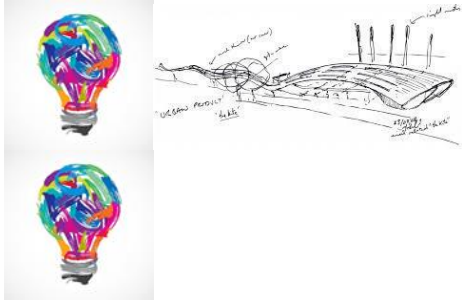


Design

Children design their own products based on a design criteria using talk, drawings and computer programmes to generate ideas.



Make

Children select appropriate tools for practical tasks from a wide range of materials and components.



Evaluate

Children learn to reflect on both what worked well in current products on the market and how they could have improved their final work both individually and by feedback from others.



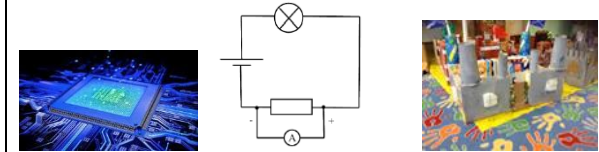
Design and Technology 2021-2022

At Cranmere, we understand and value the analysis, problem solving and application skills that design technology instils in children. We have recognised that although the cooking area is used regularly for interventions, such as Elsa and Baking Group, we are working to encourage its regular use as a facility for year groups which are not accessing this provision on a regular basis and ensure that it is being utilised to its full potential. Following analysis of D&T work, alongside pupil voice it is evident that all children thoroughly enjoy all aspects of Design and Technology across the school, and we are raising its profile so that there is a cohesive approach for planning and delivery from early years to Year 6 to ensure that all aspects of the Design Technology curriculum are met.



Technical knowledge

Children will build structures, exploring and applying their knowledge of how to strengthen them, exploring and applying their knowledge of mechanisms including electrical components and computing programmes.



Cooking and Nutrition

This essential life skill is taught to the children, instilling the principles of healthy eating and nutrition which aims to develop a love and basic understanding of cooking.



Let's get
cooking

	Autumn Term	Spring Term	Summer Term
	EYFS : in our Nursery and Reception we follow the EYFS Development matters curriculum working towards the Early Learning Goals at the end of the Foundation Stage. Pupils follow a broad and balanced curriculum which is facilitated through enhanced provision which meets the needs and interests of our children.		
Nursery Design and Technology	<p>How can I use different media to make simple representations and patterns? EYFS Curriculum Coverage</p> <ul style="list-style-type: none"> • Start to make marks intentionally • Explore paint using fingers and other parts of their bodies as well as brushes and other tools • Explore different materials, using all their senses to investigate them. • Manipulate and play with different materials. • Use their imagination as they consider what they can do with different materials • Make simple models which express their ideas <p>Enhanced and continuous provision will provide opportunities to:</p> <ul style="list-style-type: none"> • Explore and use a variety of media to create representations of people, objects and experiences • Experiment with colour mixing • Experiment with a variety of textures • Experiment with a variety of malleable materials such as playdough and clay-making clay and bread hedgehogs • making models using a variety of construction materials and recyclable materials • Use a variety of fresh and artificial foliage to create a Christmas table centre 	<p>How can I develop my ideas using a variety of media? EYFS Curriculum Coverage</p> <ul style="list-style-type: none"> • Explore different materials freely, in order to develop their ideas about how to use them and what to make • Develop their own ideas and then decide which materials to use to express them • Join different materials and explore different textures • Create closed shapes with continuous lines and begin to use these shapes to represent objects • Make imaginative small worlds with blocks and construction kits such as a city with different buildings and a park <p>Enhanced and continuous provision will provide opportunities to:</p> <ul style="list-style-type: none"> • Experiment and explore using various construction materials to create with a purpose in mind • Experiment with a variety of malleable materials such as playdough and clay and build with a purpose in mind- making clay snails- playdough snowmen • Use a variety of different tools to achieve a planned effect 	<p>How can I create with a purpose in mind? EYFS Curriculum Coverage</p> <ul style="list-style-type: none"> • Respond to what they have heard, expressing their thoughts and feelings <p>Enhanced and continuous provision will provide opportunities to:</p> <ul style="list-style-type: none"> • Learn simple sewing techniques to weave a spider's web • Planting and growing from seeds -making grass heads • Following instructions using tools safely-making sandwiches • Explore transient art using natural objects to create sculptures

	<ul style="list-style-type: none"> ● Make African instruments using a variety of media ● Learn about safety when using a variety of equipment ● Cooking- <ul style="list-style-type: none"> - Pizza faces - Bread hedgehogs - Elmer biscuits - Plantain 	<ul style="list-style-type: none"> ● Develop an awareness of safety when using tools and equipment ● Use line and shape to make representations, developing drawing skills ● Cooking- <ul style="list-style-type: none"> - Melting snowmen - Fruit tasting -Vegetable stir fry 	
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Reception Design and Technology	<p>How can I use different media to make simple representations, pictures, patterns and models?</p> <p>EYFS Curriculum Coverage</p> <ul style="list-style-type: none"> ● Articulate their ideas and thoughts in well-formed sentences.Using tools for a purpose. ● Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. ● Show resilience and perseverance in the face of challenge.. ● Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. ● Select, rotate and manipulate shapes to develop spatial reasoning skills.. ● Return to and build on their previous learning, refining ideas and developing their ability to represent them ● Create collaboratively, sharing ideas, resources and skills. 	<p>I wonder what would happen if?</p> <p>EYFS Curriculum Coverage</p> <ul style="list-style-type: none"> ● Articulate their ideas and thoughts in well-formed sentences.Using tools for a purpose. ● Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. ● Show resilience and perseverance in the face of challenge.. ● Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. ● Select, rotate and manipulate shapes to develop spatial reasoning skills.. ● Return to and build on their previous learning, refining ideas and developing their ability to represent them ● Create collaboratively, sharing ideas, resources and skills. 	<p>How can I combine media and materials to create something that has a purpose?</p> <p>EYFS Curriculum Coverage</p> <ul style="list-style-type: none"> ● Articulate their ideas and thoughts in well-formed sentences.Using tools for a purpose. ● Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. ● Show resilience and perseverance in the face of challenge.. ● Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. ● Select, rotate and manipulate shapes to develop spatial reasoning skills.. ● Return to and build on their previous learning, refining ideas and developing their ability to represent them ● Create collaboratively, sharing ideas, resources and skills.
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	<p>Enhanced and continuous provision will provide opportunities to:</p> <ul style="list-style-type: none"> • explore the use of media and materials to create true representations of ourselves, people, objects and experiences.. • Experiment with colour and texture and form using a range of media and materials. • combine materials and ingredients to create an end product. • Self Selection of materials and media • Making models – working collaboratively based on children’s interests e.g large scale Marble run • Cooking : Biscuit Bear, Soup 	<p>Enhanced and continuous provision will provide opportunities to:</p> <ul style="list-style-type: none"> • Explore the mixing of different mediums. • Study of line and texture : Creating Polar bear faces. • Developing drawing skills - looking closely and drawing appropriate shapes. and adding detail and features. • Responding to experiences through movement to music. • Cooking : Bread rolls, Easter Cakes 	<p>Enhanced and continuous provision will provide opportunities to:</p> <ul style="list-style-type: none"> • Self -Select materials for modelling. • Box Modelling : Large and small scale • learn to use simple DT tools such as saws, hammers and screwdrivers safely and effectively. • Design and create Minibeast habitats. • create Relief sculptures and natural collage. • Express ourselves through making modelling based on our own interests. • Planting and growing – planting seeds, gardening • Creating a Minibeast hotel. • Making an obstacle course. • Cooking: Minibeast Fruit Kebabs
<p>Year 1 Design and Technology</p>	<p>Can we design and make Something Else’s house? (linked to English and Science)</p> <p>National Curriculum coverage To design purposeful, functional, appealing products for other users based on design criteria To generate, develop, model and communicate their ideas through talking and drawing. To select from and use a range of tools and equipment to perform practical tasks (cutting, shaping and joining). To select from and use a wide range of materials and components, including construction materials and textiles, according to their characteristics. To evaluate their ideas and products against design criteria. To build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> • To create simple designs for a product • To use pictures and words to describe what he/she wants to do. 	<p>Design and make moving vehicle (linked to Transport)</p> <p>National Curriculum coverage To design purposeful, functional, appealing products for themselves and other users based on design criteria. To generate, develop, model and communicate their ideas through talking and drawing. To select from and use a range of tools and equipment to perform practical tasks (cutting and joining) To select from and use a wide range of materials and components, including construction materials and textiles according to their characteristics To evaluate their ideas and products against design criteria. To build structures, exploring how they can be made stronger, stiffer and more stable. To explore and use mechanisms (wheels and axles), in their products.</p> <p>The sequence of lessons will focus on:</p>	<p>Design and make healthy fruit and vegetable kebabs (Linked to plants and keeping healthy)</p> <p>National Curriculum coverage To design purposeful, functional, appealing products for themselves and other users based on design criteria. To generate, develop, model and communicate their ideas through talking and drawing. To select from and use a range of tools and equipment to perform practical tasks (cutting). To select from and use a wide range of components (ingredients). To evaluate their ideas and products against design criteria.</p> <p>The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> • Create simple designs for a product • Use pictures and words to describe what they want to do • Talk about what they eat at home and begin to discuss what healthy foods are • Say where some foods come from and give examples of foods that are grown

	<ul style="list-style-type: none"> • To decide which materials to use for different parts of a house. • Build structures, exploring how they can be made stronger, stiffer and more stable. • Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing • Use a range of simple tools to cut, join and combine materials and components safely • To explain what they have done well and what they could improve about their product 		<ul style="list-style-type: none"> • Use simple tools with help to prepare food safely • To explain what they have done well and what they could improve about their product
	<p>Design and make puppets (linked to Toys)</p> <p>National Curriculum coverage To generate, develop, model and communicate their ideas through talking, drawing and templates. To select from and use a range of tools and equipment to perform practical tasks (cutting, shaping and joining). To select from and use a wide range of materials and components (textiles) according to their characteristics. To explore and evaluate a range of existing products. To evaluate their ideas and products against design criteria.</p> <p>The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> • Create simple designs for a product • Use pictures and words to describe what they want to do • Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing • Use a range of simple tools to cut, join and combine materials and components safely • Ask simple questions about existing products and those they have made 	<ul style="list-style-type: none"> • Create simple designs for a product • Use pictures and words to describe what they want to do • Ask simple questions about existing products and those they have made • Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing • Use a range of simple tools to cut, join and combine materials and components safely • Build structures, exploring how they can be made stronger, stiffer and more stable • Use wheels and axles in a product • To explain what they have done well and what they could improve about their product 	

	<ul style="list-style-type: none"> To explain what they have done well and what they could improve about their product 		
<p>Year 2 Design and Technology</p>	<p>How can we make a structure strong and stable? National Curriculum coverage I can investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable I can design useful, pleasing products for myself and other users based on a design brief I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and IT I can choose tools I would like to use and select materials based on my knowledge of their properties I can safely measure, mark out, cut and shape materials and components using a range of tools I can evaluate and assess existing products and those that I have made using a design criteria The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> investigating which shapes are most stable and strong. exploring the strength of different materials and how we can make them stronger. how we can join materials and how to make joints stronger and more stable. investigating 17th century houses, their designs and materials. designing and making our own strong, stable houses. Evaluating the outcomes of our construction against design criteria. 	<p>How can select, join, cut and shape material? (Links to Art) National Curriculum coverage I can design useful, pleasing products for myself and other users based on a design brief I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and IT I can choose tools I would like to use and select materials based on my knowledge of their properties I can safely measure, mark out, cut and shape materials and components using a range of tools I can evaluate and assess existing products and those that I have made using a design criteria The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> investigating the characteristics of different textiles.. investigate ways to cut and join textiles. join textiles to create a piece of Adinkra cloth. evaluate their products against design criteria. 	<p>Levers & Sliders - How can we make things move? National Curriculum coverage I can explore and use mechanisms such as levers, sliders, wheels and axles in products I can design useful, pleasing products for myself and other users based on a design brief I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and IT I can choose tools I would like to use and select materials based on my knowledge of their properties I can safely measure, mark out, cut and shape materials and components using a range of tools I can evaluate and assess existing products and those that I have made using a design criteria The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> looking at existing products that use levers and sliders. investigating how levers and sliders create movement. creating a moving picture that uses levers and sliders to create movement. <p>Cooking and Nutrition - How can we create a healthy, nutritious pizza? National Curriculum coverage I can understand the need for a variety of food in a diet I can understand that all food has to be farmed, grown or caught. I can use a wider range of cookery techniques to prepare food safely I can design useful, pleasing products for myself and other users based on a design brief I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and IT I can evaluate and assess existing products and those that I have made using a design criteria</p>

			<p>The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> ● finding the favourite pizzas and toppings within the class. ● finding out what pizza bases are made from and the variety of breads we can use. ● taste testing different bases and toppings, thinking about their characteristics. ● designing, making and evaluating their own pizzas based on design criteria.
<p>Year 3 Design and Technology</p>	<p>Sundials – Linked to Stonehenge</p> <p>National Curriculum Coverage:</p> <p>Use research and develop design criteria to inform their design that are fit for purpose. Investigate and analyse a range of existing products. Select from and use a wider range of tools and equipment to perform practical tasks. Select from and use a wider range of materials and components according to their functional properties and aesthetic qualities. Understand how key events and individuals in design and technology have helped shape the world.</p> <p>The sequence of lessons will include:</p> <ul style="list-style-type: none"> ● Use knowledge of existing sundials to design own functional product. ● Create designs using annotated sketches. ● Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them. ● Safely measure, mark out, cut, assemble and join with some accuracy. ● To be able to evaluate a finished product. 	<p>Pneumatic Systems- Movable Iron Man</p> <p>National Curriculum Coverage:</p> <p>Generate, develop, model and communicate their ideas through discussion & annotated sketches. Select from and use a wider range of materials and components. Understand and use mechanical systems in their products. Evaluate their ideas and products against their own design criteria.</p> <p>The Sequence of lessons:</p> <ul style="list-style-type: none"> ● Investigate a variety of familiar objects that use air to make them work. ● Understand how mechanical systems such as levers and linkages or pneumatic systems create movement. ● Investigate techniques for making simple pneumatic systems. ● Gather ideas for creating a moving Iron Man. ● Design an Iron Man including a moving pneumatic system. ● Safely cut, assemble and join an Iron Man with a moving pneumatic part. ● To be able to evaluate a finished product. 	<p>Food technology - Tudor Meal</p> <p>National Curriculum Coverage:</p> <p>Understand and apply the principles of a healthy and varied diet. Prepare and cook a savoury dish for Henry VIII using seasonal fruit and vegetables that were available in the Tudor period. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>The sequence of lessons will include:</p> <ul style="list-style-type: none"> ● Talk about the different food groups and name food from each group. ● Understand that food has to be grown, farmed or caught in Europe and the wider world. ● Use a wider variety of ingredients and techniques to prepare and combine ingredients safely.

Making Mini Greenhouses

National Curriculum Coverage:

Use research and develop design criteria to inform the design that are fit for purpose. Generate, develop, model and communicate their ideas through discussion and annotated sketches.

Select from and use a wider range of tools and equipment to perform practical tasks.

Select from and use a wider range of materials and components according to their functional properties and aesthetic qualities.

Investigate and analyse a range of existing products.

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

The sequence of lessons will include:

- Use knowledge of existing greenhouses to design your own functional product.
- Investigate stable structures.
- Create designs using annotated sketches.
- Investigate and analyse existing products and those he/she has made, considering a wide range of factors.
- Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them.
- Safely measure, mark out, cut, assemble and join with some accuracy.

		<ul style="list-style-type: none"> Strengthen frames using diagonal struts. To be able to evaluate a finished product. 	
<p>Year 4 Design and Technology</p>	<p><u>How do you make a tasty Italian pasta salad?</u> National curriculum coverage: Pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown. The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> evaluate different Italian ingredients and understand seasonality and the advantages of eating seasonal and locally produced food. evaluate different pasta salads understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active. design and plan your own pasta salad using the criteria that it needs to be healthy. make a pasta salad following the plan. read and follow recipes which involve several processes, skills and techniques. evaluate pasta salad against own design criteria 	<p><u>Why do torches have specific design features?</u> National curriculum coverage: 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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams. Make Select from and use a wider range of tools and equipment to perform practical tasks, accurately select from and use a wider range of materials and components, 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. Technical knowledge Understand and use electrical systems in their products [for example, series circuits incorporating switches and bulbs]. The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> evaluate and analyse existing torches to design a functional and appealing product for a specific audience. create designs using exploded diagrams. use techniques which require more accuracy to cut, shape, join and 	<p><u>How can we make a bee hotel which bees would use?</u> National curriculum coverage: 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. 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, 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. The sequence of lessons will focus on:</p> <ul style="list-style-type: none"> use knowledge of existing products to design a functional and appealing product for a particular purpose and audience look at a variety of different bee hotels, evaluate these products as a class discuss and choose the criteria needed to make an effective bee hotel research what different bees' need in a home. make annotated and cross-sectional drawing of their design select appropriate materials and equipment

		<p>finish my work e.g. Cutting internal shapes, slots.</p> <ul style="list-style-type: none"> • use my knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them. • consider how existing products and my own finished products might be improved and how well they meet the needs of the intended user. • understand and use electrical systems in my products. 	<ul style="list-style-type: none"> • use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. cutting internal shapes, slots in frameworks. • apply techniques he/she has learnt to strengthen structures and explore his/her own ideas. • evaluate their ideas and products against their own design criteria.
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<p>Year 5 Design and Technology</p>	<p><u>National curriculum coverage</u></p> <p>Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].</p> <p>When designing and making, pupils should be taught to:</p> <p>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</p> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>Evaluate investigate and analyse a range of existing products</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>understand how key events and individuals in design and technology have helped shape the world</p> <p>Technical knowledge apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use</p>	<p><u>National curriculum coverage</u></p> <p>Cooking and nutrition</p> <p>As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.</p> <p>understand and apply the principles of a healthy and varied diet</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p><u>Anglo Saxon Meal</u></p> <p><u>Sequence of lessons</u></p> <ul style="list-style-type: none"> • To confidently plan a series of healthy meals based on the principles of a healthy and varied diet To use information on food labels to inform choices 	<p><u>National curriculum coverage</u></p> <p>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</p> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p><u>Quilting</u></p> <p><u>Sequence of lessons</u></p> <ul style="list-style-type: none"> • Investigate and analyse a range of existing products and 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. • 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
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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.

Reeds car Challenge

Sequence of lessons

- 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 and pattern pieces.
- 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.
- 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.
- Evaluate and discuss the strengths and weaknesses of their design.

- Use his /her research into existing products and his /her market research to inform the design of his/her own innovative product To research, plan and prepare and cook a savoury dish, applying his/her knowledge of ingredients and his/her technical skills
- Understand and apply the principles of a healthy and varied diet, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

- construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- Create prototypes to show his/her ideas.
 - Produce step-by-step plans to guide his/her making, demonstrating that he/she can apply his/her knowledge of different materials, tools and techniques.

Year 6
Design and
Technology

How can you recreate a Mayan or a Carnival mask?

National Curriculum Coverage

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 and annotated sketches

Make:

Select from and use a wider range of tools and equipment to perform practical tasks 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

The sequence of lessons will focus on:

- 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.
- Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities

How do you make a tasty, healthy and authentic Greek Meal?

National Curriculum Coverage

Understand and apply the principles of a healthy and varied diet

Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet

Become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes] Understand the source, seasonality and characteristics of a broad range of ingredients

The sequence of lessons will focus on:

- Confidently plan a series of healthy meals based on the principles of a healthy and varied diet
- Use information on food labels to inform choices
- Research, plan and prepare and cook a savoury dish, applying his/her knowledge of ingredients and his/her technical skills

How do you make a moving Fairground ride?

National Curriculum Coverage

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 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

Understand and use electrical systems in their products

Apply their understanding of computing to programme, monitor and control their products

The sequence of lessons will focus on:

- Use research I have done into famous designers and inventors to inform the design of his/her own innovative products.

			<ul style="list-style-type: none">• Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design• Use technical knowledge accurate skills to problem solve during the making process• Use my knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made• Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately• Apply my understanding of computing to program, monitor and control his/her product
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