

	Year 1					
	 Investigating pictures Making pictures Making a lever mechanism Making a wheel mechanism Writing the specification Exploring materials Relating textiles to their uses Learn which food comes from plants and plants and which food comes from plants and which foo					
Design						
	Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology					
Contexts, Uses	State the purpose of the design and the intended user					
and Purposes	Explore materials, make templates and mock ups e.g. moving picture					
Ideas	Generate own ideas for design by drawing on own experiences or from reading					
Make	Make					
	Select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristic					
Planning	Begin to select from a range of tools and equipment explaining their choices					
	Begin to select from a range of materials and components according to their characteristics					
Practical Skills	Follow procedures for safety					
and	Use and make own templates					
Techniques	Measure, mark out, cut out and shape materials and components					
	Assemble, join and combine materials and components					
	Use simple fixing materials e.g. temporary – paper clips tape and permanent – glue, staples					
Evaluate	Use finishing techniques, including those from art and design					
Lvaluate	Explore and evaluate a range of existing products					
	Evaluate their ideas and products against design criteria					



Own Ideas and	Talk about their design ideas and what they are making
Products	Make simple judgements about their products and ideas against design criteria
	Suggest how their products could be improved
	Evaluating products and components used
Existing	Investigate - what products are, who they are for, how they are made and what materials are used
Products	
Technical Knowl	edge
	Build structures, exploring how they can be made stronger, stiffer and more stable
	Explore and use mechanisms [e.g. levers and sliders], in their products
Making	Understand about the simple working characteristics of materials and components
Products Work	Understand about the movement of simple mechanisms including levers, sliders
	Understand that food ingredients should be combined according to their sensory characteristics
	Know the correct technical vocabulary for the projects they are undertaking
	Understand how freestanding structures can be made stronger, stiffer and more stable
Cooking and Nut	trition
	Use the basic principles of a healthy and varied diet to prepare dishes
	Understand where food comes from
Where Food	Know that food comes from plants and animals
Comes From	
Food,	Use appropriate equipment to weigh and measure ingredients
Preparation,	Prepare simple dishes safely and hygienically, without using a heat source
Coking and	Use techniques such as cutting and peeling
Nutrition	Know that everyone should eat at least five portions of fruit and vegetables every day
Continuous	
Healthy eating	

Discussions about food

Fine motor skills- threading, tweezing

Using a range of materials and practising joining skills in provision

British Food Fortnight

Farm to Fork

Revisit previous skills

Construction kits



				Year 2		
	How will your vehicle move?	 Exploring rolling toys Investigating different vehicles Making wheels and axles Exploring body decoration 	How do we make a puppet?	 Investigate different kinds of puppets, e.g. marionette, hand, finger, stick Make paper versions of puppets, e.g. finger hand Make own hand puppet from fabric using sewing and gluing 	What can we put in a smoothie?	 Discuss origin of a variety of fruits and role of edible seeds (link to Science Y2T2) Classify fruit ingredients used in smoothie based on how they grow – vine/trees/shrubs. Make a smoothie from a variety of fruit
Design						
	Generate communi	, develop, model and communicat cation technology	e their	for themselves and other users based on design ideas through talking, drawing, templates, mo		d, where appropriate, information and
Contexts, Uses	State the purpose of the design and the intended user					
and Purposes	Explore materials, make templates and mock ups e.g. moving picture					
Ideas	Generate	own ideas for design by drawing	on own	experiences or from reading		
Make	1		_			
	Select fro character	m and use a wide range of materi istic	als and	nt to perform practical tasks [e.g. cutting, shap components, including construction materials		
Planning	Begin to s	select from a range of tools and ed	quipmer	nt explaining their choices		
		<u> </u>	nd comp	ponents according to their characteristics		
Practical Skills		ocedures for safety				
and		nake own templates				
Techniques		mark out, cut out and shape mat		·		
		, join and combine materials and	•			
				clips tape and permanent – glue, staples		
Final cake	Use finish	ing techniques, including those fr	om art a	and design		
Evaluate	Fundanc :	ad avaluate a name of aviative and	- d a.t.c			
		nd evaluate a range of existing pro		ritorio		
	Evaluate 1	their ideas and products against d	esign cr	iteria		



Own Ideas and	Talk about their design ideas and what they are making
Products	Make simple judgements about their products and ideas against design criteria
	Suggest how their products could be improved
	Evaluating products and components used
Existing	Investigate - what products are, who they are for, how they are made and what materials are used
Products	
Technical Knowl	edge
	Build structures, exploring how they can be made stronger, stiffer and more stable
	Explore and use mechanisms [e.g. wheels and axles], in their products
Making	Understand about the simple working characteristics of materials and components
Products Work	Understand about the movement of simple mechanisms including wheels and axles
	Understand that food ingredients should be combined according to their sensory characteristics
	Know the correct technical vocabulary for the projects they are undertaking
	Understand how freestanding structures can be made stronger, stiffer and more stable
Cooking and Nut	trition
	Use the basic principles of a healthy and varied diet to prepare dishes
	Understand where food comes from
Where Food	Know that food comes from plants and animals
Comes From	
Food,	Use appropriate equipment to weigh and measure ingredients
Preparation,	Prepare simple dishes safely and hygienically, without using a heat source
Coking and	Use techniques such as cutting, peeling and grating
Nutrition	Name and sort foods into the five groups of the 'eat well' plate
	Know that everyone should eat at least five portions of fruit and vegetables every day
Continuous	
Healthy eating	
Discussions abou	ut food
British Food Fort	tnight
Farm to Fork	
Revisit previous	skills
Construction kits	S



				Year 3 and Year 3/4		
	How can I make my monster move?	 Investigating air objects Exploring pneumatics Making new pneumatics Planning own moving monster Making moving monsters Evaluating monsters 	What went in an Iron Age Stew?	 Iron Age Root Vegetable Stew (link to History Y3T1 Science Y3T2) Discuss original recipe and adaptions to be made (e.g. our stew is vegetarian and could include additional root vegetables, many of which were not available during this time period). I can say which part of a plant different foods come from. 	How were the Romans able to quickly get over a wall?	 Investigating Roman catapults (link to History Y3T3) Investigating forces (link to Science Y3/4T1) Looking at pulleys and levers Making own catapults and testing Evaluating catapults
Design						
Contexts, Uses and Purposes Ideas	particula Generate prototyp Gather in Develop Research Share an Model th	r individuals or groups	te their ided de ants of hese to tern pie	particular individuals and groups inform their ideas		
		puter-aided design	uwings	and diagrams		
Make						
	Select fr	_	ials and	ipment to perform practical tasks [e.g. cuttin components, including construction materia		
Planning	Explain t Select m	aterials and components suitable f	t in rela or the t	tion to the skills and techniques they will be unask in according to functional properties and aesthe		S



	Order the main stages of making
	Produce detailed lists of tools, equipment and materials that they need
Practical Skills	Follow procedures for safety
and	Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components
Techniques	Measure, mark out, cut and shape materials and components with some accuracy
	Assemble, join and combine materials and components with some accuracy apply a range of finishing techniques, include those from art and
	design, with some accuracy
Evaluate	
	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
Own Ideas and	Identify the strengths and weaknesses of their ideas and products
Products	Consider the views of others, including intended users, to improve their work
Existing	Investigate - who designed and made the products, where products were designed and made, when products were designed and made and
Products	whether products can be recycled or reused
Key Events/	Identify great designers and their work and use research of designers to influence work
Individuals	
Technical Knowl	ledge
	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]
	Apply their understanding of computing to program, monitor and control their products
Making	Understand how levers and linkages or pneumatic systems create movement
Products Work	Know how to make strong, stiff shell structures
	Know that food ingredients can be fresh, pre-cooked and processed
Cooking and Nu	trition
	Understand and apply the principles of a healthy and varied diet
	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed
Where Food	Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and
Comes From	cattle) and caught (such as fish) in the UK, Europe and the wider world
	Know that seasons may affect the food available
	Understand how food is processed into ingredients that can be eaten or used in cooking



Food,	How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat		
Preparation,	source		
Cooking and	How to use a range of techniques such as peeling, chopping, slicing, grating		
Nutrition	Know that a healthy diet is made up from a variety and balance of different foods and drinks, as depicted in the 'eat well' plate		
	Know that to be active and healthy, food is needed to provide energy for the body		
	Follow a recipe		
Continuous			
Healthy eating			
Discussions abo	out food		
British Food For	British Food Fortnight		
Farm to Fork			
Revisit previous	skills		
Construction kit	ts		



	Year 4/5	
	• Evaluating existing products • Exploring simple stitches (Introduction for Art Y4/5 T2) • Decorating fabric in different ways • Design own stocking • Create own stocking • Evaluating different kinds of pizza • Understand where the ingredients come from • Baking dough • Choosing toppings • Making the pizza sauce • Making the pizza • Evaluating products • Create own stocking • Evaluating products • Evaluating different kinds of pizza • Understand where the ingredients come from • Baking dough • Choosing toppings • Making the pizza • Design own stocking • Evaluating products • Create own stocking • Evaluating products • Create own stocking • Evaluating products	s ce wn
Design		
Contexts, Uses and Purposes Ideas	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Gather information about the needs and wants of particular individuals and groups Develop their own design criteria and use these to inform their ideas Research designs Ghare and clarify ideas through discussion Model their ideas using prototypes and pattern pieces Use annotated sketches, cross-sectional drawings and diagrams Use computer-aided design	
Make	soc compater alaca design	
	Select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	
Planning	Select tools and equipment suitable for the task Explain their choice of tools and equipment in relation to the skills and techniques they will be using Select materials and components suitable for the task Explain their choice of materials and components according to functional properties and aesthetic qualities Order the main stages of making	



	Draduce detailed lists of tools, equipment and materials that they need
B .: 1.01:11	Produce detailed lists of tools, equipment and materials that they need
Practical Skills	Follow procedures for safety
and	Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components
Techniques	and electrical components
	Measure, mark out, cut and shape materials and components with some accuracy
	Assemble, join and combine materials and components with some accuracy apply a range of finishing techniques, include those from art and
	design, with some accuracy
Evaluate	
	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
Own Ideas and	Identify the strengths and weaknesses of their ideas and products
Products	Consider the views of others, including intended users, to improve their work
Existing	Investigate - who designed and made the products, where products were designed and made, when products were designed and made and
Products	whether products can be recycled or reused
Key Events/	Identify great designers and their work and use research of designers to influence work
Individuals	
Technical Knowl	edge
	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
	Understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers and motors]
	Apply their understanding of computing to program, monitor and control their products
Making	Understand how simple electrical circuits and components can be used to create functional products
Products Work	Understand how to program a computer to control their products
	Know that a single fabric shape can be used to make a 3D textiles product
	Know that food ingredients can be fresh, pre-cooked and processed
Cooking and Nut	trition
	Understand and apply the principles of a healthy and varied diet
	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed
Where Food	Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and
Comes From	cattle) and caught (such as fish) in the UK, Europe and the wider world
	Know that seasons may affect the food available
	Understand how food is processed into ingredients that can be eaten or used in cooking
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Food,	How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat
Preparation,	source
Cooking and	How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
Nutrition	Know that a healthy diet is made up from a variety and balance of different foods and drinks, as depicted in the 'eat well' plate
	Know that to be active and healthy, food is needed to provide energy for the body
	Measure using grams
	Follow a recipe
Continuous	
Healthy eating	
Discussions abo	out food
British Food Fo	rtnight
Farm to Fork	
Revisit previous	s skills
Construction ki	ts



	Year 5
	• Investigating preferences • Understanding where ingredients come from • The taste test • The design • The Bake-Off • Evaluating • Exploring the features of money containers • Exploring the features of money containers • Practising and refining sewing skills (link to art Y5T2) • The taste test • Designing and planning • Bringing design to life • Evaluating • Looking at cam mechanism • Making sturdy structures • Designing toys • Making toys move • Evaluating • Evaluating
Design	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at
Contexts, Uses and Purposes Ideas	particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Carry out research, using surveys, interviews, questionnaires and web-based resources Identify the needs, wants, preferences and values of particular individuals and groups Develop a simple design specification to guide their thinking Recognise when their products have to fulfil conflicting requirements Generate innovative ideas, drawing on research Make design decisions, taking account of constraints such as time, resources and cost
Make	Develop prototypes
Planning	Select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Select tools and equipment suitable for the task Explain their choice of tools and equipment in relation to the skills and techniques they will be using Select materials and components suitable for the task Explain their choice of materials and components according to functional properties and aesthetic qualities Order the main stages of making Produce detailed lists of tools, equipment and materials that they need



Practical Skills and Accurately assemble, join and combine materials/components Accurately apply a range of finishing techniques, including those from art and design Use techniques that involve a number of steps Demonstrate resourcefulness, e.g. make refinements Evaluate	
Techniques Accurately apply a range of finishing techniques, including those from art and design Use techniques that involve a number of steps Demonstrate resourcefulness, e.g. make refinements	
Use techniques that involve a number of steps Demonstrate resourcefulness, e.g. make refinements	
Demonstrate resourcefulness, e.g. make refinements	
Evaluate	
LValuate	
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	
Own Ideas and Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make	
Products Compare their ideas and products to their original design specification	
Existing Investigate - how much products cost to make, how innovative products are and how sustainable the materials in products are	
Products	
Key Events/ Identify great designers and their work and use research of designers to influence work	
Individuals	
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]	
Making Understand how cams, pulleys and gears create movement	
Products Work Know how to reinforce/strengthen a 3D framework	
Know that a 3D textiles product can be made from a combination of fabric shapes	
Know that a recipe can be adapted a by adding or substituting one or more ingredients	
Cooking and Nutrition	
Understand and apply the principles of a healthy and varied diet	
Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques	
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed	
Where Food Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and	
Comes From cattle) and caught (such as fish) in the UK, Europe and the wider world	
Know that seasons may affect the food available	
Understand how food is processed into ingredients that can be eaten or used in cooking	
Food, How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a	heat
Preparation, source	



Cooking and Nutrition

How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking

Know that recipes can be adapted to change the appearance, taste, texture and aroma

Know that different foods contain different substances - nutrients, water and fibre - that are needed for health

Understand the need for correct storage

Measure accurately

Work out ratios in recipes

Continuous

Healthy eating

Discussions about food

British Food Fortnight

Farm to Fork

Revisit previous skills

Construction kits



	Year 6
	 Burger nutrition facts (links to Science- Y6T1) Understand where ingredients come from Making burger patties Exploring burger sauces Exploring burger buns Design a burger Make and evaluate a burger Beam bridges Truss bridges Arch bridges Suspension bridges Bridge-building challenge Evaluating bridges Bridge-building challenge Evaluating bridges What have we learned? (link to Science Y6T1)
Design	
	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at
	particular individuals or groups
	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams,
	prototypes, pattern pieces and computer-aided design
Contexts, Uses	Carry out research, using surveys, interviews, questionnaires and web-based resources
and Purposes	Identify the needs, wants, preferences and values of particular individuals and groups
	Develop a simple design specification to guide their thinking
l d a a a	Recognise when their products have to fulfil conflicting requirements
Ideas	Generate innovative ideas, drawing on research
	Make design decisions, taking account of constraints such as time, resources and cost
Make	Develop prototypes
IVIANC	Select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately
	Select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, snaping, joining and missing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their
	functional properties and aesthetic qualities
Planning	Select tools and equipment suitable for the task
	Explain their choice of tools and equipment in relation to the skills and techniques they will be using
	Select materials and components suitable for the task
	Explain their choice of materials and components according to functional properties and aesthetic qualities
	Order the main stages of making



	Produce detailed lists of tools, equipment and materials that they need
Practical Skills	Accurately measure to nearest mm, mark out, cut and shape materials and components
and	Accurately assemble, join and combine materials/components
Techniques	Accurately apply a range of finishing techniques, including those from art and design
	Use techniques that involve a number of steps
	Demonstrate resourcefulness, e.g. make refinements
Evaluate	
	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
Own Ideas and	Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
Products	Compare their ideas and products to their original design specification
Existing	Investigate - how much products cost to make, how innovative products are and how sustainable the materials in products are
Products	
Key Events/	Identify great designers and their work and use research of designers to influence work
Individuals	
Technical Knowl	edge
	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 [e.g. series circuits incorporating switches, bulbs, buzzers and motors]
	Apply their understanding of computing to program, monitor and control their products
Making	Understand how more complex electrical circuits and components can be used to create functional products
Products Work	Understand how to program a computer to monitor changes in the environment / control their products
	Know how to reinforce/strengthen a 3D framework
	Know that a recipe can be adapted a by adding or substituting one or more ingredients
Cooking and Nu	trition
	Understand and apply the principles of a healthy and varied diet
	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed
Where Food	Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and
Comes From	cattle) and caught (such as fish) in the UK, Europe and the wider world
	Know that seasons may affect the food available
	Understand how food is processed into ingredients that can be eaten or used in cooking



Food,	How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat
Preparation,	source
Cooking and	How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
Nutrition	Know that recipes can be adapted to change the appearance, taste, texture and aroma
	Know that different foods contain different substances - nutrients, water and fibre - that are needed for health
	Understand the need for correct storage

Measure accurately

Work out ratios in recipes

Continuous

Healthy eating

Discussions about food

British Food Fortnight

Farm to Fork

Revisit previous skills

Construction kits