be good quality Begin to measure, mark out, cut and shape materials/components with some accuracy Assemble, join and combine materials and components with some accuracy Begin to apply finishing techniques with some accuracy 	 say what I would change to make design better begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose begin to understand by whom, when and where products were designed learn about some inventors/designers/ engineers/chefs/ manufacturers of groundbreaking products refer to design criteria while designing and making use criteria to evaluate product begin to explain how I could improve original design evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose discuss by whom, when and where products were designed research whether products can be recycled or reused
Year 5	 Use internet and questionnaires for research and design ideas Take a users view into account when designing Begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose Create own design criteria Have a range of ideas Produce a logical, realistic plan and explain it to others Use cross-sectional planning and annotated sketches Make design decision considering time and resources Clearly explain how parts f the product will work Model and refine design ideas by making prototypes and using pattern pieces Use computer-aided designs 	 Use selected tools/equipment with good level of precision Produce suitable list of tools, equipment/material needed Select most appropriate materials, fit for purpose; explain choices, consideration functionality Create and follow detailed step by step plan Explain how product will appeal to an audience Mainly accurately measure, mark out, cut and shape materials/components Mainly accurately apply a range of finishing techniques Use techniques that involve a small number of steps Begin to be resourceful with practical problems 	 know about some inventors/designers/ engineers/chefs/manufacturers of ground- breaking products evaluate quality of design while designing and making evaluate ideas and finished product against specification, considering purpose and appearance. Test and evaluate final product evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose begin to evaluate how much products cost to make and how innovative they are research how sustainable materials are talk about some key inventors/designers/ engineers/ chefs/manufacturers of groundbreaking products





Year 6	 Draw on market research to inform design Use research of users individual needs, wants, requirements for design Identify features of design that will appeal to the intended user Create own design criteria and specification Come up with innovative design Follow and refine a logical plan Use annotated sketches and cross-sectional planning Make design decisions considering resources and cost Clearly explain how parts of the design will work and how they are fit for purpose Independently model and refine design ideas by making prototypes and using pattern pieces Use computer-aided designs 	 Use selected tools and equipment precisely Produce suitable list of tools, equipment/material needed considering constraints Select most appropriate materials, fit for purpose; explain choices, consideration functionality and aesthetics Create, follow and adapt detailed step by step plans Explain how product will appeal to an audience, make changes to improve quality Accurately measure, mark out, cut and shape materials/components Accurately assemble, join and combine materials/components Accurately apply a range of finishing techniques use techniques that involve a small number of steps 	 evaluate quality of design while designing and making; is it fit for purpose? keep checking design is best it can be. evaluate ideas and finished product against specification, stating if it's fit for purpose test and evaluate final product; explain what would improve it and the effect different resources may have had do thorough evaluations of existing products considering; how well they've been made, materials, whether they work, how they've been made, fit for purpose evaluate how much products cost to make and how innovative they are research and discuss how sustainable material are consider the impact of products beyond their intended purpose discuss some key inventors/designers/
		Begin to be resourceful with practical problems	engineers/ chefs/manufacturers of groundbreaking products





	Structures	Mechanisms	Textiles	Food and nutrition	Electrical systems
Nursery	Join materials using glue			Pull – e.g. hull fruit, pick grapes from vines Shape foods by hand Mix – combine ingredients Measure – count ingredients Cut out – ingredients with a cutter Tear Cut out – ingredients	
Reception	Join materials using glue			Cut with a butter knifeCrush with a potato masher or forkPeel by handShape foods with a rolling pinSpoon ingredients between containersMeasure using a spoon and cupsCut out – ingredients with a cutterCut with a butter knife	
Year 1	Suggest ways to make materials like paper or card stronger – using rolling or folding. Join materials using glue stick, PVA, and cello tape, masking tape	Begin to use levers, sliders and pivots		Spread – soft ingredients Shape- with accuracy for a desired effect Mix/stir – knead dough Measure – using a spoon and cups Cut with a table knife Grate soft foods (adult support) Snip with scissors (adult support)	
Year 2		Begin to understand how to use wheels and axles	Measure textiles	Juice – use a hand juicer to extract juice	





Sen Primari		-			
			Join textiles together	Peel – with a swivel	
				peeler (adult support)	
			Carefully cut textiles to	Mix/stir – whisk using a	
			make accurate pieces	fork	
				Spoon – into different	
			Explain choices of textiles	containers minimal	
				spillage	
			Understand that a 3D	Measure – using simple	
			textile structure can be	fractions	
			made from 2 identical	Cut with a table knife	
			fabric shapes	Snip with scissors (adult	
				support)	
				Thread – onto cocktail or	
				kebab sticks	
Year 3	Measure carefully to		Measure textiles	Spread – evenly over	
	avoid mistakes			food	
			Join textiles together in	Shape and mould –	
	Work accurately to make		different ways	visually appealing	
	cuts and holes			Spoon – use 2 spoons to	
			Carefully cut textiles to	transfer ingredients	
	Join materials using glue		make accurate pieces.	Grate soft foods (adult	
	stick, PVA, and cello			support)	
	tape, masking tape		Explain choices of textiles	Snip with scissors (adult	
			considering appearance	support)	
			and functionality	Cut – use a vegetable	
				knife for medium	
			Understand that a 3D	resistance foods	
			textile structure can be		
			made from 2 identical		
			fabric shapes		
Year 4		Use levers and linkages to		Press – use a garlic press	Use a number of
		create movement		Peel – with a swivel	components in a circuit
				peeler, create food	
				ribbons (adult support)	Program a computer to
				Shape and mould –	control product
				visually appealing	
				Whisk – use a hand	
				mixing	
				Grate firmer foods (adult	





Year 5	Measure carefully to avoid mistakes Reinforce and strengthen a 3D frame Use triangulation to strengthen a structure Use bench hooks, clamps, junior hacksaws, squared sectioned wood, glue gun (used by adult) and sandpaper	Begin to use circuits to create movement through a motor and a pulley		Cut – use a vegetable knife for medium resistance foods (cucumber) Measure – use a measure jug and digital scales Cut out – placing the cutter in a suitable position to avoid waste Sift Shape and mould – visually appealing Mix/stir – rub ingredients together	
Year 6			Think about users wants/needs and aesthetics when choosing textiles Make product attractive and strong Make a prototype Use a rage of joining techniques Think about how product might be sold Think carefully about what would improve the product.	Mix/stir – rub ingredients together, fold ingredients together Measure – use a measure jug and digital scales Spoon – use wooden spoons Cut out – placing the cutter in a suitable position to avoid waste Sift Spread – evenly over food	Use different types of circuit in product Think of ways in which adding a circuit would improve product Program a computer to monitor changes in environment and control product