



Cassop Primary School – Design and Technology plans

KS1 DT	Autumn	Spring	Summer
Topic	Food	Make an insect hotel	Homes (link to China) Make a boat Chinese Food
Question	Where does food come from?	What do we need to build a hotel for bugs?	What are Chinese boats like?
NC Progression Skills Statements	<ul style="list-style-type: none"> * Use the basic principles of a healthy and varied diet to prepare dishes * Understand where food comes from 	<ul style="list-style-type: none"> * 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 ICT * Select 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 * Explore and evaluate a range of existing products * Evaluate their ideas and products against design criteria * Build structures, exploring how they can be made stronger, stiffer and more stable 	<ul style="list-style-type: none"> * 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 ICT * Select 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 * Explore and evaluate a range of existing products * Evaluate their ideas and products against design criteria * Build structures, exploring how they can be made stronger, stiffer and more stable

KS1 DT	Autumn	Spring	Summer
Topic	Pop-up cards (Christmas)	Make a vehicle	Masks (link to Africa) African Food
Question	Can you make a card pop up?	How do wheels work?	What are African masks like?
NC Progression Skills Statements	<ul style="list-style-type: none"> * 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 ICT * Select and use a range of tools and equipment to perform practical tasks e.g cutting, shaping, joining and finishing * Explore and evaluate a range of existing products * Evaluate their ideas and products against design criteria 	<ul style="list-style-type: none"> * 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 ICT * Select 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 * Explore and evaluate a range of existing products * 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 e.g. levers, sliders, wheels and axles 	<ul style="list-style-type: none"> * 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 ICT * Select 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 * Explore and evaluate a range of existing products * Evaluate their ideas and products against design criteria * Build structures, exploring how they can be made stronger, stiffer and more stable

KS2	DT	
Topic	Design and make pizza (link to Geography – Italy)	
Question	Can you design and make a pizza?	
	Year 3/4	Year 5/6
Progression Skills Statements	<p>DESIGN</p> <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	<p>DESIGN</p> <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	<p>MAKE</p> <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	

	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * Know that food ingredients can be fresh, pre-cooked and processed 	<p>TECHNICAL KNOWLEDGE</p> <p>Know that a recipe can be adapted by adding or substituting one or more ingredients</p>
	<p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> * Know 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 seasons may affect the food available * Understand how food is processed into ingredients that can be eaten or used in cooking * How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source * How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Know that recipes can be adapted to change the appearance, taste, texture and aroma * Know that different foods contain different substance – nutrients, water and fibre – that are needed for health * Understand the need for correct storage * Measure accurately * Work out ratios in recipes
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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 * 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 	

KS2	DT	
Topic	Bag challenge	
Question	Can you design, make and evaluate a bag?	
	Year 3/4	Year 5/6
Progression Skills Statements	<p>DESIGN</p> <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	<p>DESIGN</p> <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	<p>MAKE</p> <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	

	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	TECHNICAL KNOWLEDGE <ul style="list-style-type: none"> * Know that a single fabric shape can be used to make a 3D textiles product 	TECHNICAL KNOWLEDGE <ul style="list-style-type: none"> * Know that a 3D textiles product can be made from a combination of fabric shapes
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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 	

KS2	DT	
Topic	Design something to lift a load – pulleys (link to Geography – Alaska) (link to History: local – study mining)	
Question	What will you design to lift a load?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	DESIGN <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	MAKE <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities 	

	<ul style="list-style-type: none"> * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
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	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * Apply their understanding of how to strengthen, stiffen and reinforce more complex structures * Understand and use mechanical systems in their products e.g. gears, pulleys, cams, levers and linkages 	
	<ul style="list-style-type: none"> * Understand how levers and linkages or pneumatic systems create movement * Know how to make strong, stiff shell structures 	<ul style="list-style-type: none"> * Understand how cams, pulleys and gears create movement * Know how to reinforce/strengthen a 3D framework
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * Investigate and analyse a range of existing products 	

	<ul style="list-style-type: none"> * 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
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KS2	DT	
Topic	Food from the land (link to History: Anglo Saxons) – bread, flapjack, honey	
Question	What did the Saxons eat?	
	Year 3/4	Year 5/6
Progression Skills Statements	<p>MAKE</p> <ul style="list-style-type: none"> * Follow procedures for safety * Use a wider range of food ingredients 	
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
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	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * Know that food ingredients can be fresh, pre-cooked and processed 	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> Know that a recipe can be adapted by adding or substituting one or more ingredients
	<p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> * Know 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 seasons may affect the food available * Understand how food is processed into ingredients that can be eaten or used in cooking * How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source * How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Know that recipes can be adapted to change the appearance, taste, texture and aroma

	<ul style="list-style-type: none"> * Know that to be active and healthy, food is needed to provide energy for the body * Measure using grams * Follow a recipe 	<ul style="list-style-type: none"> * Know that different foods contain different substance – nutrients, water and fibre – that are needed for health * Understand the need for correct storage * Measure accurately * Work out ratios in recipes
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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 * 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 	

KS2	DT	
Topic	Torches/lighthouses (link to Science: Light and Sound) – Souter Lighthouse visit (ICT)	
Question	Can you make a light?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	DESIGN <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	MAKE <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making 	

	<ul style="list-style-type: none"> * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * 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 	
	<ul style="list-style-type: none"> * Understand how simple electrical circuits and components can be used to create functional products * Understand how to program a computer to control their products 	<ul style="list-style-type: none"> * Understand how more complex electrical circuits and components can be used to create functional products * Understand how to program a computer to monitor changes in the environment/control their products
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * Investigate and analyse a range of existing products 	

	<ul style="list-style-type: none"> * 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
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KS2	DT	
Topic	Moving Monsters (ICT) (cams for upper KS2) Mechanical systems	
Question	Can you make it move?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	DESIGN <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	MAKE <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
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	EVALUATE <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work 	

	<ul style="list-style-type: none"> * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
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	TECHNICAL KNOWLEDGE <ul style="list-style-type: none"> * Apply their understanding of how to strengthen, stiffen and reinforce more complex structures * Understand and use mechanical systems in their products e.g. gears, pulleys, cams, levers and linkages 	
	<ul style="list-style-type: none"> * Understand how levers and linkages or pneumatic systems create movement * Know how to make strong, stiff shell structures 	<ul style="list-style-type: none"> * Understand how cams, pulleys and gears create movement * Know how to reinforce/strengthen a 3D framework
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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 	

KS2	DT	
Topic	Vases (sculptures): Link to Ancient Greece	
Question	Can you make a Greek vase?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share and clarify ideas through discussion 	DESIGN <ul style="list-style-type: none"> * 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

	<ul style="list-style-type: none"> * Model their ideas using prototypes and pattern pieces * Use annotated sketches, cross-sectional drawings and diagrams * Use computer-aided design 	<ul style="list-style-type: none"> * Recognise when their products have to fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	<p>MAKE</p> <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * Apply their understanding of how to strengthen, stiffen and reinforce more complex structures * Understand and use mechanical systems in their products e.g. gears, pulleys, cams, levers and linkages 	

NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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
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KS2	DT	
Topic	India: Textiles - Geography link	
Question	How do you tie-dye?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	DESIGN <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	MAKE <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * Measure, mark out, cut and shape materials and components with some accuracy 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * Accurately assemble, join and combine materials/components

	* 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	* 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 * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work	
	* Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused	* Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	TECHNICAL KNOWLEDGE * Know that a single fabric shape can be used to make a 3D textiles product	TECHNICAL KNOWLEDGE * Know that a 3D textiles product can be made from a combination of fabric shapes
NC Skills	* 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 * 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 of aesthetic qualities * 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	

KS2	DT	
Topic	Smoothies – seasonality/ingredients grown (link to Geography: Amazon Rainforest)	
Question	What will you put in your smoothie?	
	Year 3/4	Year 5/6

<p>Progression Skills Statements</p>	<p>DESIGN</p> <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	<p>DESIGN</p> <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	<p>MAKE</p> <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are

	TECHNICAL KNOWLEDGE * Know that food ingredients can be fresh, pre-cooked and processed	TECHNICAL KNOWLEDGE Know that a recipe can be adapted by adding or substituting one or more ingredients
	COOKING AND NUTRITION * Know 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 seasons may affect the food available * Understand how food is processed into ingredients that can be eaten or used in cooking * How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source * How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	
	* 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	* Know that recipes can be adapted to change the appearance, taste, texture and aroma * Know that different foods contain different substance – nutrients, water and fibre – that are needed for health * Understand the need for correct storage * Measure accurately * Work out ratios in recipes
NC Skills	* 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 * 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 of aesthetic qualities * 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 * 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	

KS2	DT	
Topic	Mexican food (beans, pulses, chocolate – link to Harvest Festival)	
Question	What Mexican dish will you make?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN * Gather information about the needs and wants of particular individuals and groups	DESIGN * Carry out research, using surveys, interviews, questionnaires and web-based resources

	<ul style="list-style-type: none"> * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	<ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	<p>MAKE</p> <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are

	TECHNICAL KNOWLEDGE * Know that food ingredients can be fresh, pre-cooked and processed	TECHNICAL KNOWLEDGE Know that a recipe can be adapted by adding or substituting one or more ingredients
	COOKING AND NUTRITION * Know 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 seasons may affect the food available * Understand how food is processed into ingredients that can be eaten or used in cooking * How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source * How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	
	* 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	* Know that recipes can be adapted to change the appearance, taste, texture and aroma * Know that different foods contain different substance – nutrients, water and fibre – that are needed for health * Understand the need for correct storage * Measure accurately * Work out ratios in recipes
NC Skills	* 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 * 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 of aesthetic qualities * 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 * 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	

KS2	DT	
Topic	Bridges	
Question	What kind of bridge will you make?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN * Gather information about the needs and wants of particular individuals and groups	DESIGN * Carry out research, using surveys, interviews, questionnaires and web-based resources

	<ul style="list-style-type: none"> * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	<ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	<p>MAKE</p> <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	
	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * Apply their understanding of how to strengthen, stiffen and reinforce more complex structures 	

	* Know how to make strong, stiff shell structures	* Know how to reinforce/strengthen a 3D framework
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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 	

KS2	DT	
Topic	Motorised Vehicle	
Question	What motorised vehicle will you make?	
	Year 3/4	Year 5/6
Progression Skills Statements	DESIGN <ul style="list-style-type: none"> * Gather information about the needs and wants of particular individuals and groups * Develop their own criteria and use these to inform ideas * Research designs * Share 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 	DESIGN <ul style="list-style-type: none"> * 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 fulfill conflicting requirements * Generate innovative ideas, drawing on research * Make design decisions, take account of constraints such as time, resources and cost * Develop prototypes
	MAKE <ul style="list-style-type: none"> * 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 according to functional properties and aesthetic qualities * Order the main stages of making * Produce detailed lists of tools, equipment and materials that they need * Follow safety procedures * Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	

	<ul style="list-style-type: none"> * 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 	<ul style="list-style-type: none"> * Accurately measure to nearest mm, mark out, cut and shape materials and components * 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
	<p>EVALUATE</p> <ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Refer back to their design criteria as they design and make * Use their criteria to evaluate their completed products * Investigate – how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants * Identify great designers and their work and use research of designers to influence of work 	
	<ul style="list-style-type: none"> * Identify strengths and weaknesses of their ideas and products * Consider the views of others, including intended users, to improve their work * Investigate – who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused 	<ul style="list-style-type: none"> * Critically evaluate the quality of design, manufacture and fitness for purpose of their products as they design and make * Compare their ideas and products to their original design specification * Investigate – how much products cost to make, how innovative products are and how sustainable the materials in products are
	<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> * 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 	
	<ul style="list-style-type: none"> * Understand how simple electrical circuits and components can be used to create functional products * Understand how to program a computer to control their products 	<ul style="list-style-type: none"> * Understand how more complex electrical circuits and components can be used to create functional products * Understand how to program a computer to monitor changes in the environment/control their products
NC Skills	<ul style="list-style-type: none"> * 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 * 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 of aesthetic qualities * 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 	