

's excellere	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
National	Safely use and explore		functional, appealing			to inform the design of ir			
Curriculum/	a variety of materials,		elves and other users		appealing products that are fit for purpose, aimed at particular individuals or groups.				
Early Years	tools and techniques,	based on design cri		2. Generate, develop, model and communicate their ideas through discussion, annotated					
Outcomes	experimenting with	2. Generate, develop,	model and	sketches, cross	s-sectional and exploded o	liagrams, prototypes, patt	ern pieces and		
	colour, design,	communicate their	ideas through talking,	computer-aide	d design.				
Pupils should	texture, form and	drawing, templates	, mock-ups and, where	Select from an	d use a wider range of too	ols and equipment to perfo	orm practical tasks [for		
be taught:	function.	appropriate, inform	nation and		ng, shaping, joining and fir				
		communication tec				terials and components, i	_		
			e a range of tools and	materials, text	iles and ingredients, accor	ding to their functional pr	operties and aesthetic		
		1	rm practical tasks [for	qualities.					
		example, cutting, sl	naping, joining and	_	d analyse a range of existing	- ·			
		finishing].			-	t their own design criteria	and consider the views		
		4. Select from and use	_		prove their work.				
		materials and comp			w key events and individu	uals in design and technolo	ogy nave neiped snape		
		construction mater		the world.					
		characteristics.	ingredients, according to their		Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.				
					9. Understand and use mechanical systems in their products [for example, gears, pulleys,				
		products.		cams, levers and linkages].					
		<u>'</u>	and products against	-	<u> </u>	their products [for exam	ple, series circuits		
		design criteria.		incorporating switches, bulbs, buzzers and motors].					
		7. Build structures, ex	7. Build structures, exploring how they can be made stronger, stiffer and more stable.		11. Apply their understanding of computing to program, monitor and control their products.				
		made stronger, stif			12. Understand and apply the principles of a healthy and varied diet.				
		8. Explore and use mechanisms [for example,		13. Prepare and cook a variety of predominantly savoury dishes using a range of cooking					
		levers, sliders, whe	levers, sliders, wheels and axles], in their		techniques.				
		products.		14. Understand seasonality, and know where and how a variety of ingredients are grown,					
		9. Use the basic princi	· · · · · · · · · · · · · · · · · · ·	reared, caught	and processed.				
		varied diet to prepa							
		10. Understand where							
	l Hannahari I	Developed 1111		r, children should be able		Manh and I	Manh and I		
Generating	Use what they have	Develop ideas within a	Developing within a	Work confidently	Work confidently	Work confidently	Work confidently		
and	learnt about media and materials in	range of contexts, such as imaginary,	range of contexts, such as imaginary,	within a range of contexts, such as the	within a range of contexts, such as the	within a range of contexts, such as the	within a range of contexts, such as the		
developing the skills of	original ways, thinking	story-based, home,	story-based, home,	home, school and	home, school, leisure	home, school, leisure,	home, school, leisure,		
creative,	about uses and	school, gardens,	school, gardens,	leisure.	and culture	culture and	culture, enterprise,		
technical and	purposes.	playgrounds and the	playgrounds, local	leisure.	and culture	enterprise,	industry and the wider		
practical	purposes.	local community	community, industry	Show that their design	Explain how particular	citerprise,	environment		
expertise.	Represent their own		and the wider	meets a range of	parts of their products	Describe the purpose			
•	ideas, thoughts and		environment.	requirements?	work.	of their products.	Indicate the design		
	feelings through			·		·	features of their		
		•	•		•	•	•		

design and	State what products	Describe what their	Begin to put together	Gather information	Begin to carry out	products that will
technology.	they are designing and	products are for and	a step-by-step plan	about the needs and	research, using	appeal to intended
	making and why.	how they will work.	which shows the	wants of particular	surveys, interviews,	users and how they
			order and also what	individuals and groups	questionnaires and	will meet their needs.
	Say whether their	Use simple design	equipment and tools	and use these to	web-based resources	
	products are for	criteria to help	they need?	inform their ideas.	to come up with a	Begin to identify the
	themselves or other	develop their ideas.			range of ideas.	needs, wants,
	users.		Indicate the design	Produce a step-by		preferences and
		Use knowledge of	features of their	step plan	Begin to identify the	values of particular
	Generate some of	existing products to	products that will		needs and wants.	individuals and groups.
	their own ideas by	help come up with	appeal to intended	Develop their own		
	drawing on their own	ideas and explain why	users and how	design criteria and use	Produce a detailed	Carry out research,
	experiences. Develop	their products are	realistic their plans	these to inform their	step-by-step plan	using surveys,
	and communicate	suitable for the	are?	ideas.		interviews,
	ideas by talking and	intended users.			Share and clarify ideas	questionnaires and
	drawing.		Begin to describe their	Model their ideas	through discussion.	web-based resources.
		Choose the best tools	design using an	using prototypes and	Also suggest some	
		and materials and give	accurately labelled	pattern pieces.	alternative plans and	Develop a simple
		reasons why these are	sketch, cross-sectional		say what the good	design specification to
		best	drawing or exploded	Use annotated	points and drawbacks	guide their thinking.
			diagram	sketches, cross-	are about each	
		Describe their design		sectional drawings or		Model their ideas
		by using pictures,		exploded diagrams to	Use annotated	using prototypes and
		diagrams, models and		develop and	sketches, cross-	pattern pieces.
		words. (Plan by		communicate their	sectional drawings or	Use computer-aided
		suggesting what to do		ideas.	exploded diagrams to	design to develop and
		next).			develop and	communicate their
				Suggest some	communicate their	ideas.
				improvements and say	ideas.	
				what was good and		Generate innovative
				not so good about	Use computer-aided	ideas, drawing on
				their original design	design to develop and communicate their	research.
				Make design decisions		Make decign decisions
				that take account of	ideas.	Make design decisions,
				that take account of the availability of		taking account of constraints such as
				•		
				resources.		time, resources and
						cost.

Building and	Show good co-	With support, select	Select from a range of	Select tools and	Explain their choice of	Select tools and	Select tools and
applying a	ordination in large and	from a range of tools	tools and equipment,	equipment suitable	tools and equipment	equipment suitable	equipment suitable for
repertoire of	small movements.	and equipment,	explaining their	for the task.	in relation to the skills	for the task.	the task.
knowledge	Sitiali illovellielies.	explaining their	choices.	TOT THE TASK.	and techniques they	TOT CITE CASK.	the task.
and skills to	Handle equipment	choices.	choices.	Follow procedures for	will be using.	Explain their choice of	Explain their choice of
make	and tools effectively.	choices.	Select from a range of	safety and hygiene.	will be dailig.	tools and equipment	tools and equipment
products	and tools chectively.	With support, select	materials and	Sarcty and myglene.	Explain their choice of	in relation to the skills	in relation to the skills
products	Safely use and explore	from a range of	components according	Use a wide range of	materials and	and techniques they	and techniques they
	a variety of materials,	materials and	to their	materials and	components according	will be using.	will be using.
	tools and techniques,	components according	characteristics.	components, including	to functional	Will be dailig.	Will be dailig.
	experimenting with	to their	characteristics.	construction materials	properties and	Select materials and	Explain their choice of
	colour, design,	characteristics.	Follow procedures for	and kits, textiles, food	aesthetic qualities.	components suitable	materials and
	texture, form and	criaracteristics.	safety and hygiene.	ingredients,	destrictio quanties.	for the task. Produce	components according
	function.	Follow procedures for		mechanical	Follow procedures for	appropriate lists of	to functional
		safety and hygiene.	Use a range of	components and	safety and hygiene.	tools, equipment and	properties and
			materials and	electrical	70 -	materials that they	aesthetic qualities.
		Use a range of	components, including	components.	Use a wide range of	need.	·
		materials and	construction materials	·	materials and		Produce appropriate
		components, including	and kits, textiles, food	Begin to measure,	components, including	Follow procedures for	lists of tools,
		construction materials	ingredients and	mark out, cut and	construction materials	safety and hygiene.	equipment and
		and kits, textiles, food	mechanical	shape materials and	and kits, textiles, food		materials that they
		ingredients and	components.	components with	ingredients,	Use a wide range of	need.
		mechanical		some accuracy.	mechanical	materials and	
		components.	Measure, mark out,		components and	components, including	Formulate step-by-
			cut and shape	Begin to assemble,	electrical components.	construction materials	step plans as a guide
		With support,	materials and	join and combine		and kits, textiles, food	to making.
		measure, mark out,	components.	materials and	Measure, mark out,	ingredients,	
		cut, shape and join		components with	cut and shape	mechanical	Follow procedures for
		materials and	Assemble, join and	some accuracy	materials and	components and	safety and hygiene.
		components	combine materials	demonstrating	components with	electrical components.	
		developing	and components	perseverance and	some accuracy.		Use a wide range of
		perseverance and	developing .	adaptability when		Accurately measure,	materials and
		adaptability when	perseverance and	mistakes are made.	Assemble, join and	mark out, cut and	components, including
		mistakes are made.	adaptability when		combine materials	shape materials and	construction materials
			mistakes are made.	Apply a range of	and components with	components.	and kits, textiles, food
			AACAIn accounts to	finishing techniques,	some accuracy	A	ingredients,
			With support use	including those from	demonstrating	Accurately assemble,	mechanical
			finishing techniques,	art and design.	perseverance and	join and combine	components and
			including those from		adaptability when	materials and	electrical components.
			art and design.		mistakes are made.	components	
						demonstrating	

					Refer to their design	perseverance and	Accurately measure,
					criteria as they design	adaptability when	mark out, cut and
					and make. Apply a	mistakes are made.	shape materials and
					range of finishing		components.
					techniques, including	Accurately apply a	
					those from art and	range of finishing	Accurately assemble,
					design, with some	techniques, including	join and combine
					accuracy.	those from art and	materials and
						design.	components
							demonstrating
							perseverance and
							adaptability when
							mistakes are made.
							Accurately apply a
							range of finishing
							techniques, including
							those from art and
							design.
							Use techniques that
							involve a number of
							steps. Demonstrate
							resourcefulness when
							tackling practical
							problems.
Evaluating	Express themselves	Talk about their	Talk about their	Identify the strengths	Identify the strengths	Identify the strengths	Identify the strengths
Skills of	effectively.	design ideas and what	design ideas and what	and areas for	and areas for	and areas for	and areas for
Judgement		they are making	they are making and	development in their	development in their	development in their	development in their
and	Develop their own		comment on things	ideas and products	ideas and products	ideas and products	ideas and products
Evaluation	narratives and	Make simple	others have done.	and suggest	and suggest	and suggest	and suggest
	explanations by	judgements about		improvements	improvements	improvements	improvements
	connecting ideas or	their products and	Make judgements	throughout the	throughout the	throughout the	throughout the
	events.	ideas against design	about their products	process.	process.	process.	process.
		criteria.	and ideas against design criteria and	Begin to consider the	Consider the views of	Consider the views of	Consider the views of
		Begin to suggest how	suggest	views	others, including	others, including	others, including
		their products could	improvements.	of others, including	intended users, to	intended users, to	intended users, to
		be improved.	improvements.	intended users, to	improve their work.	improve their work.	improve their work.
		25 1110101001	Evaluate existing	improve their work.	prove then work	prove then work	prove their work.
			products considering:	p. o to allon work			
			1 1	I			

	Begin to evaluate	*what products are,	With support, use	Use their design	Begin to critically	Critically evaluate the
	existing products	*who products are	their design criteria to	criteria to evaluate	evaluate the quality of	quality of the design,
	considering:	for,	evaluate their	their completed	the design,	manufacture and
	*what products are,	*what products are	completed products	products.	manufacture and	fitness for purpose of
	*who products are	for,	and suggest		fitness for purpose of	their products as they
	for,	*how products are	improvements	Evaluate existing	their products as they	design and make.
	*what products are	used,		products considering:	design and make.	
	for,	*where products	Begin to evaluate	*how well products		Evaluate their ideas
	*how products are	might be used,	existing products	have been designed,	Begin to evaluate their	and products against
	used,	*what materials	considering:	*how well products	ideas and products	their original design
	*where products	products are made	*how well products	have been made,	against their original	specification.
	might be used,	from.	have been designed,	*why materials have	design specification.	
	*what materials		*how well products	been chosen,		Investigate and
	products are made		have been made,	*what methods of	Investigate and	analyse existing
	from.		*why materials have	construction have	analyse existing	products considering:
			been chosen,	been used,	products considering:	*how well products
			*what methods of	*how well products	*how well products	have been designed,
			construction have	work,	have been designed,	*how well products
			been used,	*how well products	*how well products	have been made,
			*how well products	achieve their	have been made,	*why materials have
			work,	purposes,	*why materials have	been chosen,
			*how well products	*how well products	been chosen,	*what methods of
			achieve their	meet user needs and	*what methods of	construction have
			purposes,	wants,	construction have	been used,
			*how well products	*who designed and	been used,	*how well products
			meet user needs and	made the products,	*how well products	work,
			wants,	*where products were	work,	*how well products
			*who designed and	designed and made,	*how well products	achieve their
			made the products,	*when products were	achieve their	purposes,
			*where products were	designed and made,	purposes,	*how well products
			designed and made,	*whether products	*how well products	meet user needs and
			*when products were	can be recycled or	meet user needs and	wants,
			designed and made,	reused.	wants,	*how much products
			*whether products		*how much products	cost to make,
			can be recycled or		cost to make,	*how innovative
			reused.		*how innovative	products are,
					products are,	*how sustainable the
					*how sustainable the	materials in products
					materials in products	are
					are	*what impact
						products have beyond

					*la a t :a a a a t	Ala ai u i u ka u al a al
					*what impact	their intended
					products have beyond	purpose.
					their intended	
					purpose.	
Knowledge	Recognise and	Recognise and	Describe how	Describe how	Describe how	Describe how
and	describe basic	construct basic	materials and	materials and	materials,	materials, components
understanding	structures and name a	structures and use a	components are	components are	components and	and computing
Acquiring and	range of materials and	range of materials and	chosen and applied to	chosen and applied to	computing programs	programs are chosen
applying	ingredients.	ingredients.	a specific purpose.	a specific purpose.	are chosen and	and applied to a
knowledge to					applied to a specific	specific purpose
inform	Name some of the	Describe the	Demonstrate, how	Demonstrate an	purpose.	
progress	tools, techniques and	materials,	tools they have	understanding and		Demonstrate an
	their essential	components,	chosen to work with	use of mechanical and	Demonstrate an	understanding and use
	purpose.	techniques and	should be used	electrical systems	understanding and	of mechanical and
		processes they have	effectively and with		use of mechanical and	electrical systems
	Name significant	used, using an	safety	Demonstrate, how	electrical systems	
	individuals and	appropriate		tools they have		Describe the processes
	companies that have	vocabulary (for	Name and describe	chosen to work with	Demonstrate, how	they are using and
	impacted the design	instance, they know	how and why	should be used	tools they have	how they hope to
	and technology	the names of the	significant individuals	effectively and with	chosen to work with	achieve high quality
	industry.	tools/materials they	and companies have	safety	should be used	outcomes
		use)	impacted the design		effectively and with	
			and technology	Name and describe	safety	Demonstrate, how
		Name significant	industry.	how and why		tools they have chosen
		individuals and		significant individuals	Name and describe	to work with should be
		companies that have		and companies have	how and why	used effectively and
		impacted the design		impacted the design	significant individuals	with safety
		and technology		and technology	and companies have	
		industry.		industry.	impacted the design	Name and describe
					and technology	how and why
					industry.	significant individuals
						and companies have
						impacted the design
						and technology
						industry.
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	By the end of EYFS, children should be able to	By the end of KS1, children should be able to	By the end of KS2, children should be able to
Cooking and Nutrition	Know the importance for good health of a healthy diet.	Explain that food has to be farmed, grown elsewhere (e.g. home) or caught.	Explain that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.
		Know that everyone should eat at least five portions of fruit and vegetables every day.	Explain that a healthy diet is made up from a variety and balance of different foods and drinks.
		Name and sort foods into the five groups.	Explain that to be active and healthy, food is needed to provide energy for the body.
		Prepare simple dishes safely and hygienically,	Explain that seasons may affect the food available and give examples.
		without using a heat source.	Prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.
		Use techniques such as cutting, peeling and	
		grating.	Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.
		Explain that food ingredients should be	
		combined according to their sensory characteristics.	Adapt recipes to change the appearance, taste, texture and aroma.
			Explain that different foods contain different substances - nutrients, water and fibre - that are needed for health.