

St. Augustine's Primary School – Whole School Design and Technology Overview

Year Group/Topic		Design and Make	Evaluate	Technical Knowledge	Nutrition and Cooking
EYFS	Autumn	<p>Nursery</p> <ul style="list-style-type: none"> • Uses various construction materials. • Realises tools can be used for a purpose. • Select tools and techniques needed to shape, assemble and join materials they are using. <p>Reception</p> <ul style="list-style-type: none"> • Explore different materials freely, to develop their ideas about how to use them and what to make. 	N/A	N/A	Nursery and Reception – daily snack time
		<p>Key words scissors, materials, make, glue, cut, tools Bold for new words. Not bold for previous words.</p>	<p>Reception builds upon skills learnt in nursery. Foundations for: All topics throughout the school. EYFS are the building blocks for DT.</p>		
	Spring	<ul style="list-style-type: none"> - Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. - Explore different materials freely, to develop their ideas about how to use them and what to make. <p>Reception:</p> <ul style="list-style-type: none"> • Explore a range of media and materials in creative work. 	N/A	N/A	Nursery and Reception – daily snack time
		<p>Key words scissors, materials, make, glue, cut, tools Bold for new words. Not bold for previous words.</p>	<p>Reception builds upon skills learnt in nursery. Foundations for: All topics throughout the school. EYFS are the building blocks for DT</p>		
	Summer				
		<p>Nursery</p> <ul style="list-style-type: none"> - Explore different materials freely, to develop their ideas about how to use them and what to make. - Make imaginative and complex 'small worlds' with blocks and 	<p>Reception:</p> <ul style="list-style-type: none"> • Share creations, explaining the process they have used. 	<p>Reception:</p> <ul style="list-style-type: none"> • Share creations, explaining the process they have used. 	Nursery and Reception – daily snack time

		<p>construction kits, such as a city with different buildings and a park</p> <p>Reception Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p>			
		<p>Key words scissors, materials, make, glue, cut, tools, colour, design Bold for new words. Not bold for previous words.</p>	<p>Reception builds upon skills learnt in nursery. Foundations for: All topics throughout the school. EYFS are the building blocks for DT</p>		
Year 1	Autumn Dips and Dippers	<ul style="list-style-type: none"> -design products that have a purpose and are aimed at an intended user -explain how their products will look and work through talking and simple annotated drawings -understand and follow simple design criteria -work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment. -with support, follow a simple plan or recipe -begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer -select from a range of materials, textiles and components according to their characteristics -learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures -use a range of materials and components, including textiles and food ingredients -assemble, join and combine materials, components or ingredients -cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups 	<ul style="list-style-type: none"> -explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations -explain positives and things to improve for existing products -talk about their design ideas and what they are making -as they work, start to identify strengths and possible changes they might make to refine their existing design -evaluate their products and ideas against their simple design criteria 	NA	<ul style="list-style-type: none"> -explain where in the world different foods originate from -name and sort foods into the five groups in the Eatwell Guide -understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why -use what they know about the Eatwell Guide to design and prepare dishes
	Dips and Dippers	<p>Key Vocabulary: varied diet, equipment, likes and dislikes, design criteria, prepare, balance, healthy, product, appealing, blend, crush, slice, mix, chop, peel, grate. Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – Snack time/ discussions around healthy food in EYFS Foundation for – Sensational Salads – Year 1 Edible Garden – Year 3 The Great Bread Bake Off – Year 4 Super Seasonal Food – Year 5 Global Food – Year 6</p>		Adaptations made -

Spring Fabric Bunting	<ul style="list-style-type: none"> -design models using simple computing software -plan and test ideas using templates and mock-ups -work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment. -select from a range of materials, textiles and components according to their characteristics -learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures -cut, shape and score materials with some accuracy -demonstrate how to cut, shape and join fabric to make a simple product -use a basic running stitch 	<ul style="list-style-type: none"> -explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations -explain positives and things to improve for existing products -talk about their design ideas and what they are making -as they work, start to identify strengths and possible changes they might make to refine their existing design -evaluate their products and ideas against their simple design criteria 	NA	NA
Fabric Bunting	<p>Key Vocabulary: Fabric, material, technique, stitch, yarn: lace, felt, corduroy, denim, satin, silk, cotton, fur, velvet, velour, ribbon and wool felt fabric, binca fabric, beads, sequins, buttons, ribbon, wool, embroidery threads, plastic/ large metal darning needles, scissors, small staplers, PVA glue. Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – Junk Modelling using a range of materials in EYFS. Foundation for – Year 2 Fabric Faces Year 3 – Lets go Fly a Kite Year 6 – Felt Phone Cases</p>	Adaptations made -	
Summer Sensational Salads	<ul style="list-style-type: none"> -with support, follow a simple plan or recipe -begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer -learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures -assemble, join and combine materials, components or ingredients 	<ul style="list-style-type: none"> -explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations -explain positives and things to improve for existing products 	NA	<ul style="list-style-type: none"> -explain where in the world different foods originate from -understand that all food comes from plants or animals -understand that food has to be farmed, grown elsewhere (e.g. home) or caught -name and sort foods into the five groups in the Eatwell Guide -understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why

		-cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups			-use what they know about the Eatwell Guide to design and prepare dishes
Sensational Salads	Key Vocabulary: Healthy, varied, diet, recipe, measuring spoons, zesters, juicers, prepare, grown. Bold for new words. Not bold for previous words.	Links: Builds on – Dips and Dippers – Autumn EYFS – Snack time and talks around healthy eating Foundation for – Edible Garden – Year 3 The Great Bread Bake Off – Year 4 Super Seasonal Food – Year 5 Global Food – Year 6	Adaptations made -		

Year 2	Autumn Pirate Paddy's Packed Lunch Problems	<ul style="list-style-type: none"> -use their knowledge of existing products and their own experience to help generate their ideas -design products that have a purpose and are aimed at an intended user -understand and follow simple design criteria -work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment -begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer -select from a range of materials, textiles and components according to their characteristics - learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures -cut, shape and score materials with some accuracy -assemble, join and combine materials, components or ingredients -demonstrate how to cut, shape and join fabric to make a simple product -manipulate fabrics in simple ways to create the desired effect; -use a basic running stitch 	<ul style="list-style-type: none"> -explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations -explain positives and things to improve for existing products -explore what materials products are made from -as they work, start to identify strengths and possible changes they might make to refine their existing design -evaluate their products and ideas against their simple design criteria -start to understand that the iterative process sometimes involves repeating different stages of the process 	<ul style="list-style-type: none"> -build simple structures, exploring how they can be made stronger, stiffer and more stable; -talk about and start to understand the simple working characteristics of materials and components 	NA
	Pirate Paddy's Packed Lunch Problems	<p>Key Vocabulary: design criteria, stronger, stiffer, stable, design, positive, negatives, evaluate, problem, product, compartments, materials, cardboard, plastic, glass</p> <p>Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on - EYFS JUNK MODELING</p> <p>Foundation for - Year 5 Marbulous Structures and Year 6 Anderson Shelters</p>	Adaptations made -	

	Spring Fabric Faces	<ul style="list-style-type: none"> -explain how their products will look and work through talking and simple annotated drawings -plan and test ideas using templates and mock-ups -understand and follow simple design criteria -begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer -select from a range of materials, textiles and components according to their characteristics; - learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures -cut, shape and score materials with some accuracy -assemble, join and combine materials, components or ingredients -demonstrate how to cut, shape and join fabric to make a simple product -manipulate fabrics in simple ways to create the desired effect; -use a basic running stitch 	<ul style="list-style-type: none"> -explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations -explain positives and things to improve for existing products -explore what materials products are made from -as they work, start to identify strengths and possible changes they might make to refine their existing design 	<ul style="list-style-type: none"> -talk about and start to understand the simple working characteristics of materials and components 	NA
	Fabric Faces	<p>Key Vocabulary: Bold for new words. Fabric, design, join, stitch, sew, materials, design criteria Not bold for previous words.</p>	<p>Links: Builds on – Year 1 – Fabric Burning Foundation for – Felt Phone Cases – Year 6</p>	<p>Adaptations made -</p>	

	<p>Summer Moving Pictures</p>	<ul style="list-style-type: none"> -use their knowledge of existing products and their own experience to help generate their ideas -design products that have a purpose and are aimed at an intended user -explain how their products will look and work through talking and simple annotated drawings -understand and follow simple design criteria -work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment -with support, follow a simple plan or recipe -begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer -select from a range of materials, textiles and components according to their characteristics -use a range of materials and components, including textiles and food ingredients -assemble, join and combine materials, components or ingredients 	<ul style="list-style-type: none"> -explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations -explain positives and things to improve for existing products -talk about their design ideas and what they are making -as they work, start to identify strengths and possible changes they might make to refine their existing design -evaluate their products and ideas against their simple design criteria 	<ul style="list-style-type: none"> -talk about and start to understand the simple working characteristics of materials and components -explore and create products using mechanisms, such as levers, sliders and wheels 	<p>NA</p>
	<p>Moving Pictures</p>	<p>Key Vocabulary: Bold for new words. Moving pictures, product, design, moving mechanism, evaluate, slider, wheels, lever Not bold for previous words.</p>	<p>Links: Builds on – Foundation for –</p>	<p>Adaptations made -</p>	

Year 3	<p>Autumn 1 Edible Garden</p>	<ul style="list-style-type: none"> • with growing confidence, carefully select from a range of tools and equipment, explaining their choices • learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; 			<ul style="list-style-type: none"> • start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world; • understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically; • with support, use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven; • use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking; • explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes; understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body; prepare ingredients using appropriate cooking utensils; • measure and weigh ingredients to the nearest gram and millilitre; • start to independently follow a recipe; • start to understand seasonality.
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Edible Garden	Key Vocabulary: eatwell plate, ingredients, utensils, hygienically, balanced meal, yield produce, seasonality, temperature, hob. Bold for new words. Not bold for previous words.		Links: Builds on – Sensation salads and dips and dippers (year 1) Foundation for – Year 4 – The Great British Bake Off Year 5 – Sensational Salads Year 6 – Global Foods	Adaptations made -
Let's Go Fly A Kite	<ul style="list-style-type: none"> identify the design features of their products that will appeal to intended customers; use their knowledge of a broad range of existing products to help generate their ideas; use annotated sketches and cross-sectional drawings to develop and communicate their ideas develop and follow simple design criteria with growing confidence, carefully select from a range of tools and equipment, explaining their choices; select from a range of materials and components according to their functional properties and aesthetic qualities; use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components join textiles with an appropriate sewing technique; 	<ul style="list-style-type: none"> explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose; explore what materials/ingredients products are made from and suggest reasons for this; consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product; evaluate their product against their original design criteria; evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world 	<ul style="list-style-type: none"> understand that materials have both functional properties and aesthetic qualities; apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products; 	N/A
Let's Go Fly A Kite	Key Vocabulary: Saws, scissors, frame structures, design criteria, materials, joining, strengthen, stiffen, measure, cut. Bold for new words. Not bold for previous words.		Links: Builds on – Paddy's Packed Lunch – Year 2 Foundation for – Marbulous Structures - Year 5 Automata Animals - Year 6	Adaptations made -

Mechanical Posters

- identify the design features of their products that will appeal to intended customers;
- use their knowledge of a broad range of existing products to help generate their ideas;
- design innovative and appealing products that have a clear purpose and are aimed at a specific user;
- explain how particular parts of their products work;
- use annotated sketches and cross-sectional drawings to develop and communicate their ideas;
- when designing, explore different initial ideas before coming up with a final design;
- when planning, start to explain their choice of materials and components including function and aesthetics;
- test ideas out through using prototypes;
- develop and follow simple design criteria;
- work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment

- with growing confidence, carefully select from a range of tools and equipment, explaining their choices;
- select from a range of materials and components according to their functional properties and aesthetic qualities

- explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose

- consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product;

- evaluate their product against their original design criteria;

- understand and demonstrate how mechanical and electrical systems have an input and output process;

- explain how mechanical systems such as levers and linkages create movement;

- use mechanical systems in their products.

		<ul style="list-style-type: none"> learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components cut, shape and score materials with some degree of accuracy; assemble, join and combine material and components with some degree of accuracy begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics 				
	<u>Mechanical Posters</u>	<p>Key Vocabulary: Lever, linkage mechanisms, prototype, recycling, mechanical systems, annotated design, design criteria, Evaluate, improve, mechanical systems</p> <p>Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – Moving Pictures – Year 2 Let’s Go Fly a Kite – Year 3 Foundation for – Battery Operated Lights – Year 4</p>	Adaptations made -		
Year 4	The Great Bread Bake Off	<ul style="list-style-type: none"> use annotated sketches and cross-sectional drawings to develop and communicate their ideas; when designing, explore different initial ideas before coming up with a final design; develop and follow simple design criteria; work in a broader range of relevant contexts, for example 	<ul style="list-style-type: none"> explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose; explore what materials/ingredients products are made from and suggest reasons for this; consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views 	n/a	<ul style="list-style-type: none"> understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking; 	

	<p>entertainment, the home, school, leisure, food industry and the wider environment</p> <ul style="list-style-type: none"> with growing confidence, carefully select from a range of tools and equipment, explaining their choices; learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures cut, shape and score materials with some degree of accuracy 	<p>of others if this helps them to improve their product;</p> <ul style="list-style-type: none"> evaluate their product against their original design criteria 		<ul style="list-style-type: none"> measure and weigh ingredients to the nearest gram and millilitre; start to independently follow a recipe;
The Great Bread Bake Off	<p>Key Vocabulary: Bread production designing, making and evaluating, ingredients, kneading, equipment, shaping, Weighing scales, sieves, mixing Bowls, Measuring spoons, measuring Jugs, Oven gloves, cooling racks. Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – Year 1 – dips and dippers and sensational salads. Year 3 – edible garden Foundation for – Year 5 – Seasonal Salads Year 6 – Global Food</p>	Adaptations made -	
<u>Battery Operated Lights</u>	<ul style="list-style-type: none"> design innovative and appealing products that have a clear purpose and are aimed at a specific user; use annotated sketches and cross-sectional drawings to develop and communicate their ideas; develop and follow simple design criteria; work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment with growing confidence, carefully select from a range of tools and equipment, explaining their choices; select from a range of materials and components according to their functional properties and aesthetic qualities learn to use a range of tools and equipment safely, appropriately 	<ul style="list-style-type: none"> evaluate their product against their original design criteria; evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world. 	<ul style="list-style-type: none"> understand that materials have both functional properties and aesthetic qualities make and represent simple electrical circuits, such as a series and parallel, and components to create functional products; 	N/A

	<p>and accurately and learn to follow hygiene procedures;</p> <ul style="list-style-type: none"> • use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components • assemble, join and combine material and components with some degree of accuracy 			
<p><u>Battery Operated Lights</u></p>	<p>Key Vocabulary: electrical systems, electric circuits, battery operated light, switch. Design criteria, evaluation, final product, parallel circuit, bulb. Faults, aesthetic, functional qualities, cross sectional diagram Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – -Mechanical Posters Foundation for – KS3</p> <ul style="list-style-type: none"> • understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs] • <ul style="list-style-type: none"> ▪ apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers]. 	<p>Adaptations made -</p>	
<p>Juggling Balls:</p>	<ul style="list-style-type: none"> • identify the design features of their products that will appeal to intended customers; • use their knowledge of a broad range of existing products to help generate their ideas; • design innovative and appealing products that have a clear purpose and are aimed at a specific user; • when designing, explore different initial ideas before coming up with a final design • test ideas out through using prototypes 	<ul style="list-style-type: none"> • consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product; • evaluate their product against their original design criteria 	<p>N/A</p>	<p>N/A</p>

		<ul style="list-style-type: none"> • work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment • with growing confidence, carefully select from a range of tools and equipment, explaining their choices; • select from a range of materials and components according to their functional properties and aesthetic qualities • learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; • Use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components • join textiles with an appropriate sewing technique; • begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics 			
	<p>Juggling Balls:</p>	<p>Key Vocabulary: Evaluating, design brief, hemming and overcast stitch, tie-dye and fabric paints, hem, stitch, Analyse, test, Bold for new words.</p>	<p>Links: Builds on – Fabric Bunting – Year 1 Fabric Faces – Year 2 Foundation for – Year 6 – Felt Phone Cases</p>	<p>Adaptations made -</p>	

		Not bold for previous words.			
Year 5	<u>Super Seasonal Food</u>	<ul style="list-style-type: none"> use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas 	<ul style="list-style-type: none"> evaluate their ideas and products against the original design criteria, making changes as needed 	N/A	<ul style="list-style-type: none"> know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world; understand about seasonality, how this may affect the food availability and plan recipes according to seasonality; understand that food is processed into ingredients that can be eaten or used in cooking; demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source; demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling; explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes; adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma; alter methods, cooking times and/or temperatures; measure accurately and calculate ratios of ingredients to scale up or down from a recipe;
	<u>Super Seasonal Food</u>	Key Vocabulary Seasonality, spring, summer, autumn, winter, imported, ripe, sustainable. Seasonal, reared, caught, processed. asparagus, kale, spinach, radishes, rocket, Jersey Royal new potatoes, spring onions, taste, texture, smell, blanch, fry, grill, griddle, chop, slice, peel, grate,	Links: Builds on: Year 1 – Dips and Dippers Sensational Salads Year 3 – Edible Garden Year 4 – The Great Bread Bake Off Foundations for:	Adaptions:	

		balanced, protein, eat well plate. Design criteria, specification, annotated diagram, generate, refine.	Global Food – year 6	
Marbulous Structures	<ul style="list-style-type: none"> with growing confidence, select from a wide range of tools and equipment, explaining their choices; select from a range of materials and components according to their functional properties and aesthetic qualities learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures use a full range of materials and components, including construction materials and kits, textiles, and mechanical components; cut a range of materials with precision and accuracy; shape and score materials with precision and accuracy; assemble, join and combine materials and components with accuracy 	<ul style="list-style-type: none"> complete detailed competitor analysis of other products on the market; critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make; evaluate their ideas and products against the original design criteria, making changes as needed. 	<ul style="list-style-type: none"> apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products 	n/a
Marbulous Structures	<p>Key Vocabulary:</p> <p>Free standing, structure, support, stiffen, sturdy, stable, reposition, strengthen, reinforce. accurate, join, shape, cut aesthetics, tools, equipment, functional</p> <p>Bend, skills, tools, equipment, cut, shape, join.</p> <p>Existing, product.</p> <p>iterative process.</p> <p>Test, evaluate, design criteria, improve.</p>	<p>Links: Builds on –</p> <p>Year 2 – Paddy’s pack lunch</p> <p>Year 2 – Moving pictures</p> <p>Year 3 – Lets Go Fly A kite</p> <p>Year 4 – Juggling Balls</p> <p>Foundation for –</p> <p>Automata Animals – year 6</p>	Adaptations made -	

	<p>Bold for new words. Not bold for previous words.</p>			
<p>Programing Adventures</p>	<ul style="list-style-type: none"> • use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market • design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user • use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas • select from a range of materials and components according to their functional properties and aesthetic qualities • learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures • shape and score materials with precision and accuracy 	<ul style="list-style-type: none"> • critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make; • evaluate their ideas and products against the original design criteria, making changes as needed. 	<ul style="list-style-type: none"> • understand and demonstrate that mechanical and electrical systems have an input, process and output • apply their understanding of computing to program, monitor and control a product 	<p>N/A</p>
<p>Key Vocabulary: Floor robot, bee –bot, input, output Adventure, maps, obstacles, squares, background, start and finish, materials, properties, cotton, silk, felt, cardboard, paper, bubble wrap, plastic design criteria, obstacles, materials, plan, evaluate, revise, Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – Foundation for – Automata Animals Year 6</p>	<p>Adaptations made -</p>		

<p style="text-align: center;">Year 6</p>	<p><u>Automata</u> <u>Animals</u></p>	<ul style="list-style-type: none"> • use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market; • explain how particular parts of their products work • use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas • work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment • independently plan by suggesting what to do next; • with growing confidence, select from a wide range of tools and equipment, explaining their choices; • select from a range of materials and components according to their functional properties and aesthetic qualities; • learn to use a range of tools and equipment safely and appropriately and learn to follow procedures; independently take exact measurements and mark out, to within 1 millimetre; use a full range of materials and components, including construction materials and kits, textiles, and mechanical components; 	<ul style="list-style-type: none"> • critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make; • evaluate their ideas and products against the original design criteria, making changes as needed. 	<ul style="list-style-type: none"> • explain how mechanical systems, such as cams, create movement and use mechanical systems in their products 	<p>N/A</p>
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		cut a range of materials with precision and accuracy;			
<u>Automata Animals</u>	<p>Key Vocabulary: Endangered, vulnerable, appearance, habitat, research, design brief, Cam, follower, mechanism, components, mechanical systems, rotary, linear, convert, motion.</p> <p>guide, , , dwell, snail, egg shaped, eccentric, ellipse, hexagon, round, off centre, offset.</p> <p>Design criteria, functional, aesthetic, design features, innovative, research, finished, quality</p> <p>materials, framework, construction, finish, join, cut, saw, square section wood, hacksaw, vice, corner joints, framework, measure, accurately, smooth, finish, notch.</p> <p>mount, framework, finish, join, cut, saw, prototype, evaluate, peer, feedback, off centre, axle, shaft.</p> <p>Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on – Foundation for – Felt Phone Cases Year 6</p> <p>KS3</p>	<p>Adaptations made –</p> <p>Anderson shelters created linked to History topic and Remembrance Day</p>		
<u>Global Food</u>	<ul style="list-style-type: none"> learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures 				<ul style="list-style-type: none"> know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world; understand about seasonality, how this may affect the food availability and plan recipes according to seasonality; demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source; demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling;

					<ul style="list-style-type: none"> explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes measure accurately and calculate ratios of ingredients to scale up or down from a recipe; independently follow a recipe.
	<p>Key Vocabulary Ingredient, climate, taste, prepare, sensory, world, global, flourish. Diet, food groups, eat well plate, protein, dairy, carbohydrates, starchy fruit, fat, vegetables. Rice, boil, hob, heat source, recipe, staple, eat well plate, storage, handling, nutritional, benefits and measure Chinese, skills, techniques, basic, advanced, bake, crack, dice, chop, peel, grate, slice, roll, hygiene. Mexican, skills, techniques, basic, fry, grate, dice, chop, slice, hygiene, salsa, guacamole, quesadillas. Pretzel, knead, bake, recipe, equipment, ingredients, technique. Bold for new words. Not bold for previous words.</p>	<p>Links: Builds on –</p> <ul style="list-style-type: none"> Year 1 – Dips and Dippers Sensational Salads Year 3 – Edible Garden Year 4 – The Great Bread Bake Off Year 5 – Super Seasonal Food <p>Foundation for – KS3</p> <ul style="list-style-type: none"> understand and apply the principles of nutrition and health cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes] understand the source, seasonality and characteristics of a broad range of ingredients 	<p>Adaptations made -</p>	<p>NA</p>	
<p><u>Felt Phone Cases</u></p>	<ul style="list-style-type: none"> use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are 	<ul style="list-style-type: none"> critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make; 	<p>n/a</p>	<p>n/a</p>	

		<p>fit for purpose and aimed at a target market</p> <ul style="list-style-type: none"> design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas; generate a range of design ideas and clearly communicate final designs independently plan by suggesting what to do next select from a range of materials and components according to their functional properties and aesthetic qualities; create step-by-step plans as a guide to making; Practical skills and techniques Learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures shape and score materials with precision and accuracy; demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product; join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch; 	<ul style="list-style-type: none"> evaluate their ideas and products against the original design criteria, making changes as needed. 		
		<p>Key Vocabulary: Design criteria, aesthetics, functional, specification.</p>	<p>Links: Builds on – Year 2- Fabric Faces Year 3 – Lets go Fly a Kite</p>	<p>Adaptations made -</p>	

		<p>Innovative, annotate, design process.</p> <p>Pattern, template, precisely, accurately, scale, measurements, millimetre, centimetre.</p> <p>Prototype, whipstitch, backstitch, running stitch, blanket stitch</p> <p>Plan, fastenings, decoration, felt, design process. Fastenings, decoration, felt, design criteria, evaluate Bold for new words. Not bold for previous words.</p>	Year 4 – Juggling Balls		
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