

Design Technology Curriculum Overview

Our Ultimate End Goal:

What will our children be able to do when they leave us?

By the end of their time at Britannia Community Primary School, our Year 6 designers will engage confidently in the production of creative work.

The children will:

At Britannia Primary School we follow the National Curriculum objectives for planning our lessons and are supported by the Lancashire Key Learning documents. We use the Kapow scheme of work to support teaching and learning of DT. Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas, and eventually making products and systems. Through the study of design and technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

The national curriculum for design technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others

• understand and apply the principles of nutrition and learn how to cook.

Early Years Foundation Stage Framework and National Curriculum Coverage							
EYFS	Key Stage 1	Key Stage 2					
Reception	Year 1 and Year 2	Year 3 and Year 4	Year 5 and Year 6				
Creating with Materials ELG –	Pupils should be taught to:	Pupils should be taught to:					
Children at the expected level of	Key stage 1 Through a variety of creative and practical	Through a variety of creative	and practical activities, pupils				
development will:	activities, pupils should be taught the knowledge,	should be taught the knowled	dge, understanding and skills				
Safely use and explore a variety of	understanding and skills needed to engage in an	needed to engage in an itera	tive process of designing and				
materials, tools and techniques,	iterative process of designing and making. They should	making. They should work in	a range of relevant contexts				
experimenting with colour, design,	work in a range of relevant contexts [for example, the	[for example, the home, scho	•				
texture, form and function.	home and school, gardens and playgrounds, the local	industry and the wider enviro	- 5 5				
Share their creations, explaining the	community, industry and the wider environment]. When	making, pupils should be tau	ght to:				
process they have used.	designing and making, pupils should be taught to:	<u>Design</u>					
Make use of props and materials	<u>Design</u>		elop design criteria to inform				
when role playing characters in	design purposeful, functional, appealing	9	ve, functional, appealing				
narratives and stories.	products for themselves and other users based	products that are fit for	• •				
	on design criteria generate, develop, model and	particular individuals	3 .				
• Use a range of small tools,	communicate their ideas through talking,		odel and communicate their				
including scissors, paintbrushes and	drawing, templates, mock-ups and, where		ion, annotated sketches,				
cutlery.	appropriate, information and communication	cross-sectional and ex					
Begin to show accuracy and care when drawing	technology		eces and computer-aided				
when drawing.	Makeselect from and use a range of tools and	design Make					
Participate in small group, class and	equipment to perform practical tasks [for		wider range of tools and				
one-to-one discussions, offering	example, cutting, shaping, joining and finishing]		n practical tasks [for example,				
their own ideas, using recently	select from and use a wide range of materials		ng and finishing], accurately				
introduced vocabulary	and components, including construction		wider range of materials and				
Introduced Vocabulary	materials, textiles and ingredients, according to		g construction materials,				
	their characteristics Evaluate explore and	textiles and ingredien	9				
	evaluate a range of existing products	_	and aesthetic qualities				
	 evaluate their ideas and products against design 						
	criteria						

build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	 investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world Technical knowledge apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
	 switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1						Textiles: Stuffed	Structures:
	Explore different					Toys Richard	Playgrounds
	materials freely.					Steiff – German	Charles
						bear designer	Wicksteed –
	Develop own						maker of the
	ideas and decide						first slide
	which materials to						
	use to express						
	themselves.						
	Join different						
	materials to make						

	our own houses and homes- Junk modelling						
Autumn 2	Make gingerbread men- food link Christmas crafts – include a skill in the making. Christingle	Mechanisms: Moving Story Books Robert Sabuda- creator of the pop up book	Food: A Balanced Diet- making a wrap James Martin	Structures: Castles Edinburgh castle, Clitheroe castle.	Electrical Systems: Torches Conrad Hubert- inventor of torches		
Spring 1	Pancake day- choose and add toppings	Food: Fruit and Vegetable Smoothie Jo Wicks	Mechanisms: Moving Monsters Alexander Issigonis	Mechanisms: Pneumatic Systems Lonnie Johnson- Super Soaker			Mechanisms: Automata Toys- mechanical window displays Hamleys mechanical window displays or other toy stores.
Spring 2	Make Union Jack flags Make crowns/hats for the queen - explore existing products - explore the user				Textiles: Fastenings- book sleeve Sarah Jane Designs- book sleeve makers	Food: What Could Be Healthier? Bolognaise Gino D'Acampo	

	and plan a suitable design						
Summer 1	Fruit kebabs Fruit tasting - Choose ingredients - Chop ingredients - Prepare fruit kebab	Structures: Windmills Siemens – maker of windmills	Textiles: Pouches- wallet or purse Michael Kors, Channel, YSL, Louis Vitton- any purse/wallet makers	Food: Eating Seasonally- fruit tart Jamie Oliver			
Summer 2	Sculpture- Sea creatures made of clay. Make and evaluate it.				Food: Adapting a Recipe- budget a design brief Mary Berry	Structures: Bridges John Rennie the Elder, John Rennie the Younger, George Rennie- Designers of the London Bridge	Dine With Me- 3 course meal farm to fork Tom Kerridge

The skills detailed below ensure progression in each discipline and provide rich opportunities for children to engage in a range of design technology experiences. Aspects will be combined within a design technology learning experience and may also be woven into learning experiences from other subjects to further enrich them.

EYFS - Reception	Key Stage 1			Key Stage 2				
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	

☐ Exploring and Selecting:

- Explore a variety of materials and tools freely.
- Choose appropriate materials and tools for a specific purpose.
- Make decisions about how to use resources creatively and effectively.

☐ Joining and Constructing:

- Use joining techniques such as gluing, taping, folding, and slotting.
- Build simple structures with attention to stability and shape.
- Combine materials in different ways to achieve a

Structures

Design:

- Learning the importance of a clear design criteria.
- Including individual preferences and requirements in a design.

Make:

- Making stable structures from card.
- Following instructions to cut and assemble the supporting structure of a windmill.
- Making functioning turbines and axles which are assembled into a main supporting structure.
- Finding the middle of an object.
- Puncturing holes.
- Adding weight to structures.
- Creating supporting structures.
- Cutting evenly and carefully.

Design:

- Designing a castle with key features to appeal to a specific person/purpose.
- Drawing and labelling a castle design using 2D shapes, labelling: the 3D shapes that will create the features materials needed and colours.
- Designing and/or decorating a castle tower on CAD software.

Make:

- Constructing a range of 3D geometric shapes using nets.
- Creating special features for individual designs.
- Making facades from a range of recycled materials.

Evaluate:

• Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design.

Design:

- Designing a stable structure that is able to support weight.
- Creating a frame structure with a focus on triangulation.

Make:

- Making a range of different shaped beam bridges.
- Using triangles to create truss bridges that span a given distance and support a load.
- Building a wooden bridge structure.
- Independently measuring and marking wood accurately.
- Selecting appropriate tools and equipment for particular tasks.
- Using the correct techniques to saws safely.
- Identifying where a structure needs reinforcement and using card corners for support.

Design:

• Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.

Make:

- Building a range of play apparatus structures drawing upon new and prior knowledge of structures.
- Measuring, marking and cutting wood to create a range of structures.
- Using a range of materials to reinforce and add decoration to structures.

Evaluate:

- Improving a design plan based on peer evaluation.
- Testing and adapting a design

design outcome. Manipulating Materials: Cut materials safely using scissors. Roll, pinch, shape, and mould malleable materials like clay or dough. Fold and bend materials to change their form or function. Using Tools Safely: Handle basic tools (scissors, glue sticks,		Evaluate: • Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't. • Suggest points for improvements.		Suggesting points for modification of the individual designs		Explaining why selecting appropriating materials is an important part of the design process. Understanding basic wood functional properties. Evaluate: Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary. Suggesting points for improvements for own bridges and those designed by others.	to improve it as it is developed. • Identifying what makes a successful structure.
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child-safe
knives,
spreaders)
with care and
control.

 Follow simple safety and hygiene routines when using tools and preparing food.

☐ Cooking and Food Preparation:

- Wash hands and maintain cleanliness while handling food.
- Use basic food prep tools (plastic knives, spoons, peelers) with support.
- Choose and combine ingredients based on taste, texture, or appearance.

Mechanisms

Design:

- Explaining how to adapt mechanisms, using bridges or guides to control the movement.
- Designing a moving story book for a given audience

Make:

 Following a design to create moving models that use levers and sliders.

Evaluate:

- Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed.
- Reviewing the success of a product by testing it with its intended audience.

Design:

- Creating a class design criteria for a moving monster.
- Designing a moving monster for a specific audience in accordance with a design criteria.

Make:

- Making linkages using card for levers and split pins for pivots.
- Experimenting with linkages adjusting the widths, lengths and thicknesses of card used.
- Cutting and assembling components neatly

Evaluate:

- Evaluating own designs against design criteria.
- Using peer feedback to modify a final design.

Design:

- Designing a toy which uses a pneumatic system.
- Developing design criteria from a design brief.
- Generating ideas using thumbnail sketches and exploded diagrams.
- Learning that different types of drawings are used in design to explain ideas clearly.

Make:

- Creating a pneumatic system to create a desired motion.
- Building secure housing for a pneumatic system.
- Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy.
- Selecting materials due to their functional and aesthetic characteristics.

Design:

- •Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement.
- Understanding how linkages change the direction of a force.
- Making things move at the same time.
- Understanding and drawing crosssectional diagrams to show the innerworkings of my design.

Make:

- Measuring, marking and checking the accuracy of the jelutong and dowel pieces required.
- Measuring, marking and cutting components accurately using a ruler and scissors.
- Assembling components

 Follow simple 	Manipulating	accurately to make
steps in	materials to create	a stable frame.
making food	different effects by	 Understanding
items (e.g.	cutting, creasing,	that for the frame
fruit kebabs,	folding and weaving.	to function
pancakes).		effectively the
☐ Design Thinking:	<u>Evaluate:</u>	components must
Communicate	Using the views of	be cut accurately
ideas through	others to improve	and the joints of
	designs.	the frame secured
drawing,	• Testing and	at right angles.
talking, or	modifying the	Selecting
modelling.	outcome, suggesting	appropriate
 Think about 	improvements.	materials based on
who the	Understanding the	the materials being
product is for	purpose of	joined and the
and what it	exploded-diagrams	speed at which the
needs to do	through the eyes of	glue needs to
(user and	a designer and their	dry/set.
purpose).	client.	
Plan simple		Evaluate:
designs		Evaluating the
before		work of others and
making.		receiving feedback
		on own work.
☐ Evaluating and		Applying points of
Reflecting:		improvement to
Talk about		their toys.
what they		Describing shanges they would
have made		changes they would make/do if they
and how they		were to do the
made it.		
		project again.

Lalamatik , Alaimana		Desimo
Identify things		<u>Design:</u>
they like		• Designing a torch,
about their		giving
creation.		consideration to
 Suggest 		the target audience
simple		and creating both
changes or		design and success
improvements		criteria focusing on
to their work.		features of
☐ Developing Fine		individual design
Motor Control:		ideas.
Improve		Make:
hand–eye		Making a torch
coordination		with a working
through		electrical circuit
cutting,		and switch.
threading,		Using appropriate
sticking, and		equipment to cut
drawing.		and attach
 Develop 		materials.
control over		Assembling a touch according to
small		torch according to
movements		the design and success criteria.
when using		success criteria.
tools or		
	ms	<u>Evaluate:</u>
manipulating	Electrical systems	• Evaluating
materials.	sy	electrical products.
☐ Creative	cal	Testing and Testing the
Expression:	ctri	evaluating the
	ile(success of a final
	-	product.

- Use a range of materials and techniques to express ideas and imagination.
- Decorate and personalise products using colour, texture, and shape.

Design:

• Designing smoothie carton packaging by-hand.

Make:

- Chopping fruit and vegetables safely to make a smoothie.
- Juicing fruits safely to make a smoothie.

Evaluate:

- Tasting and evaluating different food combinations.
- Describing appearance, smell and taste.
- Suggesting information to be included on packaging.
- Comparing their own smoothie with someone else's.

Design:

 Designing three wrap ideas based on a food combination which work well together.

Make:

- Chopping foods safely to make a wrap.
- Constructing a wrap that meets a design brief.
- Grating foods to make a wrap.
- Snipping smaller foods instead of cutting.

Evaluate:

- Describing the taste, texture and smell of fruit and vegetables.
- Taste testing food combinations and final products.
- Describing the information that should be included on a label.
- •Evaluating food by giving a score.

Design:

• Designing a recipe for a savoury tart.

Make:

- Following the instructions within a recipe.
- Tasting seasonal ingredients.
- Selecting seasonal ingredients.
- Peeling ingredients safely.
- Cutting safely with a vegetable knife.

Evaluate:

- Establishing and using design criteria to help test and review dishes.
- Describing the benefits of seasonal fruits and vegetables and the impact on the environment.
- Suggesting points for improvement when making a seasonal tart.

Design:

- Designing a biscuit within a given budget, drawing upon previous taste testing judgements.
- Designing packaging for a biscuit that targets a specific group.

Make:

- Following a baking recipe, including the preparation of ingredients.
- Cooking safely, following basic hygiene rules.
- Adapting a recipe to meet the requirements of a target audience.
- Using a cuboid net to create packaging.

Evaluate:

- Evaluating a recipe, considering: taste, smell, texture and appearance.
- Describing the impact of the budget on the

Design:

- Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.
- Writing an amended method for a recipe to incorporate the relevant changes to ingredients.
- Designing appealing packaging to reflect a recipe.
- Researching existing recipes to inform ingredient choices.

Make:

- Cutting and preparing vegetables safely.
- Using equipment safely, including knives, hot pans and hobs.
- Knowing how to avoid crosscontamination.
- Following a step by step method

Design:

- Writing a recipe, explaining the key steps, method and ingredients.
- Including facts and drawings from research undertaken

Make:

- Following a recipe, including using the correct quantities of each ingredient
- Adapting a recipe based on research.
- Working to a given timescale.
- Working safely and hygienically with independence.

Evaluate:

- Evaluating a recipe, considering: taste, smell, texture and origin of the food group.
- Taste testing and scoring final products.
- Suggesting and writing up points of improvements when scoring others' dishes, and

Cooking and nutrition

	selection of	carefully to make a	when evaluating
	ingredients.	recipe	their own
	• Evaluating and		throughout the
	comparing a rang	Evaluate:	planning,
	of food products.		preparation and
	Suggesting	nutritional	cooking process.
	modifications to	differences	 Evaluating health
	recipe (e.g. This	between different	and safety in
	biscuit has too	products and	production to
	many raisins, and	it recipes.	minimise cross
	is falling apart, so		contamination.
	next time I will us		
	less raisins).	benefits of food	
		groups.	

		D:	Design
		Design:	Design:
		Designing a	Designing a
		pouch.	stuffed toy,
			considering the
		Make:	main component
		Selecting and	shapes required
		cutting fabrics for	and creating an
		sewing.	appropriate
		Decorating a	template.
		pouch using fabric	Considering the
		glue or running	proportions of
		stitch.	individual
		• Threading a	components.
		needle.	·
		Sewing running	Make:
		stitch, with evenly	• Creating a 3D
		spaced, neat, even	stuffed toy from a
		stitches to join	2D design.
		fabric.	
			Measuring, The state of the state o
		Neatly pinning Neatly pinning	marking and cutting
		and cutting fabric	fabric accurately
		using a template.	and independently .
			Creating strong
		Evaluate:	and secure blanket
		Troubleshooting	stitches when
		scenarios posed by	joining fabric.
		teacher.	• Threading
		Evaluating the	needles
		quality of the	independently.
		stitching on	Using appliqué to
		others' work.	attach pieces of
		Discussing as a	fabric decoration.
		class, the success	Sewing blanket
		of their stitching	stitch to join fabric.
		against the success	Applying blanket
	lextiles	criteria.	stitch so the spaces
	×	Identifying	between the
	<u>o</u>	aspects of their	
		aspects of their	

peers' work that they particularly like and why.	stitches are even and regular.
	Evaluate: • Testing and evaluating an end product and giving point for further improvements.

Substantative Knowledge

As there is such a wealth of designers and productss to choose to study, it is essential that teachers choose work which will interest and inspire their particular group of children. The most important thing is that children have opportunities to express their ideas about design technology freely and that they understand that there are no right or wrong answers when talking about DT. It is also important that children access work from a range.

EYFS - Reception	Key Stage 1			Key Stage 2			
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Materials have		To understand that	 To understand 	 To understand 	To know that
different properties		cylinders are a	that wide and flat	some different	structures can be
(e.g. hard, soft,		strong type of	based objects are	ways to reinforce	strengthened by
rough, smooth,		structure (e.g. the	more stable.	structures.	manipulating
bendy, strong).		main shape used	 To understand 	 To understand 	materials and
bendy, strong).		for windmills and	the importance of	how triangles can	shapes.
C		lighthouses).	strength and	be used to reinforce	 To understand
Some materials are		To understand	stiffness in	bridges.	what a 'footprint
better suited for		that axles are used	structures.	To know that	plan' is.
certain purposes		in structures and	 To know the 	properties are	 To understand
(e.g. strong materials		mechanisms to	following features	words that describe	that in the real
for walls, soft for		make parts turn in a	of a castle: flags,	the form and	world, design, can
decoration).		circle.	towers,	function of	impact users in
		To begin to	battlements,	materials.	positive and
Objects can be		understand that	turrets, curtain	 To understand 	negative ways.
joined using glue,		different structures	walls, moat,	why material	 To know that a
tape, tabs, or		are used for	drawbridge and	selection is	prototype is a
'		different purposes.	gatehouse - and	important based on	cheap model to test
folding.		To know that a	their purpose.	properties.	a design idea.
Charles and the		structure is	 To know that a 	 To understand 	
Structures need to		something that has	façade is the front	the material	
be stable and		been made and put	of a structure.	(functional and	
balanced to stand		together.	 To understand 	aesthetic)	
up.		To know that the	that a castle	properties of wood.	
		sails or blades of a	needed to be	 To understand 	
Tools like scissors,		windmill are moved	strong and stable	the difference	
spreaders, and		by the wind.	to withstand	between arch,	
knives have specific		To know that a	enemy attack.	beam, truss and	
purposes and must		structure is	 To know that a 	suspension bridges.	
be used safely.		something built for	paper net is a flat	 To understand 	
De used salely.		a reason.	2D shape that can	how to carry and	
la sua dia seta abasa sa		To know that	become a 3D	use a saw safely.	
Ingredients change		stable structures do	shape once		
when cooked (e.g.	10	not topple.	assembled.		
dough turns into	lre.	To know that	 To know that a 		
biscuits).	ctu	adding weight to	design		
	Structures	the base of a	specification is a		
	S		list of success		

Food must be	 structure can make	criteria for a		
	it more stable.	product.		
prepared	To know that	p. 00000		
hygienically (e.g.	design criteria is a			
wash hands, don't	list of points to			
touch face while	ensure the product			
cooking).	meets the clients			
	needs and wants.			
Some foods are	To know that a			
healthy; children	windmill harnesses			
should begin to	the power of wind			
identify healthy and	for a purpose like			
unhealthy choices.	grinding grain,			
	pumping water or			
Fruits have different	generating			
tastes, textures, and	electricity.			
appearances.	To know that			
	windmill turbines			
Ingredients can be	use wind to turn			
chosen and	and make the			
sequenced based on	machines inside			
· ·	work.			
preference or design	• To know that a			
(e.g. colour pattern	windmill is a			
on a fruit kebab).	structure with sails			
	that are moved by the wind.			
Decorations and	• To know the three			
products are often	main parts of a			
made for a purpose	windmill are the			
(e.g. a crown to	turbine, axle and			
wear, a flag to	structure.			
wave).	To know that			
	windmills are used			
Products are	to generate power			
designed for users;	and were used for			
	grinding flour.			

the design should fit		To know that a	To know that	To understand		To understand
or be suitable for the		mechanism is the	mechanisms are a	how pneumatic		that the mechanism
person using it.		parts of an object	collection of moving	systems work.		in an automata uses
person asing it.		that move together.	parts that work	To understand		a system of cams,
Flags and symbols		•To know that a	together as a	that pneumatic		axles and followers.
Flags and symbols		slider mechanism	machine to produce	systems can be		To understand
(like the Union Jack)		moves an object	movement.	used as part of a		that different
use specific shapes		from side to side.	To know that	mechanism.		shaped cams
and colours.		To know that a	there is always an	• To know that		produce different
		slider mechanism	input and output in	pneumatic systems		outputs.
Designs can be		has a slider, slots ,	a mechanism.	operate by		• To know that an
planned (through		guides and an	To know that an	drawing in,		automata is a hand
drawing or talking)		object.	input is the energy	releasing and		powered
before making.		To know that	that is used to start	compressing air.		mechanical toy.
J		bridges and guides	something working.	To understand		• To know that a
Finished products		are bits of card that	To know that an	how sketches,		cross-sectional
can be evaluated—		purposefully	output is the	drawings and		diagram shows the
		restrict the	movement that	diagrams can be		inner workings of a
children can say		movement of the	happens as a result	used to		product.
what they like or		slider.	of the input.	communicate		To understand
what they might		 To know that in 	 To know that a 	design ideas.		how to use a bench
change.		Design and	lever is something	 To know that 		hook and saw
		technology we call	that turns on a	exploded-diagrams		safely.
Sculptures can be		a plan a 'design'.	pivot.	are used to show		 To know that a
made by shaping,			 To know that a 	how different parts		set square can be
pinching, and rolling			linkage mechanism	of a product fit		used to help mark
clay.			is made up of a	together.		90° angles.
,			series of levers.	 To know that 		
Clay can be textured	ms		• To know some	thumbnail		
using tools to add	nis		real-life objects that	sketches are small		
detail.	ha		contain	drawings to get		
uetall.	Mechanisms		mechanisms.	ideas down on		
	2			paper quickly.		

Celebratory objects		• To understand	
(e.g. Christingles)		that electrical	
may have symbolic		conductors are	
meaning		materials which	
meaning		electricity can pass	
		through.	
		To understand	
		that electrical	
		insulators are	
		materials which	
		electricity cannot	
		pass through.	
		• To know that a	
		battery contains	
		stored electricity	
		that can be used to	
		power products.	
		To know that an	
		electrical circuit	
		must be complete	
		for electricity to	
		flow.	
		• To know that a	
		switch can be used	
		to complete and	
		break an electrical	
		circuit.	
		• To know the	
		features of a torch:	
		case, contacts,	
		batteries, switch,	
	US	reflector, lamp,	
	ten	lens.	
	sys	To know facts	
	al c	from the history	
	iri	and invention of	
	Electrical Systems	the electric light	
	Ш	bulb(s) - by Sir	

		Joseph Swan and Thomas Edison.	

	• To know that a	To know that 'diet'	To know that not	To know that the	To understand	To know that
	blender is a	means the food and	all fruits and	amount of an	where meat comes	'flavour' is how a
	machine which	drink that a person	vegetables can be	ingredient in a	from - learning that	food or drink tastes.
	mixes ingredients	or animal usually	grown in the UK.	recipe is known as	beef is from cattle	• To know that
	together into a	eats. • To	• To know that	the 'quantity.'	and how beef is	many countries
	smooth liquid.	understand what	climate affects	To know that	reared and	have 'national
	• To know that a	makes a balanced	food growth.	safety and hygiene	processed.	dishes' which are
	fruit has seeds.	diet. • To know that	To know that		• To know that	
	• To know that			are important when		recipes associated
		the five main food	vegetables and	cooking.	recipes can be	with that country.
	fruits grow on trees	groups are:	fruit grow in	• To know the	adapted to suit	• To know that
	or vines.	Carbohydrates,	certain seasons.	following cooking	nutritional needs	'processed food'
	To know that	fruits and	To know that	techniques: sieving,	and dietary	means food that
	vegetables can	vegetables, protein,	cooking	measuring, stirring,	requirements.	has been put
	grow either above	dairy and foods high	instructions are	cutting out and	To know that I	through multiple
	or below ground.	in fat and sugar. •	known as a	shaping.	can use a	changes in a
	To know that	To understand that I	'recipe'.	•To understand the	nutritional	factory.
	vegetables is any	should eat a range	• To know that	importance of	calculator to see	To understand
	edible part of a	of different foods	imported food is	budgeting while	how healthy a food	that it is important
	plant (e.g. roots:	from each food	food which has	planning	option is.	to wash fruit and
	potatoes, leaves:	group, and roughly	been brought into	ingredients for	 To understand 	vegetables before
	lettuce, fruit:	how much of each	the country.	biscuits.	that 'cross-	eating to remove
	cucumber).	food group. • To	 To know that 	 To know that 	contamination'	any dirt and
		know that	exported food is	products often have	means bacteria and	insecticides.
		'ingredients' means	food which has	a target audience.	germs have been	 To understand
		the items in a	been sent to		passed onto ready-	what happens to a
		mixture or recipe.	another country		to-eat foods and it	certain food before
			 To know that 		happens when	it appears on the
			eating seasonal		these foods mix	supermarket shelf
			foods can have a		with raw meat or	(Farm to Fork).
_			positive impact on		unclean objects.	
Nutrition			the environment.		 To know that 	
ıtri			To know that		coloured chopping	
ž			similar coloured		boards can prevent	
and			fruits and		cross-	
a			vegetables often		contamination.	
Cooking			have similar		 To know that 	
you			nutritional		nutritional	
Ü			benefits.		information is	
			Deficites.	L		

		To know that the appearance of food is as important as taste.	found on food packaging. • To know that food packaging serves many purposes.
Textiles	 To know that sewing is a method of joining fabric. To know that different stitches can be used when sewing. To understand the importance of tying a knot after sewing the final stitch. To know that a thimble can be used to protect my fingers when sewing. 		

Key Vocabulary			
EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
DesignMake	Structures: Year 1:	Structures: Year 3:	Structures: Year 5:
 Build Create Plan Model Product 	Axle	Aesthetic	Abutment
	Year 1:	Year 3:	Year 6:

- Tool
- Material
- Object
- Structure

Materials & Properties

- Hard
- Soft
- Smooth
- Rough
- Bendy
- Strong
- Weak
- Sticky
- Heavy
- Light
- Flat
- Shiny
- Dull

Joining & Construction

- Stick
- Glue
- Tape
- Fold

- Assemble Design Evaluation •
 Mechanism Model Sliders Stencil
 Target audience Template Test
- Year 2:
- Evaluation Input Lever Linear motion Linkage Mechanical Mechanism Motion Oscillating motion Output Pivot Reciprocating motion Rotary motion Survey

Cooking and Nutrition:

Year 1:

• Blender • Fruit • Healthy •
Ingredients • Recipe • Smoothie •
Vegetable • Seed • Root • Leaf • Stem
• Flavour • Design • Cut • Juice • Table
knife • Juicer • Plant • Bush • Tree •
Vine • Chopping board • Fork • Taste •
Select • Blend • Evaluate • Compare •
Appearance • Balanced

Year 2:

Carbohydrates ● Combination ● Dairy
 Design ● Design brief ● Diet ● Feel ●
 Grate ● Grater ● Menu ● Oils ● Prepare
 Proteins ● Review ● Scissors ● Smell
 Snip ● Spread ● Spreads

Textiles:

Year 2:

Accurate ● Fabric ● Knot ● Pouch ●
 Running-stitch ● Sew ● Shape ● Stencil
 Template ● Thimble

Exploded-diagram ● Function ● Input
 Lever ● Linkage ● Mechanism ●
 Motion ● Net ● Output ● Pivot ●
 Pneumatic system ● Thumbnail sketch

Electrical Systems:

Year 4:

Battery ● Bulb ● Buzzer ● Cell ●
 Component ● Conductor ● Copper ●
 Design criteria ● Electrical item ●
 Electricity ● Electronic item ● Function
 Insulator ● Series circuit ● Switch ●
 Test ● Torch ● Wire

Textiles:

Year 3:

• 2D shapes • 3D shapes • Castle • Design criteria • Evaluate • Facade • Feature • Flag • Net • Recyclable • Scoring • Stable • Strong • Structure • Tab • Weak

Cooking and Nutrition:

Year 3:

Arid • Climate • Complementary •
 Country • Export • Import •
 Mediterranean • Mock-up • Mountain
 • Peel • Polar • Seasonal • Seasons •
 Snip • Temperate • Texture • Tropical
 • Weather

Year 4:

Adapt • Addition • Budget • Buttery
 Combine • Comment • Construct •

Adapt ● Apparatus ● Bench hook ●
 Cladding ● Coping saw ● Design ●
 Dowel ● Evaluation ● Feedback ● Idea ●
 Jelutong ● Landscape ● Mark out ●
 Measure ● Modify ● Natural materials ●
 Plan view ● Playground ● Prototype ●
 Reinforce ● Sketch ● Strong ● Structure
 Tenon saw ● Texture ● User ● Vice ●
 Weak

Mechanisms:

Year 6:

Textiles:

Year 5:

Accurate ● Annotate ● Appendage ●
 Blanket-stitch ● Design criteria ● Detail
 Evaluation ● Fabric ● Sew ● Shape ●
 Stuffed toy ● Stuffing ● Template

Cooking and Nutrition:

Year 5:

Abattoir ● Adaptation ● Balanced ●
 Beef ● Brand ● Cook ● Cross-

		1
CutJoin	Cream ● Crunchy ● Cuboid ● Fold ● Hygiene ● Layout ● Market research ● Modify ● Multiplication ● Opinion ●	conta Equip Nutri
• Slot	Pounds	• Pre
• Connect		Year
Balance		• Bala
Stable		Comp
• Tall		• Met
• Wide		• Sour
• Base		<u>Textile</u>
• Roof		Year 5:
• Edge		• Accura
• Corner		Blanket-st • Evaluati Stuffed to
Food & Cooking		
• Chop		
• Slice		
• Mix		
• Stir		
• Pour		
• Spread		
• Peel		
• Wash		
• Clean		
 Ingredients 		
Recipe		

•	Topping
•	Healthy
•	Tasty
•	Sweet
•	Sour
•	Crunchy
•	Juicy
•	Yummy
Tools	
•	Scissors
•	Glue stick
•	Knife (child-safe)
	Spoon
	Rolling pin
	Cutter
	Peeler
Evaluat	tion & Reflection
	Like
	Change
	Improve
	Better
	Favourite
•	Try again

Next time		

Experiences and Opportunities

Children should have regular opportunities to look at real products and in their local environment and to consider the role that the arts have to play in shaping the world around us and helping us all to make it a better place.

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Trips/Visits:						
Visitor:						