

St Peter's Church of England Primary School

Design and Technology Curriculum: Topics, Coverage and Objectives



<p>Foundation Stage In the EYFS, pupils should be taught the knowledge and skills to enable them to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. They should work in a range of relevant contexts and access design and technology opportunities across indoor and outdoor provision.</p> <p>When designing and making, pupils should be taught to: Design -With support, generate, model and communicate their ideas -Draw a simple design Make -Select from a range of materials to make products with a purpose Evaluate -Say what they like about their product and consider how they could improve it. Technical Knowledge -Explore and use different tools (scissors, ruler, etc) -Create products by joining different materials together -Understand space and balance when constructing Cooking and nutrition -Pupils should be taught where food comes from and begin to understand that ingredients can produce a drink or food item. -Understand basic hygiene, including oral health</p> <p>Our EYFS Curriculum documentation outlines the Expressive Arts and Design (EAD) content more specifically to the theme.</p>	<p>Key Stage One Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].</p> <p>When designing and making, pupils should be taught to: Design -design purposeful, functional, appealing products for themselves and other users based on design criteria - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology Make - select from and use a range of tools and equipment to perform practical tasks [for example, 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 characteristics Evaluate - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria Technical knowledge - build structures, exploring how they can be made stronger, stiffer and more stable -explore and use mechanisms in their products. Cooking and nutrition As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to: -use the basic principles of a healthy and varied diet to prepare dishes -understand where food comes from.</p>	<p>Key Stage Two Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to: Design -use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups -generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Evaluate - investigate and analyse a range of existing products - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world Technical knowledge - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] -apply their understanding of computing to program, monitor and control their products. Cooking and nutrition As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to: -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.</p>
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		Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
A U T U M N T E R	Topic in Autumn 1	All About Me	All About Me and My Family	Moving Pictures	Vehicles	Packaging	Money Containers	Musical Instruments	Shelters
	Links to Prior and Future Learning:	-Year 1 – select tools and resources to cut, stick, etc. - Year 1 – cut and shape	- Builds on nursery selecting tools -Year 1 – choose suitable materials and explain choices	*Links to Year 4 Storybooks topic	*Links to Year 6 topic Controllable Vehicles	*Links to Year 1 topic Homes – structures. *Links to Year 6 topic – Shelters – structures.	*Links to Year 2 topic Puppets – Textile skills *Links to Year 6 topic Slippers – Textile Skills	*Links with the Music Curriculum across all year groups (prior and future)	*Links to Year 1 Homes topic – Structures. *Link to Year 3 topic Packaging – structures. *Links to KS3: -understand and use the properties of materials and the performance of structural elements to achieve functioning solutions

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M	DT Skills and Concepts Progression:	<p>Pupils are taught to: -Use various construction materials. -Begin to construct, stacking blocks vertically and horizontally, making enclosure and creating spaces.</p> <p>-Begin to explore different materials and media (Playdough images using cutters and open-ended resources)</p>	<p>Pupils are taught to: -Construct with a purpose in mind. -Begin to join materials using string, glue, etc.</p> <p>- Understand how to keep healthy, linked to fruits and healthy eating (Handa's surprise)</p>	<p>Pupils are taught to: -use pictures and words to plan, begin to use models -design a product for myself following design criteria -research similar existing products explain what I'm making and why -select tools/equipment to cut, shape, join, finish and explain choices -measure, mark out, cut and shape, with support try to use finishing techniques to make product look good -talk about existing products, and say what is and isn't good -talk about my work, linking it to what I was asked to do -begin to use levers or slides</p>	<p>Pupils are taught to: -explain purpose of product, how it will work and how it will be suitable for the user -describe design using pictures, words, models, diagrams, begin to use ICT -choose best tools and materials, and explain choices -join materials/components together in different ways -measure, mark out, cut and shape materials and components, with support. -choose suitable materials and explain choices -use finishing techniques to make product look good -talk about what I would do differently if I were to do it again and why -describe what went well, thinking about design criteria -measure materials -describe some different characteristics of materials -join materials in different ways -use joining, rolling or folding to make it stronger -use own ideas to try to make product stronger -begin to understand how to use wheels and axles</p>	<p>Pupils are taught to: -begin to research others' needs -show design meets a range of requirements -describe purpose of product -follow a given design criterion -have at least one idea about how to create product -describe design using an accurately labelled sketch and words -make design decisions -make a prototype -begin to use computers to show design -consider how good product will be -begin to measure, mark out, cut and shape materials/components with some accuracy -begin to assemble, join and combine materials and components with some accuracy -begin to apply a range of finishing techniques with some accuracy -begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose -begin to understand by whom, when and where products were designed -begin to make strong structures</p>	<p>Pupils are taught to: -use research for design ideas -show design meets a range of requirements and is fit for purpose -begin to create own design criteria -have at least one idea about how to create product and suggest improvements for design. -produce a plan and explain it to others -say how realistic plan is. -include an annotated sketch -make and explain design decisions considering availability of resources -explain how product will work -make a prototype -begin to use computers to show design. -evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose -measure carefully to avoid mistakes -attempt to make product strong -continue working on product even if original didn't work -make a strong, stiff structure -think about user when choosing textiles -think about how to make product strong -begin to devise a template -explain how to join things in a different way</p>	<p>Pupils are taught to: -use internet and questionnaires for research and design ideas -make design decisions considering time and resources. -clearly explain how parts of product will work. -produce suitable lists of tools, equipment/materials needed -mainly accurately apply a range of finishing techniques -use techniques that involve a small number of steps -begin to be resourceful with practical problems -evaluate ideas and finished product against specification, considering purpose and appearance. -evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose</p>	<p>Pupils are taught to: -use research of user's individual needs, wants, requirements for design -create own design criteria and specification -independently model and refine design ideas by making prototypes and using pattern pieces -produce suitable lists of tools, equipment, materials needed, considering constraints -select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics -create, follow, and adapt detailed step-by-step plans -accurately measure, mark out, cut and shape materials/components -accurately assemble, join and combine materials/components -accurately apply a range of finishing techniques -be resourceful with practical problems -evaluate quality of design while designing and making; is it fit for purpose? -select materials carefully, considering intended use of the product, the aesthetics and functionality. -explain how product meets design criteria -reinforce and strengthen a 3D frame -think about user's wants/needs and</p>
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							-understand that a simple fabric shape can be used to make a 3D textiles project		aesthetics when choosing textiles -make product attractive and strong -use a range of joining techniques -understand that a single 3D textiles project can be made from a combination of fabric shapes.
Resources Needed	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials	Tools – scissors, stamps, stencils, cutters Playdough, clay Variety of materials	- Books/cards with moving parts - card strips - paper fasteners	- plastic toy vehicles (variety) - large drinking straws - wooden discs for wheels	- Existing packaging (cardboard) - card nets	- needles - embroidery thread (thick) - press studs - felt fabric	- simple instruments - books about instruments - recycled materials (pots, boxes, biscuit tins etc)	- dowelling - plastic/paper straws - wood pieces - glue guns - saws	
Topic in Autumn 2	Animals EAD	Animals EAD		Food Technology - 5 th November feast					
Links to Prior and Future Learning:	- Link to Year 1 homes (habitats for animals) - Year 1 and beyond, exploring different designers.	- Link to Year 1 homes (habitats for animals) - Year 2 and beyond – join materials in different ways - Year 1 and beyond, exploring different designers.		<i>*Links to prior History learning of 5th November – Food tech skills. *Links to Year 1 Fruit and Vegetables – Food tech skills. *Links to Year 3 Sandwich Snacks – Food tech skills. *Links to Year 4 Tudor Feasts – Food tech skills. *Links to Year 5 Bread – Food tech skills. *Links to Year 6 WW2 rations – Food tech skills. *Links to KS3 Food Technology – Food tech skills.</i>					
DT Skills and Concepts Progression:	Pupils are taught to: -Combine different materials - Create models with malleable materials	Pupils are taught to: -Use an increasing range of media and techniques - Develop joining techniques		Pupils are taught to: -work safely and hygienically -explain hygiene and keep a hygienic kitchen					

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		- Explore the work of different designers linked to the theme (animals)	- Explore the work of designers		-describe properties of ingredients and importance of varied diet -say where food comes from (animal, underground etc.) -describe how food is farmed, home-grown, caught -draw eat well plate; explain there are groups of food -describe "five a day" -cut, peel and grate with increasing confidence -begin to weigh out ingredients using scales				
		Tools – scissors, stamps, stencils, cutters Playdough Variety of materials	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining resources – sellotape, etc		- Recipe ingredients - table top hob for heating and cooking.				
Spring 1	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
S P R I N G T E R M	Topic in Spring 1	Journeys	Journeys	Homes	Puppets	Sandwich Snacks	Storybooks	Bread	Slippers
	Links to Prior and Future Learning:	-Links to Year 2 Puppets -Links to Year 4 storybooks	-Builds on nursery 'pop up' coverage -Links to Year 2 Puppets -Links to Year 4 storybooks	*Links to Year 3 topic Packaging – structures *Links to Year 6 topic Shelters - structures	*Links to Year 4 topic Money Containers – textiles. *Links to Year 6 topic Slippers – textiles.	*Links to Year 1 Fruit and Vegetables – Food tech skills. *Links to Year 2 5 th November – Food tech skills. *Links to Year 4 Tudor Feasts – Food tech skills. *Links to Year 5 Bread – Food tech skills. *Links to Year 6 WW2 rations – Food tech skills. *Links to KS3 Food Technology – Food tech skills.	*Links to Year 1 topic Moving Pictures.	*Links to Year 1 Fruit and Vegetables – Food tech skills. *Links to Year 2 5 th November – Food tech skills. *Links to Year 4 Tudor Feasts – Food tech skills. *Links to Year 6 WW2 rations – Food tech skills. *Links to KS3 Food Technology – Food tech skills.	*Links to Year 2 topic Puppets – textiles skills. *Links to Year 4 topic Money Containers – Textiles. *Links to KS3: -understand and use the properties of materials and the performance of structural elements to achieve functioning solutions

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DT Skills and Concepts Progression:	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -Begin to join materials - Create models with recycled materials - Use malleable materials to create representations - Explore the work of different designers 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -Experiment with and combine different media - Explore different textures and materials, experiment with ways of joining materials - Explore the work of different designers 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -explain what my product is for, and how it will work -explain what I want to do -have own ideas -consider what I need to do next -select tools/equipment to cut, shape, join, finish and explain choices -measure, mark out, cut and shape, with support -choose suitable materials and explain choices -talk about my work, linking it to what I was asked to do -talk about existing products considering: use, materials, how they work, audience, where they might be used -talk about things that other people have made -begin to talk about what could make a product better -describe differences in materials -suggest ways to make material/product stronger 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -measure textiles -join textiles together to make a product, and explain how I did it -carefully cut textiles to produce accurate pieces -explain choices of textile -understand that a 3D textile structure can be made from two identical fabric shapes. -have own ideas and plan what to do next -explain what I want to do and describe how I may do it -use knowledge of existing products to produce ideas -explain what I am making and why it fits the purpose -talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -carefully select ingredients -use equipment safely -make product look attractive -think about how to grow plants to use in cooking -begin to understand food comes from UK and wider world -describe how healthy diet = variety/balance of food/drinks -explain how food and drink are needed for active/healthy bodies. -prepare and cook some dishes safely and hygienically -grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -select suitable tools and equipment, explain choices in relation to required techniques and use accurately -select appropriate materials, fit for purpose; explain choices -work through plan in order. -realise if product is going to be good quality -measure, mark out, cut and shape materials/components with some accuracy -assemble, join and combine materials and components with some accuracy -apply a range of finishing techniques with some accuracy -use levers and linkages to create movement 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -explain how to be safe / hygienic and follow own guidelines -present product well - interesting, attractive, fit for purpose -begin to understand seasonality of foods -understand food can be grown, reared or caught in the UK and the wider world -describe how recipes can be adapted to change appearance, taste, texture, aroma -explain how there are different substances in food / drink needed for health -prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source -use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -draw on market research to inform design -identify features of design that will appeal to the intended user -come up with innovative design ideas -follow and refine a logical plan. -use annotated sketches, cross-sectional planning and exploded diagrams -make design decisions, considering, resources and cost -clearly explain how parts of design will work, and how they are fit for purpose -do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose -research and discuss how sustainable materials are -refine product after testing, considering aesthetics, functionality and purpose -think about how product might be sold -think carefully about what would improve product
Resources Needed	<p>Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials</p>	<p>Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials</p>	<ul style="list-style-type: none"> - Reusable construction kits (for frames) - cardboard - glue guns 	<ul style="list-style-type: none"> - existing hand/finger puppets - needles - embroidery thread (thick) - glue guns - coloured felt fabric 	<ul style="list-style-type: none"> - bought sandwiches - different breads - different fillings 	<ul style="list-style-type: none"> - range of books/cards with pop-up and moving parts 	<ul style="list-style-type: none"> - different breads - different types of flour (rye, white, chapatti) - other ingredients - access to ovens 	<ul style="list-style-type: none"> - variety of slippers - needles - thread - pins - variety of fabrics

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<i>Topic in Spring 2</i>	Traditional Tales	Traditional Tales						Food Technology – WW2 rations
Links to Prior and Future Learning:	EAD - Year 1 home models - Year 1 measure, mark out, cut and shape - joining materials – homes, and textile units in years 2, 4 and 6 - Years 1,2,4 and 6 food technology units	EAD Build on nursery beginning to join materials Year 2 – textile structure can be made from two separate shapes Year 6 – Making slippers - Years 1,2,4 and 6 food technology units						<i>*Links to Year 1 Fruit and Vegetables – Food tech skills.</i> <i>*Links to Year 2 5th November – Food tech skills.</i> <i>*Links to Year 4 Tudor Feasts – Food tech skills.</i> <i>*Links to Year 5 Bread – Food tech skills.</i> <i>*Links to prior History knowledge of WW2 – Food tech skills.</i> <i>*Links to KS3 Food Technology – Food tech skills:</i> - 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.
DT Skills and Concepts Progression:	<i>Pupils should be taught to:</i> - Join different materials - Explore different shapes and materials - Begin to create models from recycled materials	<i>Pupils should be taught to:</i> - Experiment with and combine different media -Explore different textures and materials						-understand a recipe can be adapted by adding / substituting ingredients -explain seasonality of foods -learn about food processing methods

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		<ul style="list-style-type: none"> - Use malleable materials to create representations - Explore the work of different designers - Taste porridge with different toppings - Sequence recipes – healthy options 	<ul style="list-style-type: none"> -Experiment with ways of joining materials -Explore work of different designers and create representations of their work - Write recipes (healthy options) - Taste bread with different toppings 						<ul style="list-style-type: none"> -name some types of food that are grown, reared or caught in the UK or wider world -adapt recipes to change appearance, taste, texture or aroma. -describe some of the different substances in food and drink, and how they can affect health -prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source. -use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.
	Resources	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials Boxes Porridge and different toppings	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials Boxes Bread and different toppings						<ul style="list-style-type: none"> - ingredients for recipes - table top hob for heating/cooking.
		Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
S U M M E R T E R M	Topic in Summer 1	Superheroes	Superheroes	Fruit and Vegetables	Winding Up	Moving Monsters	Food Technology – Tudor Food	Moving Toys	Controllable Vehicles
	Links to Prior and Future Learning:	<ul style="list-style-type: none"> -Link to Reception coverage -Link to Y1 Fruit and vegetables -Link to Y3 Sandwich snacks -Foundations for reception, evaluating - Year 1 models (homes) - Year 2 – joining materials 	<ul style="list-style-type: none"> -Builds on nursery coverage -Link to Y1 Fruit and vegetables Link to Y3 sandwich snacks -Year 2 and beyond, evaluating outcomes and existing products - Year 3 and beyond, different tools such as glue guns, sews, etc 	<ul style="list-style-type: none"> *Links to Year 2 5th November – Food tech skills. *Links to Year 3 Sandwich Snacks – Food tech skills. *Links to Year 4 Tudor Feasts – Food tech skills. *Links to Year 5 Bread – Food tech skills. *Links to Year 6 WW2 rations – Food tech skills. 	<ul style="list-style-type: none"> *Links to Year 3 topic Moving Monsters – mechanisms *Links to Year 5 topic Moving Toys – mechanisms *Links to Year 6 topic Controllable Vehicles – mechanisms 	<ul style="list-style-type: none"> *Links to Year 2 topic Winding Up – mechanisms *Links to Year 5 topic Moving Toys – mechanisms *Links to Year 6 topic Controllable Vehicles – mechanisms 	<ul style="list-style-type: none"> *Links to Year 1 Fruit and Vegetables – Food tech skills. *Links to Year 2 5th November – Food tech skills. *Links to prior History learning of the Tudors – Food tech skills. *Links to Year 5 Bread – Food tech skills. 	<ul style="list-style-type: none"> *Links to Year 2 topic Winding Up - Mechanisms *Links to Year 3 topic Moving Monsters – mechanisms *Links to Year 6 topic Controllable Vehicles – mechanisms 	<ul style="list-style-type: none"> *Links to Year 2 topic Winding Up – Mechanisms. *Links to Year 3 topic Moving Monsters – mechanisms *Links to Year 5 topic Moving Toys – mechanisms *Links to KS3:

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				*Links to KS3 Food Technology– Food tech skills.			*Links to Year 6 WW2 rations – Food tech skills. *Links to KS3 Food Technology – Food tech skills.		-understand how more advanced mechanical systems used in their products enable changes in movement and force -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].
DT Skills and Concepts Progression:	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -Join construction pieces together to build and balance. -Realise that tools can be used for a purpose. -Understand they can use lines to enclose a space and then begin to use these shapes to represent objects. -Use available resources to create props to support role play. -Capture experiences and responses with a range of media. -Begin to attempt to make a product 'look good' Experiment with joining and attaching materials - Use recycled materials to create models - Join different materials - Combine materials and textures - Begin to talk about their creations <p>GARDEN DRINK (Smoothies)</p>	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -Use what they have learnt about media and materials in original ways, thinking about uses and purposes. Represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories. -Use finishing techniques to make a product look good. - <i>Experiment with different media</i> - <i>Combine materials</i> - <i>Use different tools with care</i> - <i>Reflect on and evaluate their work</i> <p>GARDEN DRINK (Smoothies)</p>	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -describe textures wash hands & clean surfaces -think of interesting ways to decorate food -say where some foods come from, (i.e. plant or animal) -describe differences between some food groups (i.e. sweet, vegetable etc.) -discuss how fruit and vegetables are healthy -cut, peel and grate safely, with support -work in a safe and hygienic manner 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -design products for myself and others following design criteria -make suggestions as to what I need to do next. -describe which tools I'm using and why -work safely -evaluate how good existing products are -describe design using pictures, words, models, diagrams, begin to use ICT -join materials/components together in different ways -measure, mark out, cut and shape materials and components, with support. -describe which tools I'm using and why -choose suitable materials and explain choices depending on characteristics. -use finishing techniques to make product look good 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -create a plan which shows order, equipment and tools -explain how product will work -select suitable tools/equipment, explain choices; begin to use them accurately -select appropriate materials, fit for purpose. -work through plan in order -look at design criteria while designing and making -use design criteria to evaluate finished product -say what I would change to make design better -use appropriate materials -work accurately to make cuts and holes -join materials -select appropriate tools / techniques 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -explain how to be safe/hygienic -think about presenting product in interesting/ attractive ways -understand ingredients can be fresh, pre-cooked or processed -begin to understand about food being grown, reared or caught in the UK or wider world -describe eat well plate and how a healthy diet=variety / balance of food and drinks -explain importance of food and drink for active, healthy bodies -prepare and cook some dishes safely and hygienically -use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -take a user's view into account when designing -begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose -create own design criteria -have a range of ideas -produce a logical, realistic plan and explain it to others. -use cross-sectional planning and annotated sketches -model and refine design ideas by making prototypes and using pattern pieces. -select appropriate materials, fit for purpose; explain choices, considering functionality -create and follow detailed step-by-step plan -explain how product will appeal to an audience 	<p>Pupils are taught to:</p> <ul style="list-style-type: none"> -use selected tools and equipment precisely -explain how product will appeal to audience; make changes to improve quality -use techniques that involve a number of steps -keep checking design is best it can be. -evaluate ideas and finished product against specification, stating if it's fit for purpose -test and evaluate final product; explain what would improve it and the effect different resources may have had -consider the impact of products beyond their intended purpose -be confident to try new/different ideas -use cams, pulleys and gears to create movement -use different types of circuit in product 	

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						<ul style="list-style-type: none"> -alter product after checking, to make it better -begin to try new/different ideas -use simple lever and linkages to create movement 		<ul style="list-style-type: none"> -mainly accurately measure, mark out, cut and shape materials/components -mainly accurately assemble, join and combine materials/components -use selected tools/equipment with good level of precision -evaluate quality of design while designing and making -test and evaluate final product -begin to evaluate how much products cost to make and how innovative they are -research how sustainable materials are -refine product after testing -grow in confidence about trying new / different ideas -begin to use cams, pulleys or gears to create movement -select materials carefully, considering intended use of product and appearance -explain how product meets design criteria -measure accurately enough to ensure precision -ensure product is strong and fit for purpose -begin to reinforce and strengthen a 3D frame 	<ul style="list-style-type: none"> -think of ways in which adding a circuit would improve product
Resources Needed	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials	- variety of fruits and vegetables	- winding toys - winding construction kits - cardboard boxes - plastic tubing/cotton reels	- balloons - syringes - plastic tubing - card	- recipe ingredients - table top hob	- range of moving toys with a cam mechanism - cam construction kits - cardboard box	- pre-made construction kit model toy vehicles - construction kits (controllable vehicles)	

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	Boxes	Boxes		- dowelling - saws to cut dowelling			- hand drills - wooden circles - plastic tubing (straws)	- saws - Wood for frames - wooden discs (wheels) - plastic tubing/drinking straws/dowelling for axles - circuit items
Topic in Summer 2	Superheroes EAD	Superheroes EAD					Torches	
Links to Prior and Future Learning:	-Foundations for reception, evaluating - Year 1 models (homes) Year 2 – joining materials	-Year 2 and beyond, evaluating outcomes and existing products - Build on prior learning from nursery					<i>*Links to KS3: -understand how more advanced electrical and electronic systems can be powered and used in their products -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].</i>	
DT Skills and Concepts Progression:	Pupils are taught to: - Experiment with joining and attaching materials - Use recycled materials for models - Begin to talk about their creations	Pupils are taught to: - Combine materials - Explore the work of different designers, such as sculptors - Draw plans of their designs, reflect on and evaluate their work					Pupils are taught to: -refer to design criteria while designing and making -use criteria to evaluate product -discuss by whom, when and where products were designed -research whether products can be recycled or reused -know about some inventors/designers/ engineers/chefs/manuf actuators of ground- breaking products -select most appropriate tools / techniques -explain alterations to product after checking it	

St Peter's Church of England Primary School

Design and Technology Curriculum: Topics, Coverage and Objectives

							<ul style="list-style-type: none"> -grow in confidence about trying new / different ideas. -use number of components in circuit 		
	Resources Needed	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials Boxes	Tools – scissors, stamps, stencils, cutters Playdough Variety of materials Joining materials Boxes				<ul style="list-style-type: none"> - Variety of torches - circuit items - recycled items (cardboard boxes, tubes, plastic bottles, card nets) 		