

	Early Years Foundation Stage EYFS					
EYFS Characteristics of effective learning	Food	<u>Textiles</u>	Construction	Modelling		
Finding out and exploring -Showing curiosity about objects, events and people -Using senses to explore the world around them -Playing with what they know -Pretending objects are things from their experience -Initiating activities -Seeking challenge -Taking a risk, engaging in new experiences, and learning by trial and error Active Learning -Maintaining focus on their activity for a period of time -Showing high levels of energy, fascination -Paying attention to details -Persisting with activity when challenges occur		-Describes textures of things Threading onto laces	We are product designers -Construct vertical and horizontal, make enclosures and make/create spaces -Build balance and join pieces together -Shows interest in technological toys -Skill in making toys work	We are model makers For the second s		
 Showing a belief that more effort or a different approach will pay off Bouncing back after difficulties Showing satisfaction in meeting their own goals Being proud of how they accomplished something-not just the end result Enjoying meeting challenges for their own sake rather than external rewards or praise 	We are chefs	We are tailors	We are product designers	We are model makers		



Progression and End of Year Expectations Document

	-Eats a range of food	- Experiments to create		
Creating and thinking critically Thinking Having	understands the need for	different textures		-Use scissors to cut on a line
their own ideas	variety.	-Begins to thread through		-Use single hole punch
-Thinking of ideas	-Everyday language of	punched holes in		-Use simple tools and
-Finding ways to solve problems	capacity and weight	card/templates.		techniques such as glue tape
-Finding new ways to do things				-Selects appropriate resources
-Making links and noticing patterns in their			~	-Adapts work where necessary
experience			-Constructs with a purpose in	
-Making predictions			mind.	
-Testing their ideas			- Realises that tools can be	
-Developing ideas of grouping, sequences, cause			used for a purpose	
and effect			-Manipulates to achieve a	
-Planning, making decisions about how to approach			planned effect	
a task, solve a problem and reach a goal			-Understands new media can	
-Checking how well their activities are going			be combined	
-Changing strategy as needed			-Assemble shape and join	
-Reviewing how well the approach worked			-Selects tools and techniques	
			- Shows an interest in	
			technological toys with knobs	
			or pulleys or real objects such	
			as cameras or mobile phones	
			Explore characteristics of	
			everyday shapes and objects	
			and use mathematical	
			language to describe them	

Technology

Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. **Expressive Arts and Design / Being imaginative**



Progression and End of Year Expectations Document

Exploring and using media and materials They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories

Year 1				
Design:	<u>Food</u>	<u>Textiles</u>	Construction	Modelling



 Think of own ideas from experiences Suggest ideas and explain Use words and pictures to plan Design a product for myself Work in a range of contexts Say how the product will work Say how the product meets the design criteria. 	We are chefs	We are tailors	We are product designers	We are model makers
 Explain what is being made and why Select tools from a given range (be able to explain why they have chosen) Select from a range of appropriate materials Measure and cut Evaluate: Like/dislike 	vocabulary using smell texture and feel -Cut and chop a range of ingredients safely and hygienically -Assemble and cook with support. - Know how to follow hygiene procedures - Group familiar food products e.g. fruit and vegetables	printing -Cut out shapes and templates. -Sew running stitch with support if needed (card holes, binca, large needles)	make models. -Constructs using a lever and	-Fold, tear and cut -Roll and curl paper to form tubes -Cut along straight and curved lines -Insert paper fasteners for linkages and use a hole punch.
Example activities	Royal banquet - Would need to make a sandwich that involved cutting something ie; bread, cucumber, cheese OR		Design a new toy - lever and slider - strengthening (not wheels)	



cutting/ chopping	
fruits for banquet	
- Buttering	
- assembling	

		<u>Year 2</u>		
Design:	Food	<u>Textiles</u>	Construction	Modelling
-Think of own ideas from experiences and others -Develop design ideas through discussion and drawing -Simple design criteria -Make drawings, label parts -Add notes		S		
-Make mock ups / templates - Say how the product will work	We are chefs	We are tailors	We are product designers	We are model makers
 Say how the product will work Say how the product meets the design criteria. Know who they are designing a product for and why they need it (why is this product suitable). 	-Food vocabulary -Grate, peel and chop a range of ingredients safely and hygienically -Measure and weigh food	-Join using glue, running stitch	-Cut strip wood/dowel using a hacksaw and bench hook - Mark out materials to be cut	-Investigate how structures can be made stiffer and more stable - Investigate strengthening sheet materials
Make : -Name tools -Select tools and equipment -Measure and cut -Assemble join and combine to make models -Explain what is being made and why -Select	items using non-statutory measures e.g. spoon and cups	-Sew a running stitch and over stitch with increased independence and metal		



tools from a given range (he able to evaluin	to their characteristics		
	to their characteristics		
why they have chosen)	- Know how to follow hygiene		
-Select from a range of appropriate materials	procedures		
	- To understand the need for a		
Evaluate:	variety of foods in a diet		
-Talk about pre-existing products			
-What could be done different and what went			
well			
-Evaluate against a design criteria			
- Make judgments about whether their finished			
product is like their design.			
Example Recipes	Yorkshire recipes	Bunting	Fire engines
		- glue	Card designs - marking and
		- running stitch	cutting shapes/ develop to
		- over stitch	more of a plaque to hang up -
		Simple hanging decorations	how can we strenghten it?
		(Christmas) - buttons, sequins	Who is it for - designs that suit
		to decorate. Cut round simple	5
		templates	
		• • • • • • • • • • • • • • • • • • • •	
		Simple Christmas decorations	



Year 3				
Design:	<u>Food</u>	<u>Textiles</u>	Construction	Modelling



-Generate ideas for an item and Consider purpose and user -Identify purpose establish criteria for a successful product - Indicate specific features of their product - Gather information about the needs/wants of particular groups. - Explore, develop and communicate proposals by modelling				
5	We are chefs	We are tailors	We are product designers	We are model makers
-Plan the order of work				
 Develop their own design criteria 	-Making healthy eating choices		-Materials more stable by	-Cut materials accurately and
-Share and clarify ideas through group	and form an understanding of a		giving them a wide base	safely by selecting appropriate
discussion.	balanced diet	- Join fabrics using running	-Choosing materials based on	tools
	 Prepare ingredients 	stitch, back stitch	their properties	-Create nets make 3d shapes.
Make:	hygienically, selecting	 Explore fastenings and re- 	-See a glue gun used by adult	-Cut internal shapes
-Select tools and techniques - explain choice of	appropriate utensils	create some e.g. Sew on		-Cut slots
tools and what techniques they are going to	 Develop a sensory vocabulary, 	buttons and make loops		-Levers and linkages
perform with them.	using smell, taste texture and			-Fixed and moving joins
	feel			- Create and investigate
-Explain choice of material according to its	- Measure ingredients with			joining's temporary, fixed and
	support – grams/cups/ follow a			moving
-Measure mark cut and assemble components	recipe/follow instruction			-Measure to nearest cm
with more accuracy.	- Assemble and cook			
-Use finishing techniques to strengthen and	ingredients – know how to mix,			
improve	mould and begin to cook foods.			
-Think about ideas as they make and change	(using toasters and microwaves			
them as they make	with supervision			
Evaluate:				



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-Evaluate products against a success criteria			
-Disassemble, investigate and evaluate familiar			
products			
-How finished products could be improved			
- Identify strengths and areas for development.			
- Be able to evaluate other children's products			
constructively.			
 Refer back to their design criteria in 			
evaluating completed products.			
- Consider and explain how a finished product			
could be improved.			
-Investigate and analyse a range of existing			
products.			
Understand how key event and individuals in			
DT have helped shape the world			
Example Activities	Viking baking	Mayan temples	Waterwheel
	-bread (baking)	 pulleys, leavers, 	
	- fishcakes	linkages	



Year 4				
Design:	Food	<u>Textiles</u>	Construction	Modelling
-Generate more than one idea considering	-u-i-			
purpose		Λ		
-Gather information to help design a				
successful product. (i.e. by asking others views)				
-Produce a detailed plan with labelled		00		
diagrams, a written explanation and sequence				
of actions.				
riopose realistic suggestions of now they can	We are chefs	We are tailors	We are product designers	We are model makers
achieve their designs.				
-Make prototypes		-Use appropriate decoration	- Incorporate a circuit with a	-Measure and mark to nearest
		techniques e.g. applique (glued		mm
indicate specific reatures of their product		or simple stiches)	- Choose materials based on	-Diagonal struts to strengthen.
- Gather information about the needs/wants of		- Join textiles with appropriate	their functional properties and	
particular groups.	- Assemble or cook ingredients		aesthetic qualities	
- Develop their own design criteria	 e.g. beating rubbing in 	- Create a simple pattern and	- Use a glue gun with adult	
-Share and clarify ideas through group			supervision 1:1	
discussion.	ingredients	pattern		



	- Make healthy eating choices	•	
	from an understanding of a		
Make:	balanced diet		
-Choose and use a range of tools and			
equipment with accuracy - explain choice of			
tools and what techniques they are going to			
perform with them.			
- Select appropriate materials.			
-Explain choice of material according to its			
functional properties and aesthetic qualities.			
-Measure mark out join and assemble			
-Select tools and techniques for making their			
products			
Evaluate:			
- Discuss how well the finish product meets the			
design criteria and how well it meets the needs			
of the user.			
-Investigate and analyse a range of existing			
products.			
-Evaluate their work both during and at the			
end of the assignment.			
- Identify strengths and areas for development.			
- Be able to evaluate other children's products			
constructively.			
- Refer back to their design criteria in			
evaluating completed products.			
Understand how key event and individuals in			
DT have helped shape the world			



Think need to make something	Board game - with electrics - design on computer first (CAD)	



Design:	<u>Food</u>	<u>Textiles</u>	Construction	Modelling
-Generate ideas through brainstorming and identifying purpose -Create annotated sketches/cross-sectional drawings to develop and communicate ideas. -Use models kits and drawings to formulate ideas -Make simple prototypes				
 Use results a of investigations when developing ideas 	We are chefs	We are tailors	We are product designers	We are model makers
 Develop clear sequence of what has to be done, planning how to use materials, equipment and processes and suggesting alternative methods if the first attempt fails. Use results of investigations, information sources including ICT when developing design ideas. Make decisions taking into account constraints such as time, resources and cost. 	 Taste a range of ingredients and food items to develop a sensory vocabulary for use when designing Measure and weigh accurately using scales Cut and shape ingredients using appropriate tools and equipment Begin to use hobs to heat food with appropriate supervision Cook savoury dishes using a 	 Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decorations) Decorate textiles appropriately often before joining components Pin and tack fabric pieces together Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles e.g. soft for a cushion 	- Use different tools and	-Chose appropriate material for the purpose - Safely cut measured accurate slots - Introduce scoring and cutting using craft knives - Cut accurately and safely to a marked line - Join and combine materials with a temporary, fixed or moving joining's -Use linkages to make movement larger
materials using appropriate tools, equipment				
and techniques. -Accurate measuring and marking out				
-Use tools safely under close supervision -Produce lists of appropriate tools and				



	=	
equipment.		
- Join and combine materials and components		
in temporary and permanent ways.		
 Formulate step by step plans. 		
- Use techniques that involve multiple steps		
- Demonstrate resilience and resourcefulness		
when tackling practical problems.		
Evaluate:		
-Justify decisions about materials and methods		
of construction		
-Evaluate against design criteria personally and		
from others		
-Identify what does and does not work in the		
product		
-Make suggestions as to how theirs or others		
designs could be improved		
-Investigate and analyse existing products		
 Evaluate the work of others 		
 Discuss whether materials used are 		
sustainable.		
 Is the product innovative 		
Understand how key event and individuals in		
DT have helped shape the world		



Suggested Actvities	Make a Victorian stew style	Make an apron	Roman chariots	
	one-pot dish	 adding an edging 	Design with k'nex then use	
	- perhaps introducing a	- decorative stitches to	wood to construct a frame.	
	slow cooker	decorate		
	 prepare a variety of 	- Design on computer		
	vegetables			
	 introducing meat 			
	 making dumplings 			

Year 6					
Design: -Investigate products and images to create design	Food	<u>Textiles</u>	<u>Construction</u>	Modelling	
criteria -Plan order of work choosing appropriate materials tools and techniques. -Create annotated sketches/cross-sectional drawings to develop and communicate ideas. -Models, kits and drawings to formulate idea -Make protoypes (use CAD)					



-Use Computer Aided Design	We are chefs	We are tailors	We are product designers	We are model makers
- Make decisions taking into account constraints				
such as time, resources and cost.	- Understand the	-Pin Sew and attach	-Construct products using	-Cut strip wood, dowel,
	importance of correct	materials together to	permanent joining	square section wood
Make:	storage and handling of	create a product	techniques	accurately to 1mm
-Select materials tools components and techniques	ingredients (using	- Make a 3D quality	-Use different tools and	-Join materials using
and explain why	knowledge of	product that use pattern	equipment safely	appropriate methods E.g.
- Assemble components to make working models.	microorganisms)	pieces and seam allowance	-Incorporate a motor and a	nailing and screwing.
-Make a quality product	- To understand	-Use a range of styles of	switch into a model	- Use a craft knife, cutting
-Use tools safely increasing independence	seasonality and where,	decoration of textiles	-Control a model using an	mat and safety ruler under
-Produce lists of appropriate tools and equipment.	and how ingredients are		ICT control programme	1:1 supervision
 Formulate step by step plans. 	grown, reared caught and		-Build a framework using a	- Choose an appropriate
 Use techniques that involve multiple steps and 	processed		range of materials e.g.	sheet material for the
make modifications as they go along.	- Measure accurately and		wood card plastic to	purpose
- Demonstrate resilience and resourcefulness when	calculate ratios of		support mechanisms	- Cut materials with
tackling practical problems.	ingredients to scale up or		- Use a cam to make an up	precision and refine the
-Achieve a quality product.	down from a recipe		and down mechanism	finish with appropriate tools
	- Demonstrate a range of			such as sanding wood after
Evaluate:	baking and cooking		 Understand and use 	cutting and more refined cut
-Identify strength and areas for improvement and	techniques		mechanical systems in	after roughly cutting out a
carry out appropriate tests	- Decorate appropriately		their products e.g. gears ,	shape
-Record their evaluations with drawings/labels	-Create/refine recipes		levers and cams	
-Evaluate against their original criteria and suggest				
ways could be improved				
-How well does product meet needs of user				
-Analyse range of existing products				
 Evaluate the work of others 				
- Discuss whether materials used are sustainable.				
- Is the product innovative				



 Reflect on their work using design criteria and saying how well their product meets the needs of the user. Investigate and analyse a range of existing products. Understand how key event and individuals in DT have helped shape the world 			
	Something that involves frying – maybe stir fry?	game (could link with Scratch ICT)	Something using different materials? What about making a box with a binged lid – linked to Egyptian sarcopogus?

