



Year Group	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2	Additional Events
Nursery	All About Me	Celebrations	Once Upon A Time	Spring has Sprung	In the Garden	It's a Pirate's Life	<b>On-site learning</b> Cooking <b>Off-site learning</b> Local parks Woodlands <b>Visitors</b>
	<b>Rationale – Design and Technology is taught through child interest led activities.</b> <b>The World</b> <b>People and Communities</b>						
	<b>Skills –</b> Construct with a purpose in mind, using a variety of resources <ul style="list-style-type: none"> <li>Use simple tools and techniques competently and appropriately</li> </ul> <b>Knowledge:</b> <ul style="list-style-type: none"> <li>To know that tools can be used to create an effect.</li> <li>To know how to join construction pieces together effectively.</li> <li>To know how to use construction equipment in different ways.</li> <li>To know how to use given props to support role-play.</li> </ul> <b>Exploring and using media and materials</b> 30-50mth - Realise that tools can be used for a purpose. Joins construction pieces together to build and balance. Beginning to construct, stacking blocks vertically, making enclosures and creating spaces. Uses several of construction materials.						
	<b>Being imaginative</b> 30-50mth - Captures experiences, and responses with a range of media. Uses available resources to create props to support role-play.						
	<b>Vocabulary –</b> stick, join, tool, build, balance, stack, material, colour						
Reception	This is Me	Toys	Fairy Tales	Creepy Crawlies	Superhero	Dinosaurs	<b>On-site learning</b> Cooking <b>Off-site learning</b> Preston Park <b>Visitors</b>
	<b>Rationale - Design and Technology is taught through child interest led activities.</b> <b>The World/ People and Communities</b>						
	<b>Skills –</b> <ul style="list-style-type: none"> <li>Build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary</li> <li>Select the tools and techniques they need to shape, assemble and join materials they are using</li> </ul> <b>Knowledge:</b> <ul style="list-style-type: none"> <li>To know how to use construction equipment in different ways.</li> <li>To know techniques and tools to help assemble and join materials.</li> <li>To know how to manipulate materials to change shape.</li> <li>To know the safety rules when using different tools and equipment.</li> </ul> <b>Exploring and using media and materials</b> 40-60mth - Select tools and techniques needed to shape, assemble and join material they are using. Selects appropriate resources and adapts work where necessary. <ul style="list-style-type: none"> <li>Constructs with a purpose in mind, using a variety of resources. Manipulates materials to achieve a planned affect.</li> </ul> ELG - Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.						
	<b>Being imaginative</b> 30-50mth - Captures and experiences and responses with a range of media. Uses available resources to create props to support role play. ELG - Children use what they have learnt about media and materials in original ways thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.						
	<b>Vocabulary -</b> stick, join, tool, build, balance, stack, material, colour, design						

## Key Stage 1

### 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

### Explore

- 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 [for example, levers, sliders, wheels and axles], in their products.

Year 1	Cooking and Nutrition		Design, Make and Explore		Design, Make and Explore	Cooking and Nutrition	On-site learning Cooking <b>Off-site learning</b> Supermarket <b>Visitors</b> Allotment owner/gardener Hindu – show Diwali food Jew – Show Sukkot food
	Super Me	Paws, Claws and Whiskers	Splendid skies	Memory Box	Bright Lights, Big Cities	Enchanted forest	
	<p><u>Seasonal Food</u> - Through a range of events, children will have the opportunity to cook several savoury and sweet snacks/meals.</p> <p><b>Rationale – To prepare and cook snacks linked to annual festivals, which will allow children to develop their cooking skills and knowledge and understanding of Harvest, Sukkot, Diwali or Christmas. (Seasonal foods)</b></p> <ul style="list-style-type: none"> <li>• Use the basic principles of a healthy and varied diet to prepare dishes</li> <li>• Understand where food comes from.</li> </ul>		<p><u>Parachute egg drop challenge</u></p> <p><b>Rationale – To plan and design a fun and purposeful project using what they have learnt about aviation to save their egg from a smash on the floor.</b></p>	<p><u>Sliders and levers</u> - Easter cards.</p> <p><b>Rationale – To use their knowledge from religious education to explore, design and make their own moving Easter card.</b></p>	<p><u>Structures</u> - Design a new palace for the queen.</p> <p><b>Rationale – To explore the building of our nation's capital to inspire their own royal building design.</b></p>	<p><u>'Bake off'</u> - Competition for a Mad Hatter's tea party.</p> <p><b>Rationale – To design and prepare foods consisting of savoury and sweet snacks.</b></p> <ul style="list-style-type: none"> <li>• Use the basic principles of a healthy and varied diet to prepare dishes</li> <li>• Understand where food comes from.</li> </ul>	
	<p><u>Skills</u> –</p> <ul style="list-style-type: none"> <li>-To use equipment safely to prepare food in a hygienic environment. To safely use knives to cut foods using the 'claw' and 'bridge' method.</li> <li>-To understand how to name and sort foods into the five groups in the eat-well plate and know that everyone should eat at least five portions of fruit and vegetables every day.</li> </ul>		<p><u>Skills</u> –</p> <ul style="list-style-type: none"> <li>-To generate ideas by drawing on their own experiences and use knowledge of existing products to help come up with ideas.</li> <li>-Plan by suggesting what to do next.</li> </ul>	<p><u>Skills</u> –</p> <ul style="list-style-type: none"> <li>-To be able to measure, mark out, cut and shape materials.</li> <li>-To use sliders and levers to allow their design to move.</li> <li>-To discuss what products are/are for</li> </ul>	<p><u>Skills</u> –</p> <ul style="list-style-type: none"> <li>-To talk about their design ideas and what they are making.</li> <li>-To use a range of materials to measure, mark out, cut and shape.</li> </ul>	<p><u>Skills</u> –</p> <ul style="list-style-type: none"> <li>-To be able to say what products they are designing and making and whether their products are for themselves or other users.</li> <li>-To prepare foods for others in a hygienic</li> </ul>	

	- That all food comes from plants or animals.		and who products are for and how products work. - To understand the simple working characteristics of materials and components and about the movement of simple mechanisms such as levers, sliders.		environment. - To prepare food using skills such as sieving, chopping, weighing, grating.	
	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know, and name, savoury and sweet foods.</li> <li>To know foods linked to the different seasons.</li> <li>To know what a healthy diet consists of.</li> <li>To know how to use the 'claw' and 'bridge' method.</li> <li>To know the names of the different food groups.</li> <li>To know where food comes from.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know what aviation is.</li> <li>To know materials and their properties.</li> <li>To know about trial and error.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know how sliders and levers work.</li> <li>To know how to replicate these mechanisms using thin card.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know the shape and properties of varying materials.</li> <li>To know how to use scissors effectively.</li> <li>To know how to measure and mark out.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To how to sieve, chop, weigh and grate.</li> <li>To know where food comes from.</li> <li>To know the importance of a balanced, varied diet.</li> <li>To know what sweet and savoury food is.</li> </ul>	
	<u>Vocabulary</u> - vegetables, plants, 'bridge' and 'claw' method, slice, cut, stir, cook, taste	<u>Vocabulary</u> - experiment, design, height, gravity, parachute, evaluate	<u>Vocabulary</u> - slider, lever, attach, cutting, decoration, evaluate	<u>Vocabulary</u> - structure, building, attach, strong/stronger, material, design, build, evaluate	<u>Vocabulary</u> - prepare foods, cut, slice, grate, cook, serve, 'bridge' and 'claw' method, taste, ingredients, equipment	

Year 2	<b>Design, Make and Explore</b> I am a Superhero	<b>Cooking and Nutrition</b> All Ablaze	<b>Design, Make and Explore</b> Planet Earth	<b>Design, Make and Explore</b> To Infinity and Beyond	<b>Cooking and Nutrition</b>	<b>On-site learning</b> Cooking <b>Off-site learning</b> Trip to the local park to observe wildlife Bakery <b>Visitors</b> RSPB visitor
	<u>Superhero cape</u>  <b>Rationale – To explore current superhero logos and design their own unique logo and vehicle.</b>	<u>Bread making</u>  <b>Rationale – To taste test different varieties of bread from around the world e.g. focaccia, tortillas, pitta, chapati, as well as making their own, thinking about how the process has changed since the Great Fire.</b> • Use the basic principles of a healthy and varied diet to prepare dishes • Understand where food comes from. • <b>To explore a selection of textiles and create a Christmas decoration.</b>	<u>Bird feeder</u>  <b>Rationale – Taking inspiration from world leading conservationist such as; David Attenborough, Steve Irwin, Ray Mears &amp; Bear Grylls, children will be planning and designing bird feeders for our school to encourage more wildlife into our urban playground.</b>	<u>Space rocket</u>  <b>Rationale – To know the structure of a space rocket and design and make their own rocket structure.</b>	<u>Testing space food</u>  <b>Rationale - Children will be taste testing space food and design space food for their very own 'out of this world' experience.</b> • Use the basic principles of a healthy and varied diet to prepare dishes • Understand where food comes from.	
	<u>Skills</u> - To select a range of tools and equipment explain their choices. - To share what they like and dislike about products.	<u>Skills</u> - To prepare simple dishes safely and hygienically, without using a heat source and how to use techniques such as cutting, peeling and grating.	<u>Skills</u> - To develop and communicate ideas by talking and drawing and model ideas by exploring materials, components and construction kits and by making templates and mock- ups - To describe how/where products are used and what materials products are made from. - To make materials and structures stronger, stiffer and more stable. - To assemble, join and combine materials and components and use finishing techniques, including those from art and design. - To describe what/who their products are for	<u>Skills</u> - To select a range of tools and equipment explain their choices. - Assemble, join and combine materials and components and use finishing techniques. - To make simple judgements about their products and ideas against design criteria and suggest	<u>Skills</u> - Understand how to prepare simple dishes safely and hygienically, without using a heat source and how to use techniques such as cutting, peeling and grating. - To understand that food has to be farmed, grown elsewhere (e.g. home) or caught.	

			and say how their products will work as well as using a simple design criteria to help develop their ideas.	how their products could be improved.		
	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know what a logo is and why/how they are used.</li> <li>To know the uses of different tools.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know the importance of a balanced, varied diet.</li> <li>To know where food comes from.</li> <li>To know the safety rules when cooking and preparing food.</li> <li>To know the importance of washing hands when preparing food.</li> <li>To know how to peel, cut and grate.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know the use and design of a bird feeder.</li> <li>To know the properties of materials.</li> <li>To know where materials comes from.</li> <li>To know how to make a structure stronger.</li> <li>To know how to join pieces of materials together.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know the uses of varying tools.</li> <li>To know how to join pieces of materials together.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>To know the importance of a balanced, varied diet.</li> <li>To know where food comes from.</li> <li>To know what 'farmed' means.</li> <li>To know the safety rules when cooking and preparing food.</li> <li>To know the importance of washing hands when preparing food.</li> <li>To know how to peel, cut and grate.</li> </ul>	
	<u>Vocabulary</u> - logo, design, identity, evaluate	<u>Vocabulary</u> - bread, yeast, flour, salt, water, knead, roll, shape, bake, cook, taste, evaluate	<u>Vocabulary</u> - design, safety, materials, wire, string, waterproof, evaluate	<u>Vocabulary</u> - structure, build, strong/stronger, material, attach, design, evaluate	<u>Vocabulary</u> -taste, test, cook, evaluate	

## Key stage 2

### 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.

Year 3	Cooking and Nutrition	Design, Make and Evaluate	Design, Make and Evaluate Cooking and Nutrition		On-site learning Cooking Off-site learning
	Stone Age	Romans	Predators/Eid Fusion Party		
	<p><u>Stone Age Food</u></p> <p><b>Rationale – Relying upon nature’s fruits and food offerings throughout the seasons, children will revisit seasonality. They will prepare and make their own ‘Stone Age’ recipes using limited ingredients.</b></p> <ul style="list-style-type: none"> <li>• Understand and apply the principles of a healthy and varied diet</li> <li>• Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> </ul> <p>Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p><u>Levers and linkages</u> - Roman catapults</p> <p><b>Rationale – Catapults were devastatingly effective weapon used during Roman battles. Using skills developed in KS1, children will design and make a roman catapult with the challenge of: Can they catapult objects across the playground and defend their civilizations from attack?</b></p>	<p>Treasure Box - Shell structure</p> <p><b>Rationale – To create a box fit for purpose that can be used to collect beach treasures.</b></p>	<p>Festival – Eid</p> <p><b>Rationale – An opportunity for year 3 children to work with ‘Friends of Ropner park’ to design a banner to promote the festival as well as host a Eid Fusion party at school.</b></p>	<p><b>Visitors</b> Friends of Ropner park Roman/Stone age visitor Muslim parent/grandparent to talk about Eid</p>
	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eat well plate.</li> <li>- To understand that seasons may affect the food available.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To talk about their design criteria as they design and make.</li> <li>- To select tools and equipment suitable for the task.</li> <li>- To understand how mechanical systems such as levers and linkages or pneumatic systems create movement and how simple electrical circuits and components can be used to create functional products.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To gather information about the needs and wants of particular individuals and groups and describe the purpose of their products.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To generate realistic ideas, focusing on the needs of the user share and clarify ideas through discussion.</li> <li>- To understand that a healthy diet is made up</li> </ul>	

			<ul style="list-style-type: none"> <li>-To be able to share who designed and made the products and where products were designed and made and why materials have been chosen.</li> <li>-To measure, mark out, cut and shape materials and components with some accuracy.</li> </ul>	<p>from a variety and balance of different food and drink, as depicted in The eat well plate.</p> <ul style="list-style-type: none"> <li>- To understand that seasons may affect the food available.</li> </ul>	
	<p><u>Knowledge</u> –</p> <ul style="list-style-type: none"> <li>• To know the importance of a balanced, varied diet.</li> <li>• To know and explain the eat well plate.</li> <li>• To know the seasonal food and when it is most likely available.</li> <li>• To know how to follow a recipe.</li> <li>• To know different cooking techniques.</li> <li>• To know (and name) some savoury meals.</li> </ul>	<p><u>Knowledge</u> –</p> <ul style="list-style-type: none"> <li>• To know how catapults work.</li> <li>• To know the uses of varying tools.</li> <li>• To know different mechanism systems and how they work.</li> </ul> <p>To know how simple electrical circuits and components can be used to create functional products.</p>	<p><u>Knowledge</u> –</p> <ul style="list-style-type: none"> <li>• To know how to gather information.</li> <li>• To know the purpose of products.</li> <li>• To know how to accurately measure, mark, cut and shape materials.</li> </ul>	<p><u>Knowledge</u> –</p> <ul style="list-style-type: none"> <li>• To know the importance of a balanced, varied diet.</li> <li>• To know the seasonal food and when it is most likely available.</li> <li>• To know how to follow a recipe.</li> </ul>	
	<p><u>Vocabulary</u> - prepare foods, weighing, measuring, cut, slice, grate, cook, serve, 'bridge' and 'claw' method, ingredients, equipment, taste.</p>	<p><u>Vocabulary</u> - design, lever, mechanism, linkage, slot, guide or bridge, loose pivot, fixed pivot</p>	<p><u>Vocabulary</u> - shell structure, 3D three-dimensional, shape, net, cube, joining, assemble, material, stiff, strong, laminate, evaluating,</p>	<p><u>Vocabulary</u> - prepare foods, cut, slice, grate, cook, weighing, measuring 'bridge' and 'claw' method, ingredients, equipment, taste.</p>	

Year 4	<p align="center"><b>Design, Make and Evaluate</b> Christmas</p> <p>Christmas cards - Using light-up ornaments</p> <p><b>Rationale</b> - Children will be adding sparkle to their very own ornament, building upon previous knowledge about circuits and power sources. (links with science)</p>	<p align="center"><b>Design, Make and Evaluate</b> Plastic Fantastic!</p> <p>Recycling - Dreamcatchers/Bug Boxes</p> <p><b>Rationale</b> - From learning about the devastating impact of plastic on our world, children will be planning local litter picking events where they will be making dream catchers or bug boxes with the litter they have found to enhance nature in the gardens of Oxbridge and promote the importance of recycling.</p>	<p align="center"><b>Design, Make and Evaluate</b> Egyptians</p> <p>Textile weaving</p> <p><b>Rationale</b> - Egypt is famous for exporting textile products across the world. In this term, children will explore the different materials and designs of the Egyptian world to design and create their own unique product.</p>	<p><b>On-site learning</b> Cooking circuits</p> <p><b>Off-site learning</b> Litter pick</p> <p><b>Visitors</b> Textile artist</p>
	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To develop their own design criteria and use these to inform their ideas and indicate the design features of their products that will appeal to intended users.</li> <li>- To order the main stages of making explain their choice of tools and equipment in relation to the skills and techniques they will be using.</li> <li>- To assemble, join and combine materials and components with some accuracy apply a range of finishing techniques.</li> <li>- To use their design criteria to evaluate their completed products.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To assemble, join and combine materials and components with some accuracy apply a range of finishing techniques.</li> <li>- Understand when products were designed and made and whether products can be recycled or reused and how well products have been designed.</li> <li>- To use their design criteria to evaluate their completed products.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>- To make design decisions that take account of the availability of resources and model their ideas using prototypes and pattern pieces.</li> <li>- To understand how to make strong, stiff shell structures and that a single fabric shape can be used to make a 3D textiles product.</li> <li>- To use their design criteria to evaluate their completed products.</li> </ul>	
	<p><u>Knowledge –</u></p> <ul style="list-style-type: none"> <li>• To know how to create a design.</li> <li>• To know how to use a design to create a finished product.</li> <li>• To know the uses of given tools.</li> <li>• To know how to join pieces of material effectively.</li> <li>• To know the importance of 'finishing touches'.</li> <li>• To know how to evaluate a completed product.</li> </ul>	<p><u>Knowledge –</u></p> <ul style="list-style-type: none"> <li>• To know how to join pieces of materials effectively.</li> <li>• To know how to check if an item is recyclable.</li> <li>• To know how to evaluate a completed product.</li> </ul>	<p><u>Knowledge –</u></p> <ul style="list-style-type: none"> <li>• To know the properties of materials.</li> <li>• To know how to join different materials together.</li> <li>• To evaluate a completed product.</li> </ul>	
	<p><u>Vocabulary</u> - design, circuit, electrical current, wire, battery, lights, bulb</p>	<p><u>Vocabulary</u> - recycle, reuse, nature, materials, structure, deign, evaluate</p>	<p><u>Vocabulary</u> - fabric, textile, materials, weave, colour, design, yarn, sew, evaluate</p>	



<b>Year 5</b>	<b>Design, Make and Evaluate</b> Inspirational Teessiders	<b>Cooking and Nutrition</b> Inspirational Teessiders	<b>Design, Make and Evaluate</b> Earth and space	<b>On-site learning</b> Cooking <b>Off-site learning</b> Visiting bridges in the local area.
	<u>Bridges in Teesside</u>  <b>Rationale - Teesside has a strong affinity with the steel and construction industry. The towns famous Transporter Bridge is still in use today whilst steel produce in the town built the world-famous Sydney Harbour bridge. Taking inspiration from these great structures, children will be designing their very own bridge to make the town proud.</b> <ul style="list-style-type: none"> <li>• Include differing heritage and diversity of area in design.</li> </ul>	<u>Local food</u> - How does diversity effect what we eat? – restaurant visit to make a range of foods. <b>Rationale - Teesside is famous for its local dish, the parmesan or 'parmo'. Using new and existing culinary skills, children will have the opportunity to prepare and make their very own.</b> <ul style="list-style-type: none"> <li>• Understand and apply the principles of a healthy and varied diet</li> <li>• Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul>	<u>Design a space suit</u> - Focus on properties of textiles for purpose.  <b>Rationale - An astronauts most important piece of kit is their space suit. Thinking of its purpose children will begin to understand the properties of different materials and how important these are to create a product fit for purpose.</b>	<b>Visitors</b> Visit from a local chef.
	<u>Skills</u> <ul style="list-style-type: none"> <li>- To carry out research, using surveys, interviews, questionnaires and web-based resources and explain how particular parts of their products work.</li> <li>- To produce appropriate lists of tools, equipment and materials that they need and select materials and components suitable for the task.</li> <li>- To critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make.</li> </ul>	<u>Skills</u> <ul style="list-style-type: none"> <li>- To use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking to prepare savory dishes.</li> <li>- To understand how much products cost to make.</li> <li>- Understand that recipes can be adapted to change the appearance, taste, texture and aroma.</li> <li>- Understand how food is processed into ingredients that can be eaten or used in cooking.</li> <li>- Understand that food is grown, reared and caught in the UK, Europe and the wider world.</li> </ul>	<u>Skills</u> <ul style="list-style-type: none"> <li>- To generate innovative ideas, drawing on research and use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas.</li> <li>- To accurately measure, mark out, cut and shape materials and components and accurately assemble, join and combine materials and components.</li> <li>- To critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make.</li> </ul>	
	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>• To know how to gather information.</li> <li>• To know the uses of tools and equipment.</li> <li>• To evaluate a completed product.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>• To know how to peel, chop, slice, grate, mix, spread, knead and bake.</li> <li>• To know (and name) some savoury meals.</li> <li>• To know how to work out how much of each ingredient is needed.</li> <li>• To know how to adapt a given recipe.</li> <li>• To know what processed food is.</li> <li>• To know where food is grown.</li> </ul>	<u>Knowledge –</u> <ul style="list-style-type: none"> <li>• To know the properties of materials.</li> <li>• To know how to join different materials together.</li> <li>• To know how to accurately measure, mark, cut and shape materials.</li> <li>• To evaluate a completed product.</li> </ul>	
	<u>Vocabulary</u> - tallest, longest, free-standing, span, support, stability, rigid, triangulation, suspension, arches, materials, design, evaluation.	<u>Vocabulary</u> - cut, slice, 'bridge' and 'claw' method, grate, weigh, measure, savoury, ingredients, taste.	<u>Vocabulary</u> - materials, strength, durability, flexibly, conductivity, water-proof, purposeful design, evaluation.	

Year 6	<p align="center"><b>Cooking and Nutrition</b> War and Conflict</p> <p><u>Cooking – rationing</u> <b>Rationale – Children will learn what food was available during rationing and how people cooked to feed families on limited resources as many still must do today</b></p> <ul style="list-style-type: none"> <li>• Understand and apply the principles of a healthy and varied diet</li> <li>• Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul>	<p align="center"><b>Design, Make and Evaluate</b> Environment</p> <p><u>Trench pulley system</u></p> <p><b>Rationale – Trench pulley systems were the railways of warfare, used to transport weapons, food and soldiers. Learning about trenches children will be able to design and make their own trench pulley system.</b></p>	<p align="center"><b>Design, Make and Evaluate</b> Electricity</p> <p><u>Game making</u></p> <p><b>Rationale – In an age of computer games and tablets this topic will take children back to traditional games that include electrical components.</b></p>	<p><b>On-site learning</b> Cooking <b>Off-site learning</b> Preston Hall – rationing workshop <b>Visitors</b> Game maker/designer</p>
	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>-To understand that a recipe can be adapted by adding or substituting one or more ingredients.</li> <li>-To understand how food is processed into ingredients that can be eaten or used in cooking.</li> <li>-To understand that food is grown, reared and caught in the UK, Europe and the wider world.</li> <li>-To understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for healthy and how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>-To make design decisions, taking account of constraints such as time, resources and cost and use computer-aided design to develop and communicate their ideas.</li> <li>-To use step-by-step plans as a guide to making and explain their choice of materials and components according to functional properties and aesthetic qualities.</li> <li>-To understand how to reinforce and strengthen a 3D framework.</li> <li>-To evaluate their ideas and products against their original design specification and identify the strengths and areas for development in their ideas and products.</li> </ul>	<p><u>Skills</u></p> <ul style="list-style-type: none"> <li>-To identify the needs, wants, preferences and values of particular individuals and groups and develop a simple design specification to guide their thinking.</li> <li>-Accurately apply a range of finishing techniques, including those from art and design and use techniques that involve a number of steps.</li> <li>-To understand how well products have been designed about inventors, designers, engineers, chefs and manufacturers</li> <li>-To evaluate their ideas and products against their original design specification and identify the strengths and areas for development in their ideas and products.</li> </ul>	
	<p><u>Knowledge –</u></p> <ul style="list-style-type: none"> <li>• To know how to peel, chop, slice, grate, mix, spread, knead and bake.</li> <li>• To know (and name) some savoury meals.</li> <li>• To know how to work out how much of each ingredient is needed.</li> <li>• To know how to adapt a given recipe.</li> <li>• To know what processed food is.</li> <li>• To know where food is grown.</li> <li>• To know the substances that are in food and drink and their uses to the human body.</li> </ul>	<p><u>Knowledge –</u></p> <ul style="list-style-type: none"> <li>• To design a product to include consideration for time, resources and cost.</li> <li>• To know the uses of tools and equipment.</li> <li>• To know how to use materials to strengthen a structure.</li> <li>• To follow instructions.</li> <li>• To evaluate a completed product.</li> </ul>	<p><u>Knowledge –</u></p> <ul style="list-style-type: none"> <li>• To know traditional and modern games that use electrical components.</li> <li>• To know (and show) the importance of ‘finishing touches’.</li> <li>• To know how products have changed over time and why some have lasted longer than others.</li> <li>• To know the role of inventors, designers, engineers, chefs and manufacturers.</li> <li>• To evaluate a completed product.</li> </ul>	
	<p><u>Vocabulary</u> - healthy eating, grown-your-own, varied diet, carbohydrates, fruit and vegetables, dairy, protein and fat, seasonality, meat, ‘claw’ and ‘bridge’ method, weigh, measure, prepare, hygiene..</p>	<p><u>Vocabulary</u> - pulley, axel, gear, gravity, speed, direction, force, lift, turn, rotate, belt,</p>	<p><u>Vocabulary</u> - voltage, brightness, volume, switches, danger, series circuit, switch, bulb, buzzer, motor, design, evaluate.</p>	