

EYFS:

Topic	All about me	Into the woods	Journeys	People who help us	Growing	Water
Nursery	Uses everyday materials to explore, understand and represent their world – their ideas, interests and fascinations.	Uses 2D and 3D structures to explore materials and express ideas.		Uses various construction materials e.g. balancing and stacking.	Uses resources to create props or create imaginary ones to support play.	Uses tools for a specific purpose.
Reception	Uses their increasing knowledge and understanding of tools and materials to explore their interests and enquiries and develop their thinking.	Chooses particular materials for their own imaginative purposes.	Describes a range of different food textures and tastes when cooking and notices changes when they are combined or exposed to hot and cold temperatures.		tools, including scissors, paint brushes and cutlery. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Share their creations, explaining the process they have used. Make use of props and materials when role playing characters in narrative and stories.
Vocab links to NC	Cut, snip, stick, glue, fold, join (attach Yr 1), construct, build, stack, knife, fork, spoon, chop, stir, spread, mix, taste, hot, cold, warm, like, dislike, make, design, tools, scissors.					

Year 1:

	Autumn Product Design	Spring Textiles	Summer Food and Nutrition
Design	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Work confidently within a range of contexts - State what products they are designing and making - Say whether their products are for themselves or others - Describe what their products are for - Use simple design criteria to help develop their ideas <p>Generating, developing and communicating ideas:</p> <ul style="list-style-type: none"> - Generate their ideas based on their own experiences - Use knowledge of existing products to help come up with ideas - Develop and communicate ideas by talking and drawing - Model ideas by exploring materials 		<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Work confidently within a range of contexts such as home, school, gardens, school kitchen. - State what products they are designing and making - Say whether their products are for themselves or others - Use simple design criteria to help develop their ideas <p>Generating, developing and communicating ideas:</p> <ul style="list-style-type: none"> - Use knowledge of existing products to help come up with ideas - Develop and communicate ideas by talking and drawing
Making	<p>Planning:</p> <ul style="list-style-type: none"> - Plan by suggesting what to do next - Select from a range of materials according to their characteristics - Select from a range of tools and equipment e.g. staplers, hole punchers, pencil, scissors <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Use a range of materials including construction materials and kits - Assemble, join and combine materials and components - Use finishing techniques, including those from art and design - Mark out, cut and shape materials 		<p>Planning:</p> <ul style="list-style-type: none"> - Plan by suggesting what to do next - Select from a range of materials according to their characteristics - Select from a range of tools and equipment e.g. knife, peeler, spoon, grater, chopping board <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Prepare simple dishes safely and hygienically, without using a heat source. - Cutting, grating, peeling
Evaluate	<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Talk about their design ideas and what they are making - Make simple judgements about their products and ideas against design criteria <p>Existing products:</p> <ul style="list-style-type: none"> - What the products are - What they products are for - How the products work - What they like and dislike about products. 		<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Talk about their design ideas and what they are making - Make simple judgements about their products and ideas against design criteria <p>Existing products:</p> <ul style="list-style-type: none"> - What the products are - What they products are for - How the products work - What they like and dislike about products.
Technical Knowledge	<p>Making products work:</p> <ul style="list-style-type: none"> - About the movement of simple mechanisms such as sliders - The correct technical vocabulary for the projects they are undertaking 		<p>Where food comes from:</p> <ul style="list-style-type: none"> - Understanding that all food comes from plants and animals <p>Food preparation, cooking and nutrition</p> <ul style="list-style-type: none"> - The names of food and naming and sorting healthy and unhealthy food
Vocab	<p>Building, tall, high, short, wide, narrow, long, strong, stiff, stable, stack, join, assemble, design, plan, materials, tools, construct. Slider, moving, fabric, purpose, puppet, design, plan, materials, tools, construct, mark out, cut, shape, product, mechanism, battery operated, wind up, press, push, switch,</p>		<p>Healthy, unhealthy, plants, animals, fruit, vegetables, portions, chopping, grating, peeling, slicing, safety, hygiene</p>

Year 2:

	Autumn Product Design	Spring Textiles	Summer Food and Nutrition
Design	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Work confidently within a range of contexts - State what products they are designing and making and what their products are for. - Use simple design criteria to help develop their ideas and how they will make their product suitable for the intended user. - Say how their products will work. <p>Generating, developing and communicating ideas:</p> <ul style="list-style-type: none"> - Generate their ideas based on their own experiences and use knowledge of existing products to help them come up with ideas. - Develop and communicate ideas by talking and drawing - Model ideas by exploring materials, components and construction kits by making templates and prototypes. - Use information and communication technology where appropriate to develop their ideas. 		<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Work confidently within a range of contexts such as home, school, gardens, school kitchen. - State what products they are designing and making - Say whether their products are for themselves or others - Use simple design criteria to help develop their ideas <p>Generating, developing and communicating ideas:</p> <ul style="list-style-type: none"> - Use knowledge of existing products to help come up with ideas - Develop and communicate ideas by talking and drawing
Making	<p>Planning:</p> <ul style="list-style-type: none"> - Select from a range of materials according to their characteristics - Select from a range of tools and equipment e.g. staplers, hole punchers, pencil, scissors explaining their choices - Plan what to do by suggesting what comes next <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety. - Use a range of materials including construction materials and kits including textiles and mechanical components. - Measure, mark out, cut and shape materials and components. - Assemble, join and combine materials and components 		<p>Planning:</p> <ul style="list-style-type: none"> - Plan by suggesting what to do next - Select from a range of materials according to their characteristics - Select from a range of tools and equipment e.g. knife, peeler, spoon, grater, chopping board and explain their choices - Follow procedures for safety and hygiene <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Prepare simple dishes safely and hygienically, without using a heat source. - Cutting, grating, peeling
Evaluate	<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Talk about their design ideas and what they are making - Make simple judgements about their products and ideas against design criteria - Suggest how their products could be improved. <p>Existing products:</p> <ul style="list-style-type: none"> - Explore what the products are and who they are for. - How the products work and are used. - Where the products might be used. - What materials they are made from. - What they like and dislike about the products. 		<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Talk about their design ideas and what they are making - Make simple judgements about their products and ideas against design criteria <p>Existing products:</p> <ul style="list-style-type: none"> - What the products are - What they products are for - How the products work - What they like and dislike about products.
Technical Knowledge	<p>Making products work:</p> <ul style="list-style-type: none"> - How freestanding structures can be made stronger, stiffer and more stable - About the simple working characteristics of materials and components. - About the movement of simple mechanisms such as levers, sliders, wheels and axles. - The correct technical vocabulary for the projects they are undertaking. - That a 3D textile product can be assembled from two identical fabric shapes. 		<p>Where food comes from:</p> <ul style="list-style-type: none"> - Understanding that all food comes from plants and animals - Food has to be farmed, grown elsewhere or caught. <p>Food preparation, cooking and nutrition</p> <ul style="list-style-type: none"> - The names of food and naming and sorting healthy and unhealthy food - How to sort food into the 5 groups in the Eatwell plate - Everyone should eat 5 portions of fruit and veg a day. - Food ingredients should be combined according to their sensory characteristics.
Vocab	<p>design, plan, materials, products, generate, ideas, knowledge, develop, components, construction kits, templates, prototype, characteristics, tools, equipment (names of), safety procedures, measure, mark out, cut, shape, assemble, join, combine, lever, slider, wheels, axles, fabric, thread, needle.</p>		<p>Farmed, grown, caught, healthy, unhealthy, protein, carbohydrate, fruit and vegetables, fats, sugars, plants, animals, fruit, vegetables, portions, chopping, grating, peeling, slicing, safety, hygiene, touch, taste, smell, sight, hearing.</p>

Year 3:

	Autumn Product Design	Spring Textiles	Summer Food and Nutrition
Design	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research information about the needs and wants of the Historical user. - Develop class design criteria and use this to inform their ideas. - Begin to work confidently on projects at home and school. - Describe the purpose of their products. - Label a diagram of their product indicating basic design features. - Explain how particular parts of their products work. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Use a range of drawing techniques to develop and communicate their ideas. - Share and clarify ideas through discussion - As a class generate realistic ideas and make design decisions. 		<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research the needs and wants of the user - Describe and explain how their product is made up from a balance of food and drink as described in the eat well plate <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Share and clarify ideas through discussion - As a class generate realistic ideas incorporating the balance of different foods and drinks.
Making	<p>Planning:</p> <ul style="list-style-type: none"> - Select tool and equipment suitable for the task - Select the most appropriate material for the task - Pictorial instructions explaining the main stages of making their product <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene. - Make a product which uses mechanical components. - Use a wider range of materials and components than KS1. - Work accurately to make cuts, holes and join materials together. - Apply a range of finishing techniques including those from art and design with some accuracy. 		<p>Planning:</p> <ul style="list-style-type: none"> - Select tools and equipment suitable for the task such as peeling, chopping, slicing, grating, mixing, kneading and baking. - Choose the right ingredients for a recipe <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene including, where appropriate the use of a heat source. - Follow a simple recipe
Evaluate	<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify what worked well and what they could improve on their product. - Consider the views of their teacher to improve their work. - Use their design when making their product. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of products looking at design, construction, purpose and user needs. - Consider who, where and when products were designed and made. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research inventors, designers, engineers and manufacturers who have developed ground-breaking products. 		<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify what worked well and what they could improve on their recipe, for example, the attractiveness of my food dish. - Consider the views of their teacher to improve their work. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of food products looking at taste, appearance, texture and aroma. - Investigate and analyse the ingredients in existing products. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research chefs who have developed ground-breaking dishes.
Technical Knowledge	<p>How to use science and mathematics to design and make products that work.</p> <p>Know that materials have functional properties and aesthetic qualities.</p> <p>Know and understand the technical vocabulary for the projects they are undertaking.</p> <p>Know how mechanical systems such as levers and linkages or pneumatic systems create movement.</p> <p>Know how to make strong, stiff shell products.</p> <p>That a single fabric shape can be used to make a 3D textiles product.</p>		<p>Know that food ingredients can be fresh, pre-cooked and processed.</p> <p>Know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Know about the Eatwell plate and how to apply this knowledge to labels.</p> <p>Understand the colour coding process used in the UK for labels.</p> <p>Know how to safely use a range of tools within a kitchen environment.</p>
Voca	<p>Generating, developing, user, purpose, design model, evaluate, functional, investigate, label, drawing, planning, design criteria, labelled diagram, appealing, pneumatic system, hinge, mechanism, lever, linkage, strengthen, stiffen, fabric, thread, spool, running stitch.</p>		<p>Fresh, edible, pre-cooked, processed, grown, reared, caught, hygiene, label, eatwell plate, carbohydrate, fat, vegetables, protein, sugar, vitamins, names of utensils and techniques, recipe, taste – sweet, spicy, savoury, hot, appearance, smell, preference, greasy, moist.</p>

Year 4:

	Product design	Textiles	Food and Nutrition
Design	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research information about the needs and wants of the historical user. - Develop class design criteria and use this to inform their ideas. - Begin to work confidently on projects at home and school. - Describe the purpose of their products. - Label a diagram of their product indicating basic design features. - Explain how particular parts of their products work. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Use annotated sketches and cross-sectional drawings to develop and communicate their ideas. - Start to generate prototypes and utilise given stencils for pattern consistency - Share and clarify ideas through discussion and make design decisions that take account of the availability of the resources. 		<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research the needs and wants of the user - Describe and explain how their product is able to provide energy for their body. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Share and clarify ideas through discussion - As a class generate realistic ideas incorporating the balance of different foods and drinks.
Making	<p>Planning:</p> <ul style="list-style-type: none"> - Select tools and equipment suitable for the task - Select the most appropriate material for the task - Write instructions explaining the main stages of making their product. <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene. - Make a product which uses mechanical components. - Use a wider range of materials and components than KS1. - Can apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material such as slots and cut outs. - Measure and mark to the nearest cm. - Apply a range of finishing techniques including those from art and design with some accuracy. 		<p>Planning:</p> <ul style="list-style-type: none"> - Select tools and equipment suitable for the task such as peeling, chopping, slicing, grating, mixing, kneading and baking. - Choose the right ingredients for a recipe <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene including, where appropriate the use of a heat source. - Follow a simple recipe including weighing out to the nearest gram. - Assemble or cook ingredients including controlling the temperature of the oven or hob if cooking.
Evaluate	<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify what worked well and what they could improve on their product. - Consider the views of their teacher and peers to improve their work. - Carefully follow their design when making their product. - Use their design criteria to evaluate their completed product. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of products looking at design, construction, purpose and user needs. - Consider who, where and when products were designed and made. - Consider whether products can be recycled or re-used. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research inventors, designers, engineers and manufacturers who have developed ground-breaking products. 		<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify what worked well and what they could improve on their recipe, for example, the attractiveness of my food dish. - Consider the views of their teacher to improve their work. - Use taste evaluation to assess success of the recipe. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of food products looking at taste, appearance, texture and aroma. - Investigate and analyse the ingredients in existing products and evaluate whether they are healthy or not. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research chefs who have developed ground-breaking dishes.
Technical Knowledge	<p>How to use science and mathematics to design and make products that work.</p> <p>Know that materials have functional properties and aesthetic qualities.</p> <p>Know and understand the technical vocabulary for the projects they are undertaking.</p> <p>Know how mechanical systems such as levers and linkages or pneumatic systems create movement.</p> <p>Know how to make strong, stiff shell products.</p> <p>That a single fabric shape can be used to make a 3D textiles product.</p>		<p>Know that food ingredients can be fresh, pre-cooked and processed.</p> <p>Know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Know about the Eatwell plate and how to apply this knowledge to labels.</p> <p>Understand the colour coding process used in the UK for labels.</p> <p>Know how to safely use a range of tools, including a heat source, within a kitchen environment.</p>
Vocab	<p>Generating, developing, user, purpose, design model, evaluate, functional, investigate, design criteria, labelled diagram, appealing, components, stencils, pattern, prototype, pivot, slot, annotated sketch, cross-sectional, clarify, availability, resources, perimeter, accuracy, textiles, fabric, thread, texture, back stitch.</p>		<p>Fresh, edible, pre-cooked, processed, grown, reared, caught, hygiene, label, Eatwell plate, carbohydrate, fat, vegetables, protein, sugar, vitamins, names of utensils and techniques, recipe, taste – sweet, spicy, savoury, hot, appearance, smell, preference, greasy, moist, grams, weighing, scales and names of ingredients, leavened and unleavened.</p>

Year 5:

	Product design	Textiles	Food and Nutrition
Design	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research information about the needs and wants of the Historical user. - Develop class design criteria and use this to inform their ideas. - Begin to work confidently on projects at home and school. - Describe the purpose of their products. - Label a diagram of their product indicating basic design features. - Explain how particular parts of their products work. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Use annotated sketches, cross-sectional drawings and exploding diagrams to develop and communicate their ideas. - Start to generate prototypes and generate their own pattern pieces for consistency - Generate innovative ideas drawing on research - Make design decisions taking account of constraints such as time and resources. 		<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research the needs and wants of the user - Research how recipes can be adapted to change the appearance, taste, texture and aroma of a dish. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Share and clarify ideas through discussion - As a class generate innovative ideas for meals based on appearance, taste, texture and aroma. - Make design decisions taking account of constraints such as time and resources.
Making	<p>Planning:</p> <ul style="list-style-type: none"> - Select tools and equipment suitable for the task - Select the most appropriate material for the task - Write instructions explaining the main stages of making their product that involve a number of steps. <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene. - Make a product which uses a combination of electronics and mechanics. - Use a wider range of materials and components than KS1. - Begin to develop a range of practical skills to create products (such as cutting, drilling, screwing, nailing, gluing, filing and sanding.) - Measure and mark to the nearest mm. - Accurately apply a range of finishing techniques including those from art and design. 		<p>Planning:</p> <ul style="list-style-type: none"> - Understanding the importance of correct storage and handling of ingredients. - Follow a recipe that uses a variety of ingredients. <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene including, where appropriate the use of a heat source. - Follow a simple recipe including accurately weighing out to the nearest gram. - Beginning to demonstrate a range of baking and cooking techniques.
Evaluate	<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify the strengths and areas for development on their product. - Consider the views of their teacher and peers to improve their work. - Critically evaluate the quality of the design, manufacture and fitness for purpose of their products and design. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of products looking at design, construction, purpose and user needs. - Investigate and analyse how innovative products are and the cost and sustainability of the products. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research inventors, designers, engineers and manufacturers who have developed ground-breaking products. 		<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify the strengths and areas of development in their recipe, for example, identifying the nutritional value of their dish. - Consider the views of their teacher to improve their work. - Evaluate the taste, aroma, appearance and texture of their dish against the recipe. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of food products looking at taste, appearance, texture and aroma. - Investigate and analyse the ingredients in existing products and evaluate how the dish can be incorporated within a balanced diet. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research chefs who have developed ground-breaking products.
Technical Knowledge	<p>How to use science and mathematics to design and make products that work.</p> <p>Know that materials have functional properties and aesthetic qualities.</p> <p>Know that mechanical and electrical systems have an input, process and output.</p> <p>Know and understand the technical vocabulary for the projects they are undertaking.</p> <p>Know how mechanical systems such as cams or pulleys or gears to create movement.</p> <p>Know how electrical components and circuits can be used to create functional products.</p> <p>Know how to reinforce and strengthen a 3D framework.</p> <p>Know that 3D textiles products can be made from a combination of fabric changes.</p>		<p>Know that a recipe can be adapted by adding or substituting one or more ingredients.</p> <p>Know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Know that seasons may affect the food available.</p> <p>Know how food is processed into ingredients that can be eaten.</p> <p>Know which food and drinks are needed to provide energy for the body.</p> <p>Know how to safely use a range of tools, including a heat source, within a kitchen environment.</p>
Vocab	<p>Generating, developing, design model, evaluate, functional, design criteria, labelled diagram, appealing, components, prototype, pulley, drive belt, gear, rotation, axel, motor, circuit, switch, mechanical system, electrical system annotated sketch, cross-sectional, exploding diagram, clarify, availability, resources, perimeter, accuracy, back stitch, decorative stitching, thread.</p>		<p>Fresh, edible, pre-cooked, processed, harvested, seasonal, hygiene, carbohydrate, fat, vegetables, protein, sugar, vitamins, names of utensils and techniques, recipe, taste – sweet, spicy, savoury, hot, appearance, smell, preference, greasy, moist, grams, weighing, scales, balanced diet, allergy intolerance, gluten, dairy.</p>

Year 6:

	Product design	Textiles	Food and Nutrition
Design	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research information about the needs and wants of the Historical user. - Develop class design criteria and use this to inform their ideas. - Begin to work confidently on projects at home and school. - Describe the purpose of their products. - Label a diagram of their product indicating basic design features. - Explain how particular parts of their products work. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Use computer aided designs (CAD) to develop and communicate their ideas. - Start to generate prototypes and their own pattern for consistency. - Generate innovative ideas drawing on research. - Make design decisions taking account of constraints such as time, resources and cost. 		<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> - Research the needs and wants of the user - Research how recipes can be adapted to change the appearance, taste, texture and aroma of a dish. - Research how different foods and drinks contain different substances – nutrients, water and fibre that are needed for health. <p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> - Share and clarify ideas through discussion - In small groups, generate innovative ideas for meals based on appearance, taste, texture and aroma. - Make design decisions taking account of constraints such as time, resources and money.
Making	<p>Planning:</p> <ul style="list-style-type: none"> - Select tools and equipment suitable for the task - Select the most appropriate material for the task - Write instructions explaining the main stages of making their product that involve a number of steps. <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene. - Make a product which uses innovative combination of electronics (or computing) and mechanics in product design. - Use a wider range of materials and components than KS1. - Cut materials with precision and refine the finish with appropriate tools such as sanding wood after cutting. - Demonstrate resourcefulness when tackling practical problems. - Accurately apply a range of finishing techniques including those from art and design. 		<p>Planning:</p> <ul style="list-style-type: none"> - Understanding the importance of correct storage and handling of ingredients using knowledge of microorganism. - Create a menu. <p>Practical skills and techniques:</p> <ul style="list-style-type: none"> - Follow procedures for safety and hygiene including, where appropriate the use of a heat source. - Follow a simple recipe including accurately weighing out to the nearest gram. - Beginning to demonstrate a range of baking and cooking techniques.
Evaluate	<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify the strengths and areas for development on their product. - Consider the views of their teacher and peers to improve their work. - Critically evaluate the quality of the design, manufacture and fitness for purpose of their products and design. - Evaluate their ideas and products against their original design specification. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of products looking at design, construction, purpose and user needs. - Investigate and analyse how innovative products are and the cost and sustainability of the products. - Investigate the impact products have beyond their intended purpose. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research inventors, designers, engineers and manufacturers who have developed ground-breaking products. 		<p>Own ideas and products:</p> <ul style="list-style-type: none"> - Identify the strengths and areas of development in their recipe, for example, identifying the nutritional value of their dish. - Consider the views of their teacher to improve their work. - Evaluate the taste, aroma, appearance and texture and cost of their dish against the recipe. <p>Existing products:</p> <ul style="list-style-type: none"> - Investigate and analyse a variety of food products looking at taste, appearance, texture and aroma. - Investigate and analyse the cost and sustainability of the dish. - Investigate and analyse the ingredients in existing products and evaluate the different substances in them which are necessary for health – water, nutrients and fibre. <p>Key invents and individuals:</p> <ul style="list-style-type: none"> - Research chefs who have developed ground-breaking products.
Technical knowledge	<p>How to use science and mathematics to design and make products that work.</p> <p>Know that materials have functional properties and aesthetic qualities.</p> <p>Know that mechanical and electrical systems have an input, process and output.</p> <p>Know and understand the technical vocabulary for the projects they are undertaking.</p> <p>Know how mechanical systems such as cams or pulleys or gears to create movement.</p> <p>Know how electrical components and circuits can be used to create functional products.</p> <p>Know how to reinforce and strengthen a 3D framework.</p> <p>Know that 3D textiles products can be made from a combination of fabric changes.</p>		<p>Know that a recipe can be adapted by adding or substituting one or more ingredients.</p> <p>Know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Know that seasons may affect the food available.</p> <p>Know how food is processed into ingredients that can be eaten.</p> <p>Know that different food and drink contain different substances – nutrients, water and fibre, that are needed for health.</p> <p>Know how to safely use a range of tools, including a heat source, within a kitchen environment.</p>
Vocab	<p>Design model, fitness for purpose, functional, Computer Aided Design, design criteria, precision, refine, components, prototype, pulley, drive belt, gear, rotation, axel, motor, circuit, switch, mechanical system, electrical system annotated sketch, cross-sectional, exploding diagram, clarify, perimeter, accuracy, back stitch, decorative stitching, thread.</p>		<p>Hygiene, carbohydrate, fat, vegetables, protein, sugar, vitamins, names of utensils and techniques, recipe, taste – sweet, spicy, savoury, hot, appearance, smell, preference, greasy, moist, grams, weighing, scales, balanced diet, allergy intolerance, gluten, dairy, substances – fibre, water, nutrients.</p>

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about the World

