

Design & Technology Curriculum Objectives 2022-2023

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National Curriculum Objectives	<p>What the National Curriculum requires in design and technology at KS1 When designing and making, pupils should be taught to:</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> 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. <p>What the National Curriculum requires in cooking and nutrition at KS1 Pupils should be taught to:</p> <p>Key stage 1</p> <ul style="list-style-type: none"> Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from. 		<p>What the National Curriculum requires in design and technology at KS2 When designing and making, pupils should be taught to:</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> 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. <p>What the National Curriculum requires in cooking and nutrition at KS2 Key stage 2</p> <ul style="list-style-type: none"> 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. 			

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Year Group	EYFS	1	2	3	4	5	6
DT Focuses	3D Models Food Technology Textiles	3D Models Food Technology Textiles	3D Models Food Technology Textiles	3D Models Food Technology Textiles	3D Models Food Technology Textiles	3D Models Food Technology Textiles	3D Models Food Technology Textiles

Year Group	R	1	2	3	4	5	6
Autumn 1	You've Got a Friend in Me	5 Senses 3D Models	Pirates	India Textiles	Africa 3D Models	Macbeth 3D Models	Woeful Wars (WW1 and WW2)
Autumn 2	How Far Will I Go?	Explorers Food Technology	Victorians Textiles	Stone Age	Rainforest	Raging Rivers	Magnificent Mountains
Spring 1	To Infinity and Beyond	Fire Fire	China Food technology	Extreme Earth: Volcanoes and Earthquakes 3D Models	Fantastic Beasts	Anglo Saxons Textiles	Vikings 3D Models
Spring 2	The Land Before Time	How does your garden grow?	Arctic/ Antarctic	Robots	Romans Food Technology	Ancient Greeks Food Technology	Frozen Kingdoms Textiles
Summer 1	Rumble in The Jungle	Toy Story Textiles	Castles 3D models	Chocolate Food Technology	Tudors Textiles	Space	British Empire
Summer 2	Once Upon a Time	What a wonderful world	Madagascar	Ancient Egypt	Urban life and Diversity	Endangered Earth	Mayans Food Technology

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Year Group	1	2	3	4	5	6
<p>Knowledge</p> <p>Design</p> <p>Make</p> <p>Evaluate</p> <p>Technical Knowledge</p> <p>Cooking and Nutrition</p>	<p>I know how to design a product for myself, following design criteria.</p> <p>I know how to use pictures and words to make a simple plan before making.</p> <p>I can begin to use hand tools and kitchen equipment safely and appropriately.</p> <p>I can explain how to use scissors correctly.</p> <p>I can learn to follow simple hygiene procedures.</p> <p>I can talk about pre-existing products, saying what is good or bad about them.</p> <p>I know if my product does what it is meant to (fits the design brief) and how it could be improved.</p> <p>I am beginning to understand how to make a 3D model stronger.</p> <p>I can describe simple features of the materials I am using.</p> <p>I can list different types of mechanisms, e.g. levers, sliders and wheels.</p> <p>I can begin explain where some foods in the world originate from.</p> <p>I understand that all food comes from plants or animals.</p> <p>I can name and sort foods into groups.</p> <p>I understand that everyone should eat at least five portions of fruit and vegetables every day.</p>	<p>I know how to create designs using pictures, diagrams, models, mock-ups, words and ICT.</p> <p>I know what tools and materials to use and can explain why I have chosen them.</p> <p>I can learn to use hand tools and kitchen equipment safely and appropriately.</p> <p>I can explain how to use a needle safely.</p> <p>I can learn to follow simple hygiene procedures.</p> <p>I can discuss positives and things to improve for existing products.</p> <p>I can talk about my design ideas and what I am making.</p> <p>I can list ways to make a 3D model stronger.</p> <p>I can describe different features of the materials I am using.</p> <p>I can list different types of mechanisms, e.g. levers, sliders and wheels, and explain how they work.</p> <p>I can explain where in the world different foods originate from.</p> <p>I can explain that all food comes from plants or animals and give examples of each.</p> <p>I understand that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>I can name and sort foods into the five groups in the Eatwell Guide.</p> <p>I understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why.</p> <p>I can use what I know about the Eatwell Guide to design and prepare dishes.</p>	<p>I can use my knowledge of a broad range of existing products to help me generate ideas.</p> <p>I can explain how particular parts of my products work.</p> <p>I can describe how my design meets a set criteria.</p> <p>I know why it's important to test ideas before making.</p> <p>I can place the main stages of making in a systematic order.</p> <p>I can learn to use a range of tools and equipment safely, appropriately and mostly accurately.</p> <p>I can learn to follow hygiene procedures.</p> <p>I understand the importance of creating a product that is aesthetically pleasing.</p> <p>I can consider my design criteria as I make progress and am willing to alter my plans if this helps to improve the product.</p> <p>I understand that materials have both functional properties and aesthetic qualities.</p> <p>I can begin to explain how mechanical systems such as levers and linkages create movement.</p> <p>I am beginning to understand the principles of a healthy and varied diet.</p> <p>I can begin to explain when, where and how some food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world.</p> <p>I understand how to prepare and cook a savoury dish safely and hygienically.</p> <p>I can explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide.</p> <p>I understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body.</p>	<p>I can describe and prove how my design meets a set criteria.</p> <p>I can list the design features of my products that will appeal to intended customers.</p> <p>I can explain why it's important to test ideas out using prototypes.</p> <p>I can place the main stages of making in a systematic order and explain my choices.</p> <p>I can learn to use a range of tools and equipment safely, appropriately and accurately.</p> <p>I can learn to follow hygiene procedures.</p> <p>I can explain how to create a product that is aesthetically pleasing.</p> <p>I can consider my design criteria as I make progress and am willing to alter my plans, sometimes considering the views of others if this helps to improve the product.</p> <p>I understand how mechanical and electrical systems have an input and output process.</p> <p>I can explain how mechanical systems such as levers and linkages create movement.</p> <p>I am beginning to understand and apply the principles of a healthy and varied diet.</p> <p>I am beginning to understand seasonality, and know where and how some ingredients are grown, reared, caught and processed.</p> <p>I can begin to explain when, where and how food is grown in the UK, Europe and the wider world.</p> <p>I understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically.</p> <p>I can explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide, and I am able to apply these principles when planning and cooking dishes.</p>	<p>I can come up with a range of ideas for an item after collecting information from different sources.</p> <p>I can explain how a product will appeal to a specific audience.</p> <p>I can explain how each part of my product works.</p> <p>I can use my knowledge to independently plan by suggesting what to do next.</p> <p>I can learn to use a wide range of tools and equipment safely, appropriately and accurately.</p> <p>I can learn to follow hygiene procedures and explain why they are important.</p> <p>I understand the importance of reviewing each construction phase to ensure that each part works and is secure to achieve a fully effective end product.</p> <p>I understand and can begin to demonstrate that mechanical and electrical systems have an input, process and output.</p> <p>I can begin to explain how mechanical systems, such as cams, create movement and use mechanical systems in their products.</p> <p>I understand and can apply the principles of a healthy and varied diet.</p> <p>I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>I understand how seasonality may affect food availability and can begin to plan recipes using my knowledge.</p> <p>I know, explain and give some examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>I understand that food is processed into ingredients that can be eaten or used in cooking.</p>	<p>I know how to use market research to inform my plans and ideas for an item (i.e. market research using surveys, interviews, questionnaires or web based resources).</p> <p>I can explain and justify how a product will appeal to a specific audience.</p> <p>I can use my knowledge to independently plan by suggesting what to do next.</p> <p>I can learn to use a wide range of tools and equipment safely, appropriately and accurately.</p> <p>I can learn to follow hygiene procedures and explain why they are important.</p> <p>I know how products should be stored and give reasons.</p> <p>I know how to work within a budget.</p> <p>I can explain the importance of reviewing each construction phase to ensure that each part works and is secure to achieve a fully effective end product.</p> <p>I understand and can demonstrate that mechanical and electrical systems have an input, process and output.</p> <p>I can explain how mechanical systems, such as cams, create movement and use mechanical systems in their products.</p> <p>I can explain and apply the principles of a healthy and varied diet.</p> <p>I can explain seasonality, and know where and how a wide variety of ingredients are grown, reared, caught and processed.</p> <p>I understand how seasonality may affect food availability and can plan recipes according to seasonality.</p> <p>I know, explain and give a range of examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>I can explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes.</p>

Knowledge Matrix (Progression of Knowledge)						
Year Group	1	2	3	4	5	6
<p>Skills</p> <p>Design</p> <p>Make</p> <p>Evaluate</p> <p>Technical Knowledge</p> <p>Cooking and Nutrition</p>	<p>I can design appealing products for a particular user based on simple design criteria.</p> <p>I can think of my own ideas to make something.</p> <p>I can describe how something works.</p> <p>I can explain to someone else how I want to make my product.</p> <p>I can work in some relevant contexts, for example imaginary, story-based, home, school and the wider environment.</p> <p>With support, I can follow a simple plan or recipe.</p> <p>I can begin to select hand tools and equipment, such as scissors, graters and safe knives.</p> <p>I can select from a range of materials, textiles and components.</p> <p>I can use simple materials and components, including textiles and food ingredients.</p> <p>With help, I can measure and mark out materials and ingredients.</p> <p>I can cut, shape and score materials.</p> <p>I can assemble, join and combine materials, components or ingredients.</p> <p>I can cut, shape and join fabric to make a simple product.</p> <p>With help, I can use a basic running stitch.</p> <p>With help, I can cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups.</p> <p>I can begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.</p> <p>I can explore what materials/ingredients products are made from.</p> <p>While working, I can start to identify strengths and possible changes I might make to refine my existing design.</p> <p>I can begin to build simple structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>I can talk about and start to understand the simple working characteristics of materials and components.</p> <p>I can begin to explore and create products using mechanisms, such as levers, sliders and wheels.</p> <p>I can begin to use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>With support, I can use simple utensils and equipment to cut, squeeze and grate safely.</p>	<p>I can design a product for myself and others, following design criteria.</p> <p>I can think of my own ideas using my knowledge of existing products and plan what to do next.</p> <p>I can explain how my product will look and work through talking and simple annotated drawings.</p> <p>I can work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment.</p> <p>I can follow a simple plan or recipe.</p> <p>I can begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives and juicers.</p> <p>I can select from a range of materials, textiles and components according to their characteristics.</p> <p>I can use a range of materials and components, including textiles and food ingredients.</p> <p>With some guidance, I can measure and mark out materials and ingredients.</p> <p>I can cut, shape and score materials with some accuracy.</p> <p>I can assemble, join and combine materials, components or ingredients.</p> <p>I can demonstrate how to cut, shape and join fabric to make a simple product.</p> <p>I can manipulate fabrics in simple ways to create the desired effect.</p> <p>I can use a basic running stitch.</p> <p>I can cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups.</p> <p>I can begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.</p> <p>I can explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations.</p> <p>I can explore what materials/ingredients products are made from and discuss my ideas.</p> <p>While working, I can start to identify strengths and possible changes I might make to refine my existing design.</p> <p>I can evaluate my products and ideas against a simple design criteria.</p> <p>I can build simple structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>I can describe and explain the simple working characteristics of materials and components.</p>	<p>I can begin to develop and follow simple design criteria.</p> <p>I can describe a design using accurately labelled diagrams.</p> <p>When designing, I can generate more than one initial ideas before coming up with a final design.</p> <p>When planning, I can start to explain my choice of materials and components.</p> <p>With help, I can create a simple step-by-step plan, choosing the right equipment and materials.</p> <p>I can begin to work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment.</p> <p>With some confidence, I can carefully select from a range of tools and equipment.</p> <p>I can select from a range of materials and components according to their aesthetic qualities.</p> <p>I can use a wider range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients.</p> <p>With support, I can measure and mark out to the nearest cm and mm.</p> <p>I can cut, shape and score materials with some degree of accuracy.</p> <p>I can assemble, join and combine material and components with some degree of accuracy.</p> <p>I can demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product.</p> <p>I can join textiles with an appropriate sewing technique.</p> <p>I can use running stitch (Y1&2) and backstitch (Y3).</p> <p>I can begin to select and use different finishing techniques to improve the appearance of a product such as tie-dye and fabric paints.</p> <p>I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose.</p> <p>I can explore what materials/ingredients products are made from and suggest reasons for this.</p> <p>I can evaluate my product against the original design criteria.</p> <p>I can begin to evaluate key events, including technological developments, and designs of individuals that have helped shape the world.</p> <p>I can apply my understanding of how to strengthen, stiffen and</p>	<p>I can develop and follow simple design criteria.</p> <p>I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas.</p> <p>When designing, I can explore different initial ideas before coming up with a final design.</p> <p>With support, I can produce a detailed plan with labelled diagrams, a written explanation and step-by-step guide, explaining my choice of materials and components.</p> <p>I can work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment.</p> <p>With some confidence, I can carefully select from a range of tools and equipment, explaining my choices.</p> <p>I can select from a range of materials and components according to their aesthetic qualities.</p> <p>I can use a wider range of materials and components, including construction materials and kits, textiles, mechanical and electrical components and food ingredients.</p> <p>With growing independence, I can measure and mark out to the nearest cm and mm.</p> <p>I can cut, shape and score materials with a growing degree of accuracy.</p> <p>I can assemble, join and combine material and components with a growing degree of accuracy.</p> <p>I can demonstrate how to measure, cut, shape and join fabric with growing accuracy to make a simple product.</p> <p>I can join textiles with an appropriate sewing technique.</p> <p>I can use running stitch (Y1&2), backstitch (Y3) and overstitch (Y4).</p> <p>I can begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics.</p> <p>I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose.</p> <p>I can explore what materials/ingredients products are made from and suggest reasons for this.</p> <p>I can evaluate my product against the original design criteria.</p> <p>I can evaluate key events, including technological</p>	<p>I can create my own set criteria to inform my design of a product.</p> <p>I can generate a range of design ideas and clearly communicate final designs.</p> <p>I can design innovative and appealing products that have a clear purpose and are aimed at a specific user.</p> <p>I can produce a detailed plan, with step-by-step instructions, cross-sectional diagrams and prototypes.</p> <p>I can suggest alternative plans, considering the positive aspects and drawbacks of each.</p> <p>I can begin to consider the availability and costings of resources when planning out designs.</p> <p>I can work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.</p> <p>With growing confidence, I can select from a wide range of tools and equipment, explaining my choices.</p> <p>I can select from a range of materials and components according to their functional properties and aesthetic qualities.</p> <p>I can independently take exact measurements and mark out, mostly accurately, to within 1mm.</p> <p>I can use a full range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients.</p> <p>I can cut a range of materials with accuracy.</p> <p>I can shape and score materials with accuracy.</p> <p>I can assemble, join and combine materials and components with accuracy.</p> <p>I can demonstrate how to measure, tape, pin, cut, shape and join fabric with precision to make a more complex product.</p> <p>I can join textiles using a greater variety of stitches, such as running stitch (Y1&2), backstitch (Y3), overstitch (Y4) and whip stitch (Y5).</p> <p>I can refine the finish using techniques to improve the appearance of my product, such as a more precise scissor cut after roughly cutting out a shape.</p> <p>I can complete competitor analysis of other products on the market.</p> <p>I can critically evaluate the quality of design, manufacture and fitness for purpose of products as I design and make.</p>	<p>I can develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market.</p> <p>I can generate a wide range of design ideas and clearly communicate final designs.</p> <p>I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas, including the use of prototypes.</p> <p>I can work within constraints, refining and justifying plans as necessary.</p> <p>I can consider the availability and costings of resources when planning out designs.</p> <p>I can work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.</p> <p>I can confidently select from a wide range of tools and equipment, explaining my choices clearly.</p> <p>I can select from a range of materials and components according to their functional properties and aesthetic qualities.</p> <p>I can independently take exact measurements and mark out, to within 1mm.</p> <p>I can use a full range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients.</p> <p>I can cut a range of materials with precision and accuracy.</p> <p>I can shape and score materials with precision and accuracy.</p> <p>I can assemble, join and combine materials and components with accuracy.</p> <p>I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product.</p> <p>I can join textiles using a greater variety of stitches, such as running stitch (Y1&2), backstitch (Y3), overstitch (Y4), whip stitch (Y5) and blanket stitch (Y6).</p> <p>I can refine the finish using techniques to improve the appearance of my product, such as a more precise scissor cut after roughly cutting out a shape or sanding.</p> <p>I can complete detailed competitor analysis of other products on the market.</p>

		<p>I can explore and create products using mechanisms, such as levers, sliders and wheels.</p> <p>I can use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>I can use simple utensils and equipment to peel, cut, slice, squeeze, grate and chop safely.</p>	<p>reinforce more complex structures in order to create more sturdy products.</p> <p>I can begin to use mechanical systems in my products.</p> <p>With support, I can prepare and cook a savoury dish using a range of cooking techniques.</p> <p>With support, I can use a heat source to cook ingredients.</p> <p>I can use a range of techniques, such as mashing, whisking, crushing, grating, cutting, kneading and baking.</p> <p>I can prepare ingredients using appropriate cooking utensils.</p> <p>With support, I can measure and weigh ingredients to the nearest gram and millilitre.</p> <p>I can begin to independently follow a recipe.</p>	<p>developments, and designs of individuals that have helped shape the world.</p> <p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more sturdy products.</p> <p>I can make and represent simple electrical circuits, such as a series and parallel, and components to create functional products.</p> <p>I can use mechanical systems in my products.</p> <p>With support, I can prepare and cook more than one savoury dish using a range of cooking techniques.</p> <p>With support, I can use a heat source to cook ingredients, showing awareness of the need to control the temperature of the hob and/or oven.</p> <p>I can independently use a range of techniques, including mashing, whisking, crushing, grating, cutting, kneading and baking.</p> <p>I can prepare ingredients using appropriate cooking utensils.</p> <p>I can measure and weigh ingredients to the nearest gram and millilitre.</p> <p>I can begin to independently follow a recipe.</p>	<p>I can evaluate my ideas and products against the original design criteria, making changes as needed.</p> <p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products.</p> <p>I can begin to apply my understanding of computing to program, monitor and control a product.</p> <p>I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>With a partner, I can demonstrate how to prepare and cook dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>With support, I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling.</p> <p>I can adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma.</p> <p>I can measure accurately and begin to calculate ratios of ingredients to scale up or down from a recipe.</p> <p>I can independently follow a recipe.</p>	<p>I can critically evaluate the quality of design, manufacture, functionality, innovation and fitness for purpose of products as I design and make.</p> <p>I can confidently evaluate my ideas and products against the original design criteria, making changes as needed.</p> <p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products.</p> <p>I can apply my understanding of computing to program, monitor and control a product.</p> <p>I can confidently prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>I can independently demonstrate how to prepare and cook a variety of dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling.</p> <p>I can adapt and refine recipes to change the appearance, taste, texture and aroma.</p> <p>I can alter methods, cooking times and/or temperatures.</p> <p>I can measure accurately and calculate ratios of ingredients to scale up or down from a recipe.</p> <p>I can independently follow a recipe.</p>
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Redwell Design & Technology Intent 22-23

Year Group		1	2	3	4	5	6
Autumn 1	Topic	My 5 Senses	Pirates	India	Africa	Macbeth	Woeful Wars
	DT Focus	Textiles		Textiles	3D Models	3D Models	
	Knowledge Design Make Evaluate Technical Knowledge Cooking and Nutrition	I know how to use pictures and words to make a simple plan before making. I can begin to use hand tools and kitchen equipment safely and appropriately. I can explain how to use scissors correctly. I can talk about pre-existing products, saying what is good or bad about them. I can describe simple features of the materials I am using.		I can describe how my design meets a set criteria. I know why it's important to test ideas before making. I can place the main stages of making in a systematic order. I understand the importance of creating a product that is aesthetically pleasing. I can consider my design criteria as I make progress and am willing to alter my plans if this helps to improve the product. I understand that materials have both functional properties and aesthetic qualities.	I can describe and prove how my design meets a set criteria. I can explain why it's important to test ideas out using prototypes. I can learn to use a range of tools and equipment safely, appropriately and accurately. I can explain how to create a product that is aesthetically pleasing. I can consider my design criteria as I make progress and am willing to alter my plans, sometimes considering the views of others if this helps to improve the product. I understand how mechanical and electrical systems have an input and output process. I can explain how mechanical systems such as levers and linkages create movement.	I can come up with a range of ideas for an item after collecting information from different sources. I can explain how each part of my product works. I can learn to use a wide range of tools and equipment safely, appropriately and accurately. I understand the importance of reviewing each construction phase to ensure that each part works and is secure to achieve a fully effective end product. I understand and can begin to demonstrate that mechanical and electrical systems have an input, process and output. I can begin to explain how mechanical systems, such as cams, create movement and use mechanical systems in their products.	
	Skills Design Make Evaluate Technical Knowledge Cooking and Nutrition	I can design appealing products for a particular user based on simple design criteria. I can work in some relevant contexts, for example imaginary, story-based, home, school and the wider environment. I can select from a range of materials, textiles and components. I can use simple materials and components, including textiles and food ingredients. I can cut, shape and join fabric to make a simple product. With help, I can use a basic running stitch. While working, I can start to identify strengths and possible changes I might make to refine my existing design.	<i>No DT this half term</i>	I can begin to develop and follow simple design criteria. With help, I can create a simple step-by-step plan, choosing the right equipment and materials. I can begin to work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment. I can demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product. I can join textiles with an appropriate sewing technique. I can use running stitch (Y1&2) and backstitch (Y3). I can begin to select and use different finishing techniques to improve the appearance of a product such as tie-dye and fabric paints. I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose. I can evaluate my product against the original design criteria.	I can develop and follow simple design criteria. I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas. When designing, I can explore different initial ideas before coming up with a final design. I can select from a range of materials and components according to their aesthetic qualities. I can use a wider range of materials and components, including construction materials and kits, textiles, mechanical and electrical components and food ingredients. With growing independence, I can measure and mark out to the nearest cm and mm. I can cut, shape and score materials with a growing degree of accuracy. I can assemble, join and combine material and components with a growing degree of accuracy. I can evaluate my product against the original design criteria. I can evaluate key events, including technological developments, and designs of individuals that have helped shape the world. I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more sturdy products. I can make and represent simple electrical circuits, such as a series and parallel, and components to create functional products. I can use mechanical systems in my products.	I can create my own set criteria to inform my design of a product. I can generate a range of design ideas and clearly communicate final designs. I can produce a detailed plan, with step-by-step instructions, cross-sectional diagrams and prototypes. I can select from a range of materials and components according to their functional properties and aesthetic qualities. I can independently take exact measurements and mark out, mostly accurately, to within 1mm. I can use a full range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients. I can cut a range of materials with accuracy. I can shape and score materials with accuracy. I can assemble, join and combine materials and components with accuracy. I can evaluate my ideas and products against the original design criteria, making changes as needed. I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. I can begin to apply my understanding of computing to program, monitor and control a product.	<i>No DT this half term</i>
	Key Vocabulary	planning, investigating design, evaluate, make, user, purpose, ideas, product		fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype, frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent	
Assessment: Final Product			Indian puppet	African huts	Shakespeare theatre		

Redwell Design & Technology Intent 2022-23

Year Group		1	2	3	4	5	6
Autumn 2	Topic	Explorers	Christmas (Victorians)	Stone Age	The Rainforest	The Anglo-Saxons	Magnificent Mountains
	DT Focus	Food Technology	Textiles		Food Technology	Textiles	
	Knowledge Design Make Evaluate Technical Knowledge Cooking and Nutrition	<p>I know how to use pictures and words to make a simple plan before making.</p> <p>I can begin to use hand tools and kitchen equipment safely and appropriately.</p> <p>I can learn to follow simple hygiene procedures.</p> <p>I can talk about pre-existing products, saying what is good or bad about them.</p> <p>I can begin explain where some foods in the world originate from.</p> <p>I understand that all food comes from plants or animals.</p> <p>I can name and sort foods into groups.</p> <p>I understand that everyone should eat at least five portions of fruit and vegetables every day.</p>	<p>I know how to create designs using pictures, diagrams, models, mock-ups, words and ICT.</p> <p>I can explain how to use a needle safely.</p> <p>I can talk about my design ideas and what I am making.</p> <p>I can describe different features of the materials I am using.</p>		<p>I can list the design features of my products that will appeal to intended customers.</p> <p>I can place the main stages of making in a systematic order and explain my choices.</p> <p>I can learn to follow hygiene procedures.</p> <p>I am beginning to understand and apply the principles of a healthy and varied diet.</p> <p>I am beginning to understand seasonality, and know where and how some ingredients are grown, reared, caught and processed.</p> <p>I can begin to explain when, where and how food is grown in the UK, Europe and the wider world.</p> <p>I understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically.</p> <p>I can explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide, and I am able to apply these principles when planning and cooking dishes.</p>	<p>I can explain how a product will appeal to a specific audience.</p> <p>I can learn to use a wide range of tools and equipment safely, appropriately and accurately.</p> <p>I understand the importance of reviewing each construction phase to ensure that each part works and is secure to achieve a fully effective end product.</p>	<p>Modroc Mountains I can generate a wide range of design ideas and clearly communicate final designs.</p> <p>I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas, including the use of prototypes. I can confidently select from a wide range of tools and equipment, explaining my choices clearly.</p> <p>I can select from a range of materials and components according to their functional properties and aesthetic qualities. I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products.</p>
	Skills Design Make Evaluate Technical Knowledge Cooking and Nutrition	<p>I can design appealing products for a particular user based on simple design criteria.</p> <p>I can think of my own ideas to make something.</p> <p>With support, I can follow a simple plan or recipe.</p> <p>I can begin to select hand tools and equipment, such as scissors, graters and safe knives.</p> <p>I can use simple materials and components, including textiles and food ingredients.</p> <p>With help, I can measure and mark out materials and ingredients.</p> <p>With help, I can cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups.</p> <p>I can explore what materials/ingredients products are made from.</p> <p>I can begin to use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>With support, I can use simple utensils and equipment to cut, squeeze and grate safely.</p>	<p>I can design a product for myself and others, following design criteria.</p> <p>I can work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment.</p> <p>I can select from a range of materials, textiles and components according to their characteristics.</p> <p>I can demonstrate how to cut, shape and join fabric to make a simple product.</p> <p>I can manipulate fabrics in simple ways to create the desired effect.</p> <p>I can use a basic running stitch.</p> <p>I can explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations.</p> <p>While working, I can start to identify strengths and possible changes I might make to refine my existing design.</p>	<i>No DT this half term</i>	<p>I can develop and follow simple design criteria.</p> <p>With support, I can produce a detailed plan with labelled diagrams, a written explanation and step-by-step guide, explaining my choice of materials and components.</p> <p>With some confidence, I can carefully select from a range of tools and equipment, explaining my choices.</p> <p>I can explore what materials/ingredients products are made from and suggest reasons for this.</p> <p>I can evaluate my product against the original design criteria.</p> <p>With support, I can prepare and cook more than one savoury dish using a range of cooking techniques.</p> <p>With support, I can use a heat source to cook ingredients, showing awareness of the need to control the temperature of the hob and/or oven.</p> <p>I can independently use a range of techniques, including mashing, whisking, crushing, grating, cutting, kneading and baking.</p> <p>I can prepare ingredients using appropriate cooking utensils.</p> <p>I can measure and weigh ingredients to the nearest gram and milliliter.</p> <p>I can begin to independently follow a recipe.</p>	<p>I can create my own set criteria to inform my design of a product.</p> <p>I can generate a range of design ideas and clearly communicate final designs.</p> <p>I can design innovative and appealing products that have a clear purpose and are aimed at a specific user.</p> <p>I can suggest alternative plans, considering the positive aspects and drawbacks of each</p> <p>I can work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.</p> <p>I can demonstrate how to measure, tape, pin, cut, shape and join fabric with precision to make a more complex product.</p> <p>I can join textiles using a greater variety of stitches, such as running stitch (Y1&2), backstitch (Y3), overstitch (Y4) and whip stitch (Y5).</p> <p>I can refine the finish using techniques to improve the appearance of my product, such as a more precise scissor cut after roughly cutting out a shape.</p> <p>I can critically evaluate the quality of design, manufacture and fitness for purpose of products as I design and make.</p>	
	Key Vocabulary	fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients	joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish		name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet		
	Assessment: Final Product	Fruit kebabs	Christmas Stockings		Food	Purse	

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Year Group		1	2	3	4	5	6
Spring 1	Topic	Fire! Fire!	China	Extreme Earth: Volcanoes & Earthquakes	Fantastic Beasts	Raging Rivers	Vikings
	DT Focus		Food technology	3D Models			3D Models
	Knowledge Design Make Evaluate Technical Knowledge Cooking and Nutrition		<p>I know what tools and materials to use and can explain why I have chosen them.</p> <p>I can learn to use hand tools and kitchen equipment safely and appropriately.</p> <p>I can learn to follow simple hygiene procedures.</p> <p>I can talk about my design ideas and what I am making.</p> <p>I can explain where in the world different foods originate from.</p> <p>I can explain that all food comes from plants or animals and give examples of each.</p> <p>I understand that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>I can name and sort foods into the five groups in the Eatwell Guide.</p> <p>I understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why.</p> <p>I can use what I know about the Eatwell Guide to design and prepare dishes.</p>	<p>I can explain how particular parts of my products work.</p> <p>I know why it's important to test ideas before making.</p> <p>I can learn to use a range of tools and equipment safely, appropriately and mostly accurately.</p> <p>I can consider my design criteria as I make progress and am willing to alter my plans if this helps to improve the product.</p> <p>I understand that materials have both functional properties and aesthetic qualities.</p> <p>I can begin to explain how mechanical systems such as levers and linkages create movement.</p>			<p>I can explain and justify how a product will appeal to a specific audience.</p> <p>I can use my knowledge to independently plan by suggesting what to do next.</p> <p>I can learn to use a wide range of tools and equipment safely, appropriately and accurately.</p> <p>I can explain the importance of reviewing each construction phase to ensure that each part works and is secure to achieve a fully effective end product.</p> <p>I understand and can demonstrate that mechanical and electrical systems have an input, process and output.</p> <p>I can explain how mechanical systems, such as cams, create movement and use mechanical systems in their products.</p>
	Skills Design Make Evaluate Technical Knowledge Cooking and Nutrition	<i>No DT this half term</i>	<p>I can design a product for myself and others, following design criteria.</p> <p>I can follow a simple plan or recipe.</p> <p>I can begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives and juicers.</p> <p>I can use a range of materials and components, including textiles and food ingredients.</p> <p>With some guidance, I can measure and mark out materials and ingredients.</p> <p>I can assemble, join and combine materials, components or ingredients.</p> <p>I can cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups.</p> <p>I can explore what materials/ingredients products are made from and discuss my ideas.</p> <p>I can use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>I can use simple utensils and equipment to peel, cut, slice, squeeze, grate and chop safely.</p>	<p>I can begin to develop and follow simple design criteria.</p> <p>When designing, I can generate more than one initial ideas before coming up with a final design.</p> <p>When planning, I can start to explain my choice of materials and components.</p> <p>I can select from a range of materials and components according to their aesthetic qualities.</p> <p>With support, I can measure and mark out to the nearest cm and mm.</p> <p>I can cut, shape and score materials with some degree of accuracy.</p> <p>I can assemble, join and combine material and components with some degree of accuracy.</p> <p>I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose.</p> <p>I can begin to evaluate key events, including technological developments, and designs of individuals that have helped shape the world.</p> <p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more sturdy products.</p> <p>I can begin to use mechanical systems in my products.</p>	<i>No DT this half term</i>	<i>No DT this half term</i>	<p>I can generate a wide range of design ideas and clearly communicate final designs.</p> <p>I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas, including the use of prototypes.</p> <p>I can work within constraints, refining and justifying plans as necessary.</p> <p>I can confidently select from a wide range of tools and equipment, explaining my choices clearly.</p> <p>I can select from a range of materials and components according to their functional properties and aesthetic qualities.</p> <p>I can independently take exact measurements and mark out, to within 1mm.</p> <p>I can use a full range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients.</p> <p>I can cut a range of materials with precision and accuracy.</p> <p>I can shape and score materials with precision and accuracy.</p> <p>I can assemble, join and combine materials and components with accuracy.</p> <p>I can critically evaluate the quality of design, manufacture, functionality, innovation and fitness for purpose of products as I design and make.</p> <p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products.</p> <p>I can apply my understanding of computing to program, monitor and control a product.</p>
	Key Vocabulary		fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients				frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent, function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype
Assessment: Final Product	Thank you cards, picnic food	Chinese Food	Exploding Volcano			A Viking boat	

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Year Group		1	2	3	4	5	6
Spring 2	Topic	How does your garden grow?	Arctic and Antarctic	Robots	Tudors	Ancient Greeks	Frozen Kingdoms
	DT Focus					Food Technology	Textiles
	Knowledge					<p>I can explain how a product will appeal to a specific audience.</p> <p>I can use my knowledge to independently plan by suggesting what to do next.</p> <p>I can learn to follow hygiene procedures and explain why they are important.</p> <p>I understand and can apply the principles of a healthy and varied diet.</p> <p>I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>I understand how seasonality may affect food availability and can begin to plan recipes using my knowledge.</p> <p>I know, explain and give some examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>I understand that food is processed into ingredients that can be eaten or used in cooking.</p>	<p>I know how to use market research to inform my plans and ideas for an item (i.e. market research using surveys, interviews, questionnaires or web based resources).</p> <p>I can explain and justify how a product will appeal to a specific audience.</p> <p>I can use my knowledge to independently plan by suggesting what to do next.</p>
	Skills	<i>No DT this half term</i>	<i>No DT this half term</i>	<i>No DT this half term</i>	<i>No DT this half term</i>	<p>I can design innovative and appealing products that have a clear purpose and are aimed at a specific user</p> <p>I can begin to consider the availability and costings of resources when planning out designs.</p> <p>With growing confidence, I can select from a wide range of tools and equipment, explaining my choices.</p> <p>I can complete competitor analysis of other products on the market.</p> <p>I can evaluate my ideas and products against the original design criteria, making changes as needed.</p> <p>I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>With a partner, I can demonstrate how to prepare and cook dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>With support, I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling.</p> <p>I can adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma.</p> <p>I can measure accurately and begin to calculate ratios of ingredients to scale up or down from a recipe.</p> <p>I can independently follow a recipe.</p>	<p>I can develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market.</p> <p>I can generate a wide range of design ideas and clearly communicate final designs.</p> <p>I can work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.</p> <p>I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product.</p> <p>I can join textiles using a greater variety of stitches, such as running stitch (Y1&2), backstitch (Y3), overstitch (Y4), whip stitch (Y5) and blanket stitch (Y6).</p> <p>I can refine the finish using techniques to improve the appearance of my product, such as a more precise scissor cut after roughly cutting out a shape or sanding.</p> <p>I can confidently evaluate my ideas and products against the original design criteria, making changes as needed.</p>
	Key Vocabulary					<p>ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble</p>	<p>seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,</p>
Assessment: Final Product					Greek salad	Indigenous Clothing	

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Year Group		1	2	3	4	5	6
Summer 1	Topic	Toy Story	Castles	Chocolate	Romans	Space	British Empire
	DT Focus	3D Models - Using mechanisms	3D models	Food Technology	Textiles		
	Knowledge Design Make Evaluate Technical Knowledge Cooking and Nutrition	<p>I know how to design a product for myself, following design criteria. I can begin to use hand tools and kitchen equipment safely and appropriately. I can explain how to use scissors correctly. I know if my product does what it is meant to (fits the design brief) and how it could be improved. I am beginning to understand how to make a 3D model stronger. I can describe simple features of the materials I am using. I can list different types of mechanisms, e.g. levers, sliders and wheels.</p>	<p>I know how to create designs using pictures, diagrams, models, mock-ups, words and ICT. I can learn to use hand tools and kitchen equipment safely and appropriately. I can discuss positives and things to improve for existing products. I can list ways to make a 3D model stronger. I can describe different features of the materials I am using. I can list different types of mechanisms, e.g. levers, sliders and wheels, and explain how they work.</p>	<p>I can use my knowledge of a broad range of existing products to help me generate ideas. I can place the main stages of making in a systematic order. I can learn to follow hygiene procedures. I am beginning to understand the principles of a healthy and varied diet. I can begin to explain when, where and how some food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world. I understand how to prepare and cook a savoury dish safely and hygienically. I can explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide. I understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body.</p>	<p>I can describe and prove how my design meets a set criteria. I can place the main stages of making in a systematic order and explain my choices. I can explain how to create a product that is aesthetically pleasing. I can consider my design criteria as I make progress and am willing to alter my plans, sometimes considering the views of others if this helps to improve the product.</p>		
	Skills Design Make Evaluate Technical Knowledge Cooking and Nutrition	<p>I can describe how something works. I can explain to someone else how I want to make my product. I can cut, shape and score materials. I can assemble, join and combine materials, components or ingredients. I can begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations. While working, I can start to identify strengths and possible changes I might make to refine my existing design. I can begin to build simple structures, exploring how they can be made stronger, stiffer and more stable. I can talk about and start to understand the simple working characteristics of materials and components. I can begin to explore and create products using mechanisms, such as levers, sliders and wheels.</p>	<p>I can think of my own ideas using my knowledge of existing products and plan what to do next. I can explain how my product will look and work through talking and simple annotated drawings. I can select from a range of materials, textures and components according to their characteristics. I can cut, shape and score materials with some accuracy. I can assemble, join and combine materials, components or ingredients. I can begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations. I can evaluate my products and ideas against a simple design criteria. I can build simple structures, exploring how they can be made stronger, stiffer and more stable. I can describe and explain the simple working characteristics of materials and components. I can explore and create products using mechanisms, such as levers, sliders and wheels.</p>	<p>I can describe a design using accurately labelled diagrams. With help, I can create a simple step-by-step plan, choosing the right equipment and materials. With some confidence, I can carefully select from a range of tools and equipment. I can use a wider range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients. I can explore what materials/ingredients products are made from and suggest reasons for this. I can evaluate my product against the original design criteria. With support, I can prepare and cook a savoury dish using a range of cooking techniques. With support, I can use a heat source to cook ingredients. I can use a range of techniques, such as mashing, whisking, crushing, grating, cutting, kneading and baking. I can prepare ingredients using appropriate cooking utensils. With support, I can measure and weigh ingredients to the nearest gram and millilitre. I can begin to independently follow a recipe.</p>	<p>I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas. When designing, I can explore different initial ideas before coming up with a final design. I can work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment. I can demonstrate how to measure, cut, shape and join fabric with growing accuracy to make a simple product. I can join textiles with an appropriate sewing technique. I can use running stitch (Y1&2), backstitch (Y3) and overstitch (Y4). I can begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics. I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose. I can evaluate my product against the original design criteria.</p>	<i>No DT this half term</i>	<i>No DT this half term</i>
	Key Vocabulary		cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder, investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function	name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance		
Assessment: Final Product	Moving vehicle	Model of a Motte and Bailey castle					

Redwell Design & Technology Intent 2022-23

Year Group		1	2	3	4	5	6	
Summer 2	Topic	What a wonderful world	Madagascar	Ancient Egypt	Urban Life & Diversity	Endangered Earth	Mayans	
	DT Focus						Food Technology	
	Knowledge Design Make Evaluate Technical Knowledge Cooking and Nutrition							I know how to use market research to inform my plans and ideas for an item (i.e. market research using surveys, interviews, questionnaires or web based resources). I can learn to follow hygiene procedures and explain why they are important. I know how products should be stored and give reasons. I know how to work within a budget. I can explain and apply the principles of a healthy and varied diet. I can explain seasonality, and know where and how a wide variety of ingredients are grown, reared, caught and processed. I understand how seasonality may affect food availability and can plan recipes according to seasonality. I know, explain and give a range of examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world. I can explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes.
	Skills Design Make Evaluate Technical Knowledge Cooking and Nutrition	<i>No DT this half term</i>	<i>No DT this half term</i>	<i>No DT this half term</i>	<i>No DT this half term</i>	<i>No DT this half term</i>	<i>No DT this half term</i>	I can develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market. I can consider the availability and costings of resources when planning out designs. I can use a full range of materials and components, including construction materials and kits, textiles, mechanical components and food ingredients. I can complete detailed competitor analysis of other products on the market. I can confidently evaluate my ideas and products against the original design criteria, making changes as needed. I can confidently prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques I can independently demonstrate how to prepare and cook a variety dishes safely and hygienically including, where appropriate, the use of a heat source. I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling. I can adapt and refine recipes to change the appearance, taste, texture and aroma. I can alter methods, cooking times and/or temperatures. I can measure accurately and calculate ratios of ingredients to scale up or down from a recipe. I can independently follow a recipe.
	Key Vocabulary							
Assessment: Final Product							Mayan inspired food	