

SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT THE FOUNDATION STAGE				
	Personal, Social and Emotional Development	Physical Development	Understanding the World	Expressive Arts and Design
THREE AND FOUR YEAR OLDS	<ul style="list-style-type: none"> I can select and use activities and resources, with help when needed 	<ul style="list-style-type: none"> I can use large muscle movements to wave flags and streamers, paint and make marks. I know which resources to choose to carry out my own plan. I know how to use one handed tools and equipment, for example, making snips in paper with scissors 	<ul style="list-style-type: none"> I know how to explore different items and know how some things work. 	<ul style="list-style-type: none"> I can make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. I can explore different materials freely, in order to develop my ideas about how to use them and what to make. I can develop my own ideas and then decide which materials to use to express them. I can create closed shapes with continuous lines, and begin to use these shapes to represent objects.

SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT THE FOUNDATION STAGE		
	Physical Development	Expressive Arts and Design
RECEPTION	<ul style="list-style-type: none"> I have developed a more fluent style of moving, with developing control and grace. I have developed my small motor skills and know how to use a range of tools competently, safely and confidently. I can use my core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. 	<ul style="list-style-type: none"> I know how to explore, use and refine a variety of artistic effects to express their ideas and feelings. I know that I can return to and build on my previous learning, refining ideas and developing my ability to represent them. I know how to create collaboratively, sharing ideas, resources and skills.

SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT THE FOUNDATION STAGE

	Physical Development	Expressive Arts and Design
EARLY LEARNING GOALS	<p><u>Fine Motor Skills</u></p> <ul style="list-style-type: none"> • I can use a range of small tools, including scissors, paintbrushes and cutlery. 	<p><u>Creating with Materials</u></p> <ul style="list-style-type: none"> • I can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • I can share my creations, explaining the process that I have used.

SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT KEY STAGE ONE.

	DESIGN	MAKE	EVALUATE	TECHNICAL SKILLS
NATIONAL CURRICULUM	<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 	<ul style="list-style-type: none"> • select from and use a range of tools and equipment to perform practical tasks • select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics 	<ul style="list-style-type: none"> • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria 	<ul style="list-style-type: none"> • build structures, exploring how they can be made stronger, stiffer and more stable • explore and use mechanisms • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from.
YEAR ONE	<p><u>1. Marvellous Mechanisms (mechanisms)</u></p> <p><u>2. How can we improve a toy from the past? (mechanisms)</u></p> <p><u>3. Fabulous Food (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can think of some ideas on my own. 	<p><u>1. Marvellous Mechanisms (mechanisms)</u></p> <p><u>2. How can we improve a toy from the past? (mechanisms)</u></p> <p><u>3. Fabulous Food (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can explain what I am making. 	<p><u>1. Marvellous Mechanisms (mechanisms)</u></p> <p><u>2. How can we improve a toy from the past? (mechanisms)</u></p> <p><u>3. Fabulous Food (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can describe how something works. 	<p><u>1. Marvellous Mechanisms (mechanisms)</u></p> <p><u>2. How can we improve a toy from the past? (mechanisms)</u></p> <ul style="list-style-type: none"> • I can make a product that moves. • I can cut materials using scissors.

	<ul style="list-style-type: none"> • I can explain what I want to do. • I can use pictures and words to plan. 	<ul style="list-style-type: none"> • I can explain which tools I am using 	<ul style="list-style-type: none"> • I can talk about my own work and things that other people have done. 	<ul style="list-style-type: none"> • I can describe the materials using different words. • I can say why I have chosen moving parts. • I can join materials together as part of a moving product. • I can add some kind of design to my product. <p><u>3. Fabulous Food (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can cut food safely. • I can describe the texture of foods. • I can wash my hands and make sure that surfaces are clean. • I can think of interesting ways of decorating food I have made. • I can describe the properties of the ingredients I am using. • I can explain what it means to be hygienic. • I can be hygienic in the kitchen.
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SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT KEY STAGE ONE.

	DESIGN	MAKE	EVALUATE	TECHNICAL SKILLS
NATIONAL CURRICULUM	<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 	<ul style="list-style-type: none"> select from and use a range of tools and equipment to perform practical tasks select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics 	<ul style="list-style-type: none"> explore and evaluate a range of existing products evaluate their ideas and products against design criteria 	<ul style="list-style-type: none"> build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from.
YEAR TWO	<p><u>1. Where Would an Animal Like to Live? (use of materials & construction)</u></p> <p><u>2. Super Salads (cooking and nutrition)</u></p> <p><u>3. Can We Put On a Puppet Show? (textiles)</u></p> <ul style="list-style-type: none"> I can think of ideas and plan what to do next. I can choose the best tools and materials. I can give a reason why these are the best. I can describe my design by using pictures, diagrams, models and words. 	<p><u>1. Where Would an Animal Like to Live? (use of materials & construction)</u></p> <p><u>2. Super Salads (cooking and nutrition)</u></p> <p><u>3. Can We Put On a Puppet Show? (textiles)</u></p> <ul style="list-style-type: none"> I can join things (materials/components) together in different ways. 	<p><u>1. Where Would an Animal Like to Live? (use of materials & construction)</u></p> <p><u>2. Super Salads (cooking and nutrition)</u></p> <p><u>3. Can We Put On a Puppet Show? (textiles)</u></p> <ul style="list-style-type: none"> I can explain what went well in my work. I can explain what I would improve if I did it again. 	<p><u>Where Would an Animal Like to Live? (use of materials & construction)</u></p> <ul style="list-style-type: none"> I can make a structure/model using different materials. I can make my work tidy. I can talk with others about how I want to construct my product. I can make simple plans before making objects, e.g. drawings, arranging pieces of construction before building. I can measure materials to use in a model or structure. I can join material in different ways. I can use joining, folding or rolling to make things stronger. I can make sensible choices as to which materials and tools to use for my constructions.

				<ul style="list-style-type: none">• I can develop my own ideas from initial starting points.• I can incorporate some type of movement into my model.• I can consider how to improve my construction <p><u>Super Salads (cooking and nutrition)</u></p> <ul style="list-style-type: none">• I can cut food safely.• I can describe the texture of foods.• I can wash my hands and make sure that surfaces are clean.• I can think of interesting ways of decorating food I have made.• I can describe the properties of the ingredients I am using.• I can explain what it means to be hygienic.• I can be hygienic in the kitchen. <p><u>3. Can We Put On a Puppet Show? (textiles)</u></p> <ul style="list-style-type: none">• I can describe how different textiles feel.• I can make a product from textiles by gluing.• I can measure textiles.• I can join textiles together to make something.• I can cut textiles.• I can explain why I chose a certain textile
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SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT LOWER KEY STAGE TWO.				
	DESIGN	MAKE	EVALUATE	TECHNICAL SKILLS
NATIONAL CURRICULUM	<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 	<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 	<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 	<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 • understand and use electrical systems in their products • apply their understanding of computing to program, monitor and control their products. • 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
YEAR THREE	<p><u>1. How Can a Poster be Interactive? (mechanisms)</u> <u>2. Sandwich Snacks (cooking and nutrition)</u> <u>3. How Do People Keep Their Money Safe? (textiles)</u></p> <ul style="list-style-type: none"> • I can show that my design meets a range of requirements. 	<p><u>1. How Can a Poster be Interactive? (mechanisms)</u> <u>2. Sandwich Snacks (cooking and nutrition)</u> <u>3. How Do People Keep Their Money Safe? (textiles)</u></p> <ul style="list-style-type: none"> • I can use equipment and tools accurately. 	<p><u>1. How Can a Poster be Interactive? (mechanisms)</u> <u>2. Sandwich Snacks (cooking and nutrition)</u> <u>3. How Do People Keep Their Money Safe? (textiles)</u></p> <ul style="list-style-type: none"> • I can explain what I have changed which made my design even better 	<p><u>1. How Can a Poster be Interactive? (mechanisms)</u></p> <ul style="list-style-type: none"> • I can select the most appropriate tools and techniques to use for a given task. • I can make a product which uses mechanical components. • I can use a number of components. • I can use the most appropriate materials.

	<ul style="list-style-type: none"> • I can put together a step-by-step plan which shows the order and also what equipment and tools I need. • I can describe my design using an accurately labelled sketch and words. • I can make a plan that is realistic. 			<ul style="list-style-type: none"> • I can work accurately to make cuts and holes. • I can join materials. <p><u>2. Sandwich Snacks (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can choose the right ingredients for a product. • I can use equipment safely. • I can make sure that my product looks attractive. • I can describe how my combined ingredients come together. • I can be hygienic and safe. • I can present my product in an interesting way <p><u>3. How Do People Keep Their Money Safe? (textiles)</u></p> <ul style="list-style-type: none"> • I can join textiles of different types in different ways. • I can choose textiles both for their appearance and also their qualities. • I can think of what the user would want when choosing textiles. • I have thought about how to make my product strong. • I can devise a template. • I can explain how to join things in a different way. • I can work accurately to make cuts and holes. • I can use finishing techniques.
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SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT LOWER KEY STAGE TWO.

	DESIGN	MAKE	EVALUATE	TECHNICAL SKILLS
NATIONAL CURRICULUM	<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 	<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 	<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 	<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 • understand and use electrical systems in their products • apply their understanding of computing to program, monitor and control their products. • 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
YEAR FOUR	<p><u>1. How Can We Help People in Need? (materials)</u> <u>2. Light It Up (materials and electrical components)</u> <u>3. Riverside Picnics (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can come up with at least one idea about how to create my product. 	<p><u>1. How Can We Help People in Need? (materials)</u> <u>2. Light It Up (materials and electrical components)</u> <u>3. Riverside Picnics (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can tell if my finished product is going to be good quality. 	<p><u>1. How Can We Help People in Need? (materials)</u> <u>2. Light It Up (materials and electrical components)</u> <u>3. Riverside Picnics (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I have thought of how I will check if my design is successful. 	<p><u>1. How Can We Help People in Need? (materials)</u></p> <ul style="list-style-type: none"> • I can measure carefully so as to make sure I have not made mistakes. • I have attempted to make my product strong. • I can use a range of advanced techniques to shape.

	<ul style="list-style-type: none"> • I can take account of the ideas of others when designing. • I can produce a plan and explain it to others. • I can suggest some improvements and say what was good and not so good about my original design. 	<ul style="list-style-type: none"> • I am conscious of the need to produce something that will be liked by others. • I can show a good level of expertise when using a range of tools and equipment. • I can work at my product even though my original idea might not have worked. 	<ul style="list-style-type: none"> • I can begin to explain how I can improve my original design. • I can evaluate my product, thinking of both appearance and the way it works. • I can take time to consider how I could have made my idea better. 	<ul style="list-style-type: none"> • I use finishing techniques, showing an awareness of audience. <p><u>2. Light It Up (materials and electrical components)</u></p> <ul style="list-style-type: none"> • I can measure carefully so as to make sure I have not made mistakes. • I have attempted to make my product strong. • I can use a range of advanced techniques to shape. • I use finishing techniques, showing an awareness of audience. • I can add things to my circuits. • I have altered my product after checking it. • I am confident about trying out new and different ideas. • I can incorporate a switch into my product. <p><u>3. Riverside Picnics (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can choose the right ingredients for a product. • I can use equipment safely. • I can make sure that my product looks attractive. • I can describe how my combined ingredients come together. • I can be hygienic and safe. • I can present my product in an interesting way
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SKILLS PROGRESSION IN DESIGN TECHNOLOGY AT UPPER KEY STAGE TWO.				
	DESIGN	MAKE	EVALUATE	TECHNICAL SKILLS
NATIONAL CURRICULUM	<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 	<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 	<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 	<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 • understand and use electrical systems in their products • apply their understanding of computing to program, monitor and control their products. • 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
YEAR FIVE	<p><u>1. Birdhouse Builders (materials)</u> <u>2. Food from other Cultures (cooking and nutrition)</u> <u>3. Talking Textiles (textiles and materials)</u></p> <ul style="list-style-type: none"> • I can come up with a range of ideas after I have collected information. 	<p><u>1. Birdhouse Builders (materials)</u> <u>2. Food from other Cultures (cooking and nutrition)</u> <u>3. Talking Textiles (textiles and materials)</u></p> <ul style="list-style-type: none"> • I can explain why my finished product is going to be of good quality. 	<p><u>1. Birdhouse Builders (materials)</u> <u>2. Food from other Cultures (cooking and nutrition)</u> <u>3. Talking Textiles (textiles and materials)</u></p> <ul style="list-style-type: none"> • I keep checking that my design is the best it can be. • I can check whether anything could be improved. 	<p><u>1. Birdhouse Builders (materials)</u></p> <ul style="list-style-type: none"> • I can measure accurately to ensure that everything is precise. • I can ensure that my product is strong and fit for purpose. <p><u>2. Food from other Cultures (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can describe what I need to do to be both hygienically and safe.

	<ul style="list-style-type: none"> • I can take a user's view into account when designing. • I can produce a detailed step-by-step plan. • I can suggest some alternative plans and say what the good points and drawbacks are about each. 	<ul style="list-style-type: none"> • I can explain how my product will appeal to the audience. • I can use a range of tools and equipment expertly. • I can persevere through different stages of the making process. 	<ul style="list-style-type: none"> • I can evaluate appearance and function against the original criteria. 	<ul style="list-style-type: none"> • I can present my product well. • I can explain how my product should be stored and why. <p><u>3. Talking Textiles (textiles and materials)</u></p> <ul style="list-style-type: none"> • I can think what the user would want when choosing textiles. • I can make my product attractive and strong. • I can make up a prototype first. • I can use a range of joining techniques. • I can think about how my product could be sold. • I can consider what would improve my product even more. • I can justify why the chosen material was best for the task. • I can justify design in relation to the audience.
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NATIONAL CURRICULUM	<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 	<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 	<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 	<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 • understand and use electrical systems in their products • apply their understanding of computing to program, monitor and control their products. • 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
YEAR SIX	<p><u>1. Programming Propaganda (electrical components)</u> <u>2. Spanish Tapas (cooking and nutrition)</u> <u>3. Terrific Toys (mechanical components and materials)</u></p> <ul style="list-style-type: none"> • I can use a range of information to inform my design. 	<p><u>1. Programming Propaganda (electrical components)</u> <u>2. Spanish Tapas (cooking and nutrition)</u> <u>3. Terrific Toys (mechanical components and materials)</u></p> <ul style="list-style-type: none"> • I can use tools and materials precisely. 	<p><u>1. Programming Propaganda (electrical components)</u> <u>2. Spanish Tapas (cooking and nutrition)</u> <u>3. Terrific Toys (mechanical components and materials)</u></p> <ul style="list-style-type: none"> • I can test and evaluate my final product. 	<p><u>1. Programming Propaganda (electrical components)</u></p> <ul style="list-style-type: none"> • I can incorporate a switch into my product. • I can refine my product after testing it. • I can incorporate hydraulics and pneumatics. • I can use different kinds of circuit in my product.

	<ul style="list-style-type: none"> • I can use market research to inform my plans. • I can work within constraints. • I can follow a plan and refine it if necessary. • I can justify my plan to someone else. • I can consider culture and society in my design. 	<ul style="list-style-type: none"> • I can change the way I am working if needed 	<ul style="list-style-type: none"> • I can check if my product is fit for purpose. • I can say how I would improve my product. • I can think about how different resources would have improved my product. • I can find the information I would need to make my product better. • I can ensure that my product meets all design criteria and if not, explain why. • I can consider how my product will be used when selecting materials. 	<ul style="list-style-type: none"> • I can think of ways in which a circuit would improve my product. <p><u>2. Spanish Tapas (cooking and nutrition)</u></p> <ul style="list-style-type: none"> • I can describe what I need to do to be both hygienically and safe. • I can present my product well. • I can explain how my product should be stored and why. <p><u>3. Terrific Toys (mechanical components and materials)</u></p> <ul style="list-style-type: none"> • I can refine my product after testing it. • I can measure accurately to ensure that everything is precise. • I can ensure that my product is strong and fit for purpose. • I can justify why I have chosen the selected materials. • I have ensured that my work is precise and accurate. • I can hide joins so as to improve the look of my product.
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KNOWLEDGE PROGRESSION IN DESIGN TECHNOLOGY AT LOWER KEY STAGE TWO.

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<p>YEAR FOUR</p>	<p><u>How Can We Help People in Need? (materials)</u></p>

- Know what a shell structure is.
- Know how shell structures can be made including the materials they are made from, how they are stiffened and strengthened and how they are made appealing to certain users.
- Know how to construct nets in a range of different shapes, including techniques like scoring and cutting.
- Know how to design based on an audience.
- Know how computer-aided design (CAD) can be used effectively, and when it should not be used.
- Know how to use CAD to improve our work.

Light It Up (materials and electrical components)

- Know how battery-powered products work, including examples with a range of different switches.
- Know how reading lights are made fit for purpose, including their intended audience.
- Know how lights and lamps have changed and developed over time.
- Know how to make manually controlled, simple series circuits with batteries and different types of switches, bulbs and buzzers and to apply this learning to include a circuit within a product.
- Know how to make sure that electrical products are safe for use.

Riverside Picnics (cooking and nutrition)

- Know the names of the different food groups and give examples of foods in each group.
- Know and understand the basic principles of a healthy and varied diet.
- Know how to plan a meal that forms part of a healthy and varied diet, incorporating the different food groups.

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<p>YEAR FIVE</p>	<p><u>Birdhouse Builders (materials)</u></p>

- Know what a frame structure is.
- Know how frame structures, both permanent and portable, are used and when we might see them in everyday life.
- Know how frame structures can be strengthened, stiffened and reinforced.
- Know about key events and individuals related to their study of frame structure, e.g. Stephen Sauvestre (Eiffel Tower), Thomas Farnolls Pritchard (Iron Bridge).
- Know how to use triangulation to reinforce square frameworks.
- Know how to safely and accurately use junior hacksaws, bench hooks, square section wood, card triangles and hand drills to construct wooden frames.
- Know how to identify potential problems by creating a prototype.

Food from Other Cultures (cooking and nutrition)

- Know the names of some traditional Islamic dishes and be able to describe their taste and appearance.
- Know and understand that all foods have nutritional values.
- Know about nutritional value and why it is important to know before eating a food.
- Know the names of the essential nutrients and why we need them in our bodies.
- Know the name of a famous chef in this area and be able to relay some key facts about her.
- Know the names of the ingredients used to create bread and those that can be added to enhance flavour.

Talking Textiles (textiles and materials)

- Know how fabric shapes can be combined.
- Know how designers have impacted fabrics used today and different products.
- Know whether products are functional or decorative.
- Know about a range of cushion products including what their purpose is and how they have been constructed.
- Know how to use iron-transfer paper.
- Know about a range of different stitching techniques.

KNOWLEDGE PROGRESSION IN DESIGN TECHNOLOGY AT UPPER KEY STAGE TWO.

<p>NATIONAL CURRICULUM</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 • 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 • 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 • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products • understand and use electrical systems in their products • apply their understanding of computing to program, monitor and control their products. • 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
<p>YEAR SIX</p>	<p><u>Programming Propaganda (electrical components)</u></p> <ul style="list-style-type: none"> • Know the names of some products that operate through changes in the environment. • Be able to talk about the advantages of computer control programs to operate products. • Know some facts about a key individual within this area of DT. • Know how to create more complex circuits including series circuits where two output devices are controlled by one switch and parallel circuits.

- Know how to use a computer to control their circuit.

Spanish Tapas (cooking and nutrition)

- Know the names of some traditional Spanish dishes and what they look like.
- Know and understand that all foods have nutritional values.
- Know about nutritional value and why it is important to know before eating a food.
- Know the names of the essential nutrients and why we need them in our bodies.
- Know about seasonality.
- Know about how key chefs have contributed to Spanish cuisine.
- Know some key facts about a Spanish chef.
- Know how to enhance the flavour of a dish with herbs and spices, etc. and know the names of some of these ingredients.
- Know how to cook safely using a range of kitchen utensils and hot appliances.

Terrific Toys (mechanical components and materials)

- Know what different types of movement look like: rotary, oscillating and reciprocating.
- Know the different components of a moving mechanism: the cam and the follower.
- Know how to change the movement of a follower.
- Know how to use market research to design a product.
- Know how to accurately cut, shape and join wood

