

Curriculum Map – Design Technology

Year R– building on understanding the World around them and starting school						
Topic and Coverage	Ongoing provision...					
ELG Goal	<p>Overarching principles of EYFS for Expressive Arts and Design: <i>The development of children’s artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.</i></p> <p>In EYFS, children are introduced to Design Technology through the ‘Expressive Arts and Design’ area of learning, specifically, the ‘Creating with Materials’ Early Learning Goal. They also develop their design skills through the ‘Physical Development’ area of learning specifically, the ‘Fine Motor Skills’ Early Learning Goal. By the end of Reception, children who are at the expected level of development in these areas will:</p> <ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (Creating with Materials) • Share their creations, explaining the process they have used. (Creating with Materials) • Make use of props and materials when role playing characters in narratives and stories. (Creating with Materials) • Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases. (Fine Motor Skills) • Use a range of small tools, including scissors, paint brushes and cutlery. (Fine Motor Skills) • Begin to show accuracy and care when drawing. (Fine Motor Skills) • Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher. (Speaking) 					
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> • I can ask simple making questions about the world and my environment e.g. ‘Why does this material feel like this?’ ‘What does texture mean?’ ‘What I like best about my creation is...?’ 					
Cooking and Nutrition Skills	<p>By the end of Reception, children who are at the expected level of development in these areas will:</p> <ul style="list-style-type: none"> • Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. (Managing Self) • Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. (Managing Self) • Use a range of small tools, including scissors, paint brushes and cutlery. (Fine Motor Skills) • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. (Numerical Patterns) <p>See Recipes Attached for ideas for Cheesy Chicken, Toad in the Hole, Jelly Boats, Sticky Chocolate Cake, Watermelon Cooler, Snowmen Melting Biscuits and Fruit Salads See Video for Hygiene: Hands and Aprons Song https://www.bbc.co.uk/cbeebies/watch/i-can-cook-hands-and-aprons-song The washing Up Song https://www.bbc.co.uk/cbeebies/watch/i-can-cook-washing-up-song</p>					
Design Technology Termly Links	<p>Autumn 1 Ongoing provision... History - All About Me Discovery Time – An introduction to the craft resources available during discovery times e.g. learning about junk modelling, playdough, sand, foam etc. Fine motor – ‘Dough Discos’</p>	<p>Autumn 2 Ongoing provision... Art skills - collage, textiles DT – A ‘Stickman’ focus – creating from natural resources DT - Design, make and evaluate your own food (Christmas baking)</p>	<p>Spring 1 Ongoing provision... Maths - Estimating quantities / Number bonds to 5 DT - The Natural World Discovery Time - Craft resources available e.g. junk modelling etc. planting seeds in outdoor area, creating bug hotels etc. Design, make and evaluate your own food</p>	<p>Spring 2 Ongoing provision... Geography - Our Marvellous Market Town – Corsham Discovery Time - Craft resources available e.g. junk modelling etc. planting seeds in outdoor area, creating bug hotels etc. Design, make and evaluate your own food</p>	<p>Summer 1 Ongoing provision... Maths - Compare quantities greater than, less than or the same as History - Great Buildings, Old and New. DT - Junk modelling buildings models of Almhouses, Corsham churches and Corsham campus designing and making and range of fixing skills including velcro</p>	<p>Summer 2 Ongoing provision... Literacy – Under the Sea (making sea animals from paper plates) Geography - Journeys – UK / Europe Discovery Time - Craft resources available e.g. junk modelling etc. planting seeds in outdoor area, creating bug hotels etc. Design, make and evaluate your own food</p>
Story Book link	<ul style="list-style-type: none"> • Stickman by Julia Donaldson • What I Like about Me by Allia Zobel-Nolan 		<ul style="list-style-type: none"> • We’re Going on a Bear Hunt by Michael Rosen 		<ul style="list-style-type: none"> • Traditional Tales • The Snail and the Whale by Julia Donaldson 	
Designer Technology Vocabulary	Imagination, make, create, play, materials, safely use, explore, tools, specific materials by name e.g. cotton or felt, specific tools by name e.g. scissors, knife and fork, names of colours, function, explain, character, story, concentrate, focus, past, present, future tenses,					
Trips / Visitors / Enrichment	Autumn Term 1 – Welly Walks in school area Autumn Term 2 – Christmas Cooking and Father Michael Visit Spring 1 – Welly Walks to look at the Natural World Spring 2 – Cooking using Seasonal Foods					

	Summer Term 1 - Welly Walks in Our Marvellous Market Town of Corsham Summer Term 2 – 11 th June Trip to Bristol Aquarium		
Community Engagement	Any families who can offer to help with cooking lesson (Christmas baking) or welly walks in school area Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability	Any families who can offer to help with cooking lesson (seasonal foods) or welly walks to look at the Natural World	Any families who can offer to help with cooking lesson or school trip to Bristol Aquarium and welly walk into Corsham
Assessment	Teacher Assessment – ongoing in books and Tapestry	Teacher Assessment – ongoing in books and Tapestry	Teacher Assessment – ongoing in books and Tapestry

Curriculum Map – Design Technology

Year 1 – building on understanding the World around them, the Natural World and People and Place from EYFS			
Topic and Coverage	Stable Structures (PlanBee Resource available for unit)	Term 3 and 4	Moving Minibeasts (PlanBee Resource available for unit)
CPD Training	<p>All of the below to be taught with focus on:</p> <ul style="list-style-type: none"> Pupils should be taught, through a variety of creative and practical activities, the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Pupils 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]. 		
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask simple design and making questions about the world and my environment e.g. ‘What does stable mean?’ ‘How do I improve something to make it stronger?’ ‘What would have made my design even better?’ 		<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask simple evaluation and technical questions about the world and my environment e.g. ‘What does pivot mean?’ ‘How can I make a wheel mechanism?’ ‘What worked well and what could I have improved?’
NC Objectives	<p>Design – Focus</p> <ul style="list-style-type: none"> I can design functional, appealing products for myself using simple design criteria I can generate and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>Make – Focus</p> <ul style="list-style-type: none"> I can select from a range of tools and equipment to perform practical tasks (for example, cutting, shaping) I can select from a wide range of materials and components, including construction materials, textiles and ingredients. <p>Evaluate</p> <ul style="list-style-type: none"> I can explore a range of existing products I can evaluate my ideas and products against a simple design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> I can build structures, exploring how they can be made stronger I can explore and use mechanisms [for example, levers and wheels], in my products. 	<p>In Terms 3 and 4 Please link to following cross curricular areas where possible....</p> <p>Term 3: Maths: Geometry - shape Science: Seasonal Changes History: Prehistoric!</p> <p>Term 4: Maths: Making timers; pendulums, water clocks, sun dials etc Science: Everyday Materials Geography: Ahoy there, Pirates! Art and Design: Andy Goldsworthy PB unit / Outdoor Sculpture and collage</p>	<p>Design</p> <ul style="list-style-type: none"> I can design functional, appealing products for myself using simple design criteria I can generate and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>Make</p> <ul style="list-style-type: none"> I can select from a range of tools and equipment to perform practical tasks (for example, cutting, shaping) I can select from a wide range of materials and components, including construction materials, textiles and ingredients. <p>Evaluate – Focus</p> <ul style="list-style-type: none"> I can explore a range of existing products I can evaluate my ideas and products against a simple design criteria <p>Technical knowledge – Focus</p> <ul style="list-style-type: none"> I can build structures, exploring how they can be made stronger I can explore and use mechanisms [for example, levers and wheels], in my products.
Cooking and Nutrition Skills NC Objectives	<p>Stable Structure Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables <i>pupils to feed themselves and others affordably and well, now and in later life</i>.</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can use the basic principles of a healthy diet to prepare dishes I understand where food comes from. <p>Where does Food Come From? BBC Bitesize on Nutrition https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/z6pms82</p> <p>What is Healthy Eating? BBC Bitesize on Nutrition https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/zvqk239</p> <p>See recipe for ‘Pizza Stockings’</p>		<p>Moving Minibeasts Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables <i>pupils to feed themselves and others affordably and well, now and in later life</i>.</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can use the basic principles of a healthy diet to prepare dishes I understand where food comes from. <p>Getting Ready to Cook BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/zb2dxg8</p> <p>Choosing Kitchen Tools BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/z4j47v4</p> <p>See Recipe for ‘Minibeast Cakes’</p>
Lesson Objectives (from PlanBee Unit)	<p>Stable Structures (4/5 weeks)</p> <ul style="list-style-type: none"> I can identify the features of toy buildings e.g. horse stable I know what the word ‘stable’ means. 		<p>Moving Minibeasts (4/5 Weeks)</p> <ul style="list-style-type: none"> I can make a sliding mechanism out of card. I know what a pivot and lever are. I can use a pivot and lever mechanism using card and a split pin.

	<ul style="list-style-type: none"> I can make changes to the design of a stable structure to make it fit for purpose. I can explore a range of materials and evaluate the usefulness of their properties for a particular project. I can explore how to make stable structures that holds a given object. I can follow a design to make a stable structure. I know some ways to make a structure more stable. I can evaluate my finished structure against a set of given criteria. 		<ul style="list-style-type: none"> I can make a wheel mechanism using card and a split pin. I can match a mechanism to the type of movement they produce. I can design a moving minibeast picture to include a variety of moving mechanisms. I can follow a design to create a moving minibeast picture for a particular purpose. I can evaluate my finished moving minibeast picture by identifying things that worked well and things that could be improved.
Design Technology Vocabulary	Building, stable, design, change, purpose, materials, names of materials used, evaluate, useful, project, explore, improve, nutrition, health, cooking, life skill, affordable, cattle, crops, shellfish, allotment, food groups, carbohydrate, dairy, alternatives		Mechanism, sliding, pivot, lever, split pin, wheel, movement, variety, design, purpose, evaluate, improved, clean, hygiene, germs, ingredients, strain, sift, free-from
Trips / Visitors / Enrichment	Visit from Father Michael		Link to Visit in Summer to Bristol Zoo
Community Engagement	Any families who can offer to help with building lesson, cooking lesson Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability		Any families who can offer to help with building lesson, cooking lesson Refer to nature around us in the local area, build a bug hotel from stones and natural wood without joins
Cross Curricular Links	Christmas – Nativity link Prophecy and Promise in RE Science – Identifying Animals – those present at Nativity		Science – Build on identifying plants from Term 5
Assessment	See PlanBee Teacher Assessment Grid ‘Stable Structure’		See PlanBee Teacher Assessment Grid ‘Moving Minibests’

Curriculum Map – Design Technology

Year 2 – building on Year 1 DT Learning and skills			
Topic and Coverage	Puppets (PlanBee Resource available for unit)	Term 3 and 4	Vehicles (PlanBee Resource available for unit)
CPD Training	<p>All of the below to be taught with focus on:</p> <ul style="list-style-type: none"> Pupils should be taught, through a variety of creative and practical activities, the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Pupils 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]. 		
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask design and making questions about my project e.g. ‘How can I join materials together?’ ‘How do I improve something to make it stronger?’ ‘What would have made my design even better?’ 		<p>I am thinking like a Designer...</p> <p>I can ask simple evaluation and technical questions about the world and my environment e.g. ‘What is an axle?’ ‘How can I attach wheels and axels to make a moving base?’ ‘What worked well and what could I have improved?’</p>
NC Objectives	<p>Design - Focus</p> <ul style="list-style-type: none"> I can design purposeful and appealing products for myself and other users based on design criteria I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] I can select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p>Evaluate</p> <ul style="list-style-type: none"> I can explore and evaluate a range of existing products I can evaluate my ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> I can build structures, exploring how they can be made stronger, stiffer and more stable I can explore and use mechanisms [for example, levers, sliders, wheels and axles], in my products. 	<p>In Terms 3 and 4 Please link to following cross curricular areas where possible....</p> <p>Term 3: Maths: Multiplication representing equal groups Science: Living in Habitats - can incorporate Camera Trap History: Fire in the Capital! Building Houses Art appreciation Fire of London Paintings Art: Art appreciation of the Nativity Story told through pictures on National Gallery website www.nationalgallery.org.uk/stories/the-nativity</p> <p>Term 4: Maths: Doubling and halving Structures: quotative and partitive division Science: Materials pendulums, water clocks, sun dials etc Geography: Corsham to Copenhagen (UK countries compared to European city / country) Art and Design: Super Sculptures PB unit Anthony Gormley plus range of sculptors</p>	<p>Design - Focus</p> <ul style="list-style-type: none"> I can design purposeful and appealing products for myself and other users based on design criteria I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] I can select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p>Evaluate</p> <ul style="list-style-type: none"> I can explore and evaluate a range of existing products I can evaluate my ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> I can build structures, exploring how they can be made stronger, stiffer and more stable I can explore and use mechanisms [for example, levers, sliders, wheels and axles], in my products.
Cooking and Nutrition Skills NC Objectives	<p>Puppets Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables <i>pupils to feed themselves and others affordably and well, now and in later life</i>.</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can use the basic principles of a healthy and varied diet to prepare dishes I understand where food comes from. <p>Where does Food Come From? BBC Bitesize on Nutrition https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/z6pms82</p> <p>What is Healthy Eating? BBC Bitesize on Nutrition https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/zvqk239</p> <p>See recipe for ‘Gingerbread Cookies’</p>		<p>Vehicles Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables <i>pupils to feed themselves and others affordably and well, now and in later life</i>.</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can use the basic principles of a healthy and varied diet to prepare dishes I understand where food comes from. <p>Getting Ready to Cook BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/zb2dxg8</p> <p>Choosing Kitchen Tools BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zjpmfdm/articles/z4j47v4</p> <p>See recipe for ‘Vegetable Cars and Tortilla Pizza Boats’</p>

Lesson Objectives (from PlanBee Unit)	<u>Puppets (4/5 weeks)</u> <ul style="list-style-type: none"> I can explore a variety of puppets, identifying and labelling their features. I can cut out felt using a simple template. I can stick pieces of felt together to make a finger puppet. I can add pieces of felt and other materials to a finger puppet to create features, such as eyes, hats and mouths. I can use running stitch to join two pieces of fabric together. I can use overstitch to join two pieces of fabric together. I can sew a button onto a piece of fabric. I can design a glove puppet for a particular purpose. I can follow a design to make a glove puppet by sewing two pieces of fabric together and adding decorations. I can evaluate my finished glove puppet by identifying what went well and what could be improved. 		<u>Vehicles (4/5 weeks)</u> <ul style="list-style-type: none"> I can investigate a range of vehicles, identifying and labelling their features. I know what an axle is. I know what a chassis is. I can explore different ways of using axles, chassis and wheels to create a moving base. I can design a vehicle with wheels, axles and chassis, as well as a body. I can follow a design to make a moving vehicle. I can evaluate my finished moving vehicle.
Design Technology Vocabulary	Nutrition, healthy eating, cooking, crucial life skill, affordable, varied diet, explore, prepare, identify, template, materials, running stitch, join, evaluate, improve		Nutrition, healthy eating, cooking, crucial life skill, affordable, varied diet, axle, chassis, wheels, movement, body, design, evaluate
Trips / Visitors / Enrichment	Visit from Father Michael		Mrs Solomon talk about Japan when she lived in Tokyo, how to get there and bullet train Visit -focus on coach and other vehicles seen, or used, to go on trips (Bristol Zoo)
Community Engagement	Any families who can offer to help with building lesson, cooking lesson Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability		Any families who can offer to help with building lesson, cooking lesson Do any parents have jobs linked to vehicles – bus/train driver etc.
Cross Curricular Links	Christmas – Nativity link Prophecy and Promise in RE Science – Exploring Everyday Materials		History – History of Flight
Assessment	See PlanBee Teacher Assessment Grid 'Puppets'		See PlanBee Teacher Assessment Grid 'Vehicles'

Curriculum Map – Design Technology

Year 3 – building on Year 2 DT Learning and skills			
Topic and Coverage	Story Books/Christmas Cards PB Unit (PlanBee Resource available for unit)	Term 3 and 4	Seasonal Foods – focus on Bread Making and Aztecs (PlanBee Resource available for unit)
CPD Training	<p>All of the below to be taught with focus on:</p> <ul style="list-style-type: none"> Pupils should be taught, 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. Pupils should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. 		
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with design and making e.g. ‘How do I know if my design is fit for purpose’, ‘What is the best way to communicate my design to others?’, ‘What is the best tool to use for joining my model?’ and ‘Why are some materials better than others for s specific design?’ 		<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with evaluating and technical knowledge e.g. ‘What is my design criteria?’, ‘Who is an individual who has helped shape the technological world?’, ‘Which materials are best to reinforce my model?’ and ‘How can I program something such as a microbit to help my design?’
NC Objectives	<p>Design – Focus</p> <ul style="list-style-type: none"> I can use research and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups I can generate, develop, model and communicate my ideas through discussion, annotated sketches and cross-sectional diagrams. <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, joining and finishing], accurately I can select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties. <p>Evaluate</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures I can understand and use mechanical systems in my products [for example, gears and levers] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs] I can apply my understanding of computing to program and control my products. 	<p>In Terms 3 and 4 Please link to following cross curricular areas where possible....</p> <p>Term 3: Maths: Algorithms Science: Rocks, Fossils and Soils – focus on building of Stonehenge Music: Compose Using Your Imagination – online composition Computing: Espresso Coding level 3 (+ level 1/2 refresher), Hour of Code Programme RE: liturgical year</p> <p>Term 4: Maths: Measure and compare lengths, mass, volume/capacity Science: Forces and magnets - Make magnet game, making timers; pendulums, water clocks, sun dials etc Geography: From source to sea – a river journey South America – link to food, nutrition, sustainability, Computing: general research lesson (Google Earth)</p>	<p>Design – Focus</p> <ul style="list-style-type: none"> I can use research and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups I can generate, develop, model and communicate my ideas through discussion, annotated sketches and cross-sectional diagrams. <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, joining and finishing], accurately I can select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties. <p>Evaluate - Focus</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge - Focus</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce structures I can understand and use mechanical systems in my products [for example, gears and levers] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs] I can apply my understanding of computing to program and control my products.
Cooking and Nutrition Skills NC Objectives	<p>Story Books <u>Cooking and Nutrition Week (1/2 weeks)</u></p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables <i>pupils to feed themselves and others affordably and well, now and in later life</i>.</p>		<p>Seasonal Foods <u>Cooking and Nutrition Week (1/2 weeks)</u></p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables <i>pupils to feed themselves and others affordably and well, now and in later life</i>.</p>

	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can understand and apply the principles of a healthy and varied diet I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>What is Seasonality? https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/z7gfcxs#z829mbk</p> <p>What are Nutrients? https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zx43khv</p> <p>See recipe for 'Carrot Cake' link to Peter Rabbit and Beatrix Potter (Classic Tale)</p>		<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can understand and apply the principles of a healthy and varied diet I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques <p>I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</p> <p>Measuring different Ingredients https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zpdcjfr</p> <p>Making Bread Around the World https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zy78mbk</p> <p>See recipe for 'Hedgehog Rolls' link to Bread Making and Aztecs – shape can be changed</p>
<p>Lesson Objectives (from PlanBee Unit)</p>	<p>Storybooks (4/5 weeks)</p> <ul style="list-style-type: none"> I can explore moving parts in storybooks, suggesting how they work and what purpose they serve. I can explain what the words 'linkage', 'pivot', 'rotate' and 'lever' mean. I can use a paper concertina to make an object pop out of a book. I can arrange and stick paper between pages to create a pop-out. I can use levers to create moving parts. I can create moving wheel mechanisms to create different effects. I can experiment with different fonts and graphic design features. I can design pages of a storybook to include moving mechanisms and appropriate graphic features. I can follow my designs to create a storybook with moving mechanisms. I can evaluate how well my moving mechanisms work. I can evaluate the overall effectiveness of my storybook. 		<p>Seasonal Foods (4/5 weeks)</p> <ul style="list-style-type: none"> I can explain what the term 'seasonal food' means. I know that different parts of the world have different seasonal food. I can discuss the benefits and problems of unseasonal food being available in shops all year round. I know that some foods, like wheat, are available all year round in the UK. I can practise cooking skills including slicing, dicing, beating, whisking, folding, sieving, rolling and grating. I can follow a recipe to make fairy cakes. I can describe the cycle of wheat production in the UK. I can distinguish between fruits that are grown in the UK and those that are grown abroad. I know how food producers can speed up or slow down the ripening process to make fruits and vegetables available all year round. I can follow a recipe to make fruit tarts using seasonal fruit. I can follow a recipe to make stuffed peppers. I know some of the nutrients we get from fruits, vegetables, meat, fish and dairy products. I know when certain meats are in season in the UK and which are available all year round. I can follow a recipe to make meatballs. I know some vegetarian options that provide the same nutrients as meat. I can explain how fish are caught or reared, processed and used in healthy meals. I can use what I have learnt about seasonal food to design healthy meals and menus.
<p>Design Technology Vocabulary</p>	<p>Nutrition, healthy eating, crucial, affordable, varied, seasonality, nutrients, linkage, pivot, rotate, lever, arrange, font, graphic design, mechanisms, appropriate, evaluate, effectiveness</p>		<p>Nutrition, healthy eating, crucial, affordable, varied, seasonality, nutrients, available, slicing, dicing, beating, whisking, folding, sieving, rolling, grating, cycle, abroad, ripening, products, vegetarian, caught, reared, processed,</p>
<p>Trips / Visitors / Enrichment</p>	<p>Visit to Mass – attention to Bible, hymn books etc</p>	<p>Visit to We the Curious Visit to Mass</p>	<p>Building on visit to We the Curious Walk to greengrocers Local allotment / farmer visit Visit to Mass – attention to Bible, hymn books etc</p>
<p>Community Engagement</p>	<p>Any families who can offer to help with creating in a lesson or cooking lesson Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability</p>		<p>Any families who can offer to help with creating in a lesson or cooking lesson</p>
<p>Cross Curricular Links</p>	<p>Christmas – Nativity link – story Prophecy and Promise in RE Christmas Around the World – The Story of Hanukah Science – Light and Shadows – puppet stories</p>		<p>Maths – Data Handling, Draw and make 2D and 3D shapes, Measurement, Time Computing – Microbits</p>
<p>Assessment</p>	<p>See PlanBee Teacher Assessment Grid 'Storybooks'</p>		<p>See PlanBee Teacher Assessment Grid 'Seasonal Foods'</p>

Curriculum Map – Design Technology

Year 4 – building on the Year 3 DT Learning and skills			
Topic and Coverage	Seasonal Stockings (PlanBee Resource available for unit)	Term 3 and 4	Making Mini Greenhouses (PlanBee Resource available for unit)
CPD Training	<p>All of the below to be taught with focus on:</p> <ul style="list-style-type: none"> Pupils should be taught, 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. Pupils should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. 		
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with design and making e.g. ‘How do I know if my design is fit for purpose?’, ‘Which way is the best to communicate my ideas to others?’, ‘Why are certain tools better than others when cutting?’ and ‘What ingredients are best to use if I am making a nutritious meal?’ and 		<p>I am thinking like a Designer...</p> <p>I can ask questions to do with focus and technical knowledge e.g. ‘Which of these products is best for a set purpose and why?’, ‘What is a key event which has shaped the world of technology?’, ‘What is a lever is used for’ and ‘What is the best program that I can design for a microbit to do...?’</p>
NC Objectives	<p>Design – Focus</p> <ul style="list-style-type: none"> I can use research and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups I can generate, develop, model and communicate my ideas through discussion, annotated sketches and cross-sectional diagrams. <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, joining and finishing], accurately I can select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties. <p>Evaluate</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures I can understand and use mechanical systems in my products [for example, gears and levers] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs] I can apply my understanding of computing to program and control my products. 	<p>In Terms 3 and 4 Please link to following cross curricular areas where possible....</p> <p>Term 3: Maths: Addition and Subtraction Science: Circuits and Conductors Computing: Key Skills – Video and photography</p> <p>Term 4: Maths: Geometry: Properties of shape, Symmetry, Position and direction RE: Recycled Art / Laudato Si Science: Great Scientists Geography: Tremendous Trading v Fair Trade? Computing: Data Handling: Data logging</p>	<p>Design – Focus</p> <ul style="list-style-type: none"> I can use research and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups I can generate, develop, model and communicate my ideas through discussion, annotated sketches and cross-sectional diagrams. <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, joining and finishing], accurately I can select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties. <p>Evaluate - Focus</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge - Focus</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce structures I can understand and use mechanical systems in my products [for example, gears and levers] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs] I can apply my understanding of computing to program and control my products.
Cooking and Nutrition Skills NC Objectives	<p>Seasonal Stockings Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables</p>		<p>Making Mini Greenhouses Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables</p>

	<p><i>pupils to feed themselves and others affordably and well, now and in later life.</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can understand and apply the principles of a healthy and varied diet I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>Why is Taste Important? https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zsj97v4</p> <p>What are Food Choices? https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/z4t7p9q</p> <p>See recipe for 'Rice Krispie Christmas Puddings'</p>		<p><i>pupils to feed themselves and others affordably and well, now and in later life.</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> I can understand and apply the principles of a healthy and varied diet I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques <p>I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</p> <p>Storing Food Safely https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/ztkgdnb</p> <p>See recipe for 'Pasta Salad'</p>
<p>Lesson Objectives (from PlanBee Unit)</p>	<p>Seasonal Stockings (4/5 weeks)</p> <ul style="list-style-type: none"> I can explain the difference between the function and visual appeal of a product. I can evaluate the function and visual appeal of a variety of Christmas stockings. I can use pins to temporarily fasten two pieces of fabric together. I can use running stitch, back stitch, over stitch and zigzag stitch to join two pieces of fabric together. I can hide the finishing knot. I can identify a variety of decorative techniques that have been used to decorate Christmas stockings. I can sew a button, bead, sequin or pipe cleaner onto a piece of fabric. I can embroider shapes and patterns into a piece of fabric. I can use appliqué to add decoration to a piece of fabric. I can design a Christmas stocking incorporating a range of decorative techniques. I can use a template to cut out front and back pattern pieces. I can follow a design to create a Christmas stocking. I can evaluate the function and visual appeal of my finished Christmas stocking. 		<p>Making Mini Greenhouses (4/5 weeks)</p> <ul style="list-style-type: none"> I know what a greenhouse is and how they work. I can explore a range of different greenhouses. I know how greenhouses are used today. I can explain how the shape of a structure affects its stability. I know that the weight of the structure needs to be evenly spread on the base to make it secure. I know that the wider a structure's base is, the more stable it will be. I can use 3D nets to explore potential structures for a greenhouse, assessing their stability. I can investigate ways of making a structure more stable, e.g. by inserting dowelling or adding triangles at the joins. I can experiment with a range of materials to test which would be most appropriate for making the structure of a mini greenhouse. I can design a mini greenhouse using specific design criteria. I can select appropriate tools and materials to make a mini greenhouse. I can follow my design to make a mini greenhouse. I can evaluate my finished mini greenhouse for stability, effectiveness and visual appeal.
<p>Design Technology Vocabulary</p>	<p>Nutrition, healthy eating, crucial, affordable, varied, seasonality, nutrients, function, visual appeal, temporarily, fasten, sunning stitch, back stitch, over stitch, finishing knot, techniques, embroider, applique, decorative, pattern pieces,</p>		<p>Nutrition, healthy eating, crucial, affordable, varied, seasonality, nutrients, structure, stability, base, secure, potential, assessing, dowelling, evaluate, visual appeal.</p>
<p>Trips / Visitors / Enrichment</p>	<p>Walk of Corsham – seasonal changes Visit to Mass – attention to liturgical season</p>	<p>Visit to Mass</p>	<p>Parents with careers or links to growing e.g. farmers, allotments, greengrocers, importer Visit to Longleat – link to nature, animals, growing Visit to Mass – attention to Bible, hymn books etc</p>
<p>Community Engagement</p>	<p>Any families who can offer to help with creating in a lesson or cooking lesson Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability</p>		<p>Any families who can offer to help with creating in a lesson or cooking lesson</p>
<p>Cross Curricular Links</p>	<p>Christmas – Nativity link – liturgical season Christmas Around the World – The Story of Hanukah Prophecy and Promise in RE Science - Circuits and Conductors - sew Christmas stockings with light-up element</p>		<p>Maths - Geometry: Properties of shape, Symmetry, Position and direction Art and design links - Recycled Art / Laudato Si Science - Great Scientists – linked to growing Geography - Tremendous Trading v Fair Trade?</p>
<p>Assessment</p>	<p>See PlanBee Teacher Assessment Grid 'Seasonal Stockings'</p>		<p>See PlanBee Teacher Assessment Grid 'Making Mini Greenhouse'</p>

Curriculum Map – Design Technology

Year 5 – building on the Year 4 DT Learning and skills			
Topic and Coverage	British Inventors (Year 4 Curriculum link to Victorians) (PlanBee Resource available for unit)	Term 3 and 4	Building Bridges (PlanBee Resource available for unit)
CPD Training	<p>All of the below to be taught with focus on:</p> <ul style="list-style-type: none"> Pupils should be taught, 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. Pupils should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. 		
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with design and making e.g. ‘What will be my design criteria to design a **** which will be fit for purpose?’, ‘What features will make my design appealing to others?’, ‘Which tools are best for shaping my design?’. ‘What does aesthetic mean?’ 		<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with focus and technical knowledge e.g. ‘What is my learning partner’s view on my design?’, ‘Who is a key individual who has helped shape the design technology world?’ and ‘What is a pulley and what is it used for?’
NC Objectives	<p>Design – Focus</p> <ul style="list-style-type: none"> I can 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 I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately I can 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 <p>Evaluate - Focus</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge - Focus</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures I can understand and use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors] I can apply my understanding of computing to program, monitor and control my products. 	<p>In Terms 3 and 4 Please link to following cross curricular areas where possible....</p> <p>Term 3: Maths: Multiplication with three factors and volume combining multiplication with addition and subtraction Science: Link to history Viking life artefacts and bread making Computing: Espresso Coding level 5 (+ level 1/2/3/4 refresher) Hour of Code Programme Link to History and DT Code a Viking Life Game</p> <p>DT link to coding Viking Game/design and make a shield</p> <p>Term 4: Maths: Measurement: Time, Making timers; pendulums, water clocks, sun dials etc Science: Forces in action Geography: Let’s Settle This – The Americas Computing: Leonardo Da Vinci artist, scientist and designer</p>	<p>Design – Focus</p> <ul style="list-style-type: none"> I can 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 I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately I can 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 <p>Evaluate - Focus</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge - Focus</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures I can understand and use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors] I can apply my understanding of computing to program, monitor and control my products.
Cooking and Nutrition Skills	<p>British Inventors Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables</p>		<p>Building Bridges Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables</p>

	<p><i>pupils to feed themselves and others affordably and well, now and in later life.</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ I can understand and apply the principles of a healthy and varied diet ▪ I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ▪ I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>Growing Food Around the World https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/z3xjtcw</p> <p>Why Do People Need Energy? https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zrh2nk7</p> <p>See recipe for 'Sandwich Fillings and Designs' linked to Brunel and how Swindon became Crucial in planning of the railways – see article below https://www.bbc.co.uk/news/uk-england-wiltshire-35605986</p>		<p><i>pupils to feed themselves and others affordably and well, now and in later life.</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ I can understand and apply the principles of a healthy and varied diet ▪ I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ▪ I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>Slicing and Cutting Safely https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zrxjtcw</p> <p>See recipe for 'Computer Mouse/ Bridge Building Biscuits'</p>
<p>Lesson Objectives (from PlanBee Unit)</p>	<p>British Inventors (4/5 weeks) link to Victorians</p> <ul style="list-style-type: none"> • I can explain about the invention of the mackintosh. • I can investigate ways of making fabric waterproof. • I can explain about the invention of the world wide web. • I can describe how the invention of the internet has changed the world. 		<p>Building Bridges (4/5 weeks)</p> <ul style="list-style-type: none"> • I know what beams and pillars are and how they are used in bridge construction. • I can predict which beams will be strongest from their cross-section. • I can test the strength of different beam shapes using paper and card. • I can explain what a truss is and how trusses make bridges stronger. • I can identify the three types of trusses commonly used in bridge design. • I can build a truss bridge spanning a width of 40cm using paper straws. • I can use a fair test to evaluate the strength of my truss bridge. • I can explain how arches work to make bridges stronger. • I can test the arch heights to see which can bear the most load. • I can make an arch frame. • I can explain how suspension bridges use tension forces to work. • I can design, make and evaluate a prototype suspension bridge using a scale of 1:100 according to specific design criteria.
<p>Design Technology Vocabulary</p>	<p>Nutrition, healthy eating, crucial life skill, affordably, varied diet, predominately, savoury, sweet, cooking techniques, seasonality, grown, reared, caught, processed, mackintosh, fabric, waterproof, world wide web (WWW), internet</p>		<p>Nutrition, healthy eating, crucial life skill, affordably, varied diet, predominately, savoury, sweet, cooking techniques, seasonality, grown, reared, caught, processed, beams, pillars, construction, predict, cross-section, strength, trusses, fair test, arches, load, frame, suspension bridge, tension forces, prototype, specific.</p>
<p>Trips / Visitors / Enrichment</p>	<p>Walk of Corsham – seasonal changes Visit to Mass – attention to liturgical season</p>	<p>Visit to Mass</p>	<p>Visit to Mass Parents with careers or links to construction Visit to Longleat – link to nature, animals, growing</p>
<p>Community Engagement</p>	<p>Any families who can offer to help with creating in a lesson or cooking lesson Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability</p>		<p>Any families who can offer to help with creating in a lesson or cooking lesson</p>
<p>Cross Curricular Links</p>	<p>Christmas – Nativity link – liturgical season Christmas Around the World – The Story of Hanukah Prophecy and Promise in RE Science - Properties and Changes of Materials Link to food DT. Meringues, eggs, potatoes etc.</p>		<p>Maths - Measurement: Converting Unit, Geometry: Position and Direction Statistics Science - Great Scientists – linked to growing Geography - Making the Most of Our World</p>
<p>Assessment</p>	<p>See PlanBee Teacher Assessment Grid 'British Inventors'</p>		<p>See PlanBee Teacher Assessment Grid 'Buildings Bridges'</p>

Curriculum Map – Design Technology

Year 6– building on the Year 5 DT Learning and skills			
Topic and Coverage	Fashion and Textiles (PlanBee Resource available for unit)	Term 3 and 4	Programming Pioneers – link to Microbits (PlanBee Resource available for unit)
CPD Training	<p>All of the below to be taught with focus on:</p> <ul style="list-style-type: none"> Pupils should be taught, 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. Pupils should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. 		
Disciplinary Knowledge	<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with design and making e.g. ‘What will be my design criteria to improve a design for ****?’; ‘How can I develop a prototype for***?’; ‘Which tools are best for finishing my design?’; ‘What aesthetic qualities does my design have?’ 		<p>I am thinking like a Designer...</p> <ul style="list-style-type: none"> I can ask questions to do with focus and technical knowledge e.g. ‘What advice can I give my learning partner, to improve their design?’; ‘What is a key event which has helped shape the design technology world?’ and ‘How can I monitor the control of my product?’ e.g. microbits
NC Objectives	<p>Design – Focus</p> <ul style="list-style-type: none"> I can 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 I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately I can 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 <p>Evaluate - Focus</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge - Focus</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures I can understand and use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors] I can apply my understanding of computing to program, monitor and control my products. 	<p>In Terms 3 and 4 Please link to following cross curricular areas where possible....</p> <p>Term 3: Maths: Decimals and Percentages, Algebra Science: Christmastide Computing: Espresso Coding level 6 (+ level 1/2/3/4/5 refresher) Hour of Code Programme History: Red and White Unite – The Tudors</p> <p>Term 4: Maths: Perimeter, Area and Volume Number: Ratio Geometry: Science: Changing Circuits, Making timers; pendulums, water clocks, sun dials etc Computing: general research lesson (Google Earth)</p>	<p>Design – Focus</p> <ul style="list-style-type: none"> I can 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 I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>Make - Focus</p> <ul style="list-style-type: none"> I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately I can 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 <p>Evaluate - Focus</p> <ul style="list-style-type: none"> I can investigate and analyse a range of existing products I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work I understand how key events and individuals in design and technology have helped shape the world <p>Technical Knowledge - Focus</p> <ul style="list-style-type: none"> I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures I can understand and use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages] I can understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors] I can apply my understanding of computing to program, monitor and control my products.
Cooking and Nutrition Skills	<p>British Inventors Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables</p>		<p>Programming Pioneers Cooking and Nutrition Week (1/2 weeks)</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of <i>nutrition and healthy eating</i>. Instilling a <i>love of cooking in pupils</i> will also open a door to one of the great expressions of human creativity. Learning how to cook is <i>a crucial life skill</i> that enables</p>

	<p><i>pupils to feed themselves and others affordably and well, now and in later life.</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ I can understand and apply the principles of a healthy and varied diet ▪ I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ▪ I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>Peeling and Grating Safely https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zwvpb7h</p> <p>Cooking Safely with Heat https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/z4nxfdm</p> <p>See recipe for 'Egg Fried Rice' linked to luxury and Takeaway/Fakeaway</p>		<p><i>pupils to feed themselves and others affordably and well, now and in later life.</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ I can understand and apply the principles of a healthy and varied diet ▪ I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ▪ I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>Understanding Food Labels https://www.bbc.co.uk/bitesize/topics/z63nrmn/articles/zkftvj6</p>
Lesson Objectives (from PlanBee Unit)	<p>Fashion and Textiles (4/5 weeks)</p> <ul style="list-style-type: none"> • I can explain the process of turning raw cotton into cloth. • I know that products that are woven together are called textiles. • I know that different textiles have different properties, and can match these to their purpose. • I can identify straight stitch, zigzag stitch, whip/blanket stitch, blind stitch, buttonhole stitch and overlock stitch on a variety of ready-made garments. • I can describe what the job of a fashion designer entails. • I can sew a basting stitch. • I can sew a whip stitch. • I can sew a hem. • I can sew back stitch. • I can sew an appliqué decoration. • I can use back stitch to embroider. • I know what a pattern piece is and why they are important when designing a garment. • I can design a drawstring bag, including the necessary pattern pieces. • I can use pattern pieces to measure, mark, cut and sew fabric. • I can sew design elements according to design criteria. • I can join two pieces of fabric by hand sewing, using an appropriate stitch. • I can evaluate my finished product against a set of design criteria. 		<p>Programming Pioneers (4/5 weeks)</p> <ul style="list-style-type: none"> • I can explain how computers and computer programs are used in a variety of products. • I can explain how modern memory chips work to store information. • I can write an algorithm to suggest how various appliances might work. • I know what a computer engineer is and what they do. • I can describe some examples of how computer hardware and software specialists work together to create new products. • I can develop and build a prototype pedestrian crossing using computer programming. • I can develop, model and communicate ideas for an embedded system which monitors and controls a door, room or both. • I can describe the typical design process for computer-controlled electronic products. • I can debug errors in an algorithm. • I can suggest ways to change an algorithm to improve a system. • I can select and use electronic components to construct a prototype of an embedded computer-controlled room system. • I can evaluate my design for a computer-controlled system and consider the views of others to improve my work. • I know that Charles Babbage created the first mechanical computer. • I know that Ada Lovelace is referred to as the world's first computer programmer. • I know that Steve Jobs and Steve Wozniak co-founded Apple, Inc. to make the first Apple computers.
Design Technology Vocabulary	<p>Nutrition, healthy eating, crucial life skill, affordably, varied diet, predominately, savoury, sweet, cooking techniques, seasonality, grown, reared, caught, processed, raw cotton, woven, properties, purpose, straight stitch, zigzag stitch, whip/blanket stitch, blind stitch, buttonhole stitch, overlock stitch, basting stitch, whip stitch, hem, back stitch, applique decoration, embroider, pattern piece, drawstring bag, design criteria, evaluate.</p>		<p>Nutrition, healthy eating, crucial life skill, affordably, varied diet, predominately, savoury, sweet, cooking techniques, seasonality, grown, reared, caught, processed, product, memory chip, algorithm, computer engineer, hardware, software, prototype, electronic component, computer controlled system,</p>
Trips / Visitors / Enrichment	<p>Walk of Corsham – seasonal changes Visit to Mass – attention to textiles in church</p>	<p>Visit to We the Curious</p>	<p>Visit to Mass Parents with careers or links to computers/programming</p>
Community Engagement	<p>Any families who can offer to help with creating in a lesson or cooking lesson Refer to Corsham Foodbank and Harvest, when discussing life skills of cooking and affordability</p>		<p>Any families who can offer to help with creating in a lesson or cooking lesson</p>
Cross Curricular Links	<p>Christmas – Nativity link – liturgical season Christmas Around the World – The Story of Hanukah Prophecy and Promise in RE</p>		<p>Maths - Consolidation and themed projects Science - Great Scientists</p>

	Science - Classifying Organisms (PlanBee) link to products used in fashion		Geography - Considering Corsham (Fieldwork Skills – independent self-led project)
Assessment	See PlanBee Teacher Assessment Grid 'Fashion and Textiles'		See PlanBee Teacher Assessment Grid 'Programming Pioneers'