

DT overview						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Marvellous Me Knowledge	Toys Knowledge Mechanisms A toy with wheels and axles	Jack and the Beanstalk Knowledge	The Very Hungry Caterpillar Knowledge Food Healthy fruit salad for the Hungry Caterpillar <ul style="list-style-type: none"> • Talk about what he/she eats at home and begin to discuss what healthy foods are. • Say where some food comes from and give examples of food that is grown. 	The Three Little Pigs Knowledge Structures A house for the three little pigs	The Lighthouse Keepers Lunch Knowledge
	Skills	Skills <ul style="list-style-type: none"> • Use a range of simple tools to cut, join and combine materials and components safely. • Ask simple questions about existing products and those that he/she has made. • Create simple designs for a product. • Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing. • Use wheels and axles in a product.. • Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products 	Skills	Skills <ul style="list-style-type: none"> • Create simple designs for a product. • Use pictures and words to describe what he/she wants to do. • Use simple tools with help to prepare food safely. • Ask simple questions about existing products and those he/she has made 	Skills <ul style="list-style-type: none"> • Create simple designs for a product. • Use pictures and words to describe what he/she wants to do. • Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing. • Ask simple questions about existing products and those he/she has made. • Build structures, exploring how they can be made stronger, stiffer and more stable. 	Skills

Year 2	Stranded Knowledge Structures Making a toy boat	Heroes Knowledge Food A healthy snack fit for a hero. <ul style="list-style-type: none"> • Understand the need for a variety of food in a diet. • Understand that food has to be farmed, grown or caught. 	Great Fire of London Knowledge	Falmouth Knowledge	Mining Knowledge Mechanisms Making a moving picture	The Rainforest Knowledge
	<p>Skills</p> <ul style="list-style-type: none"> • Design purposeful, functional, appealing products for himself/herself and other users based on design criteria. • Generate, develop, model and communicate his/her ideas through talking, drawing, templates mock-ups and, where possible information and communication technology. • Choose appropriate tools, equipment, techniques and materials from a wide range. • Safely measure, mark out, cut and shape materials and components using a range of tools. 	<p>Skills</p> <ul style="list-style-type: none"> • Use a wider range of cookery techniques to prepare food safely. • Design purposeful, functional, appealing products for himself/herself and other users based on design criteria. • Generate, develop, model and communicate his/her ideas through talking, drawing, templates mock-ups and, where possible information and communication technology. • Choose appropriate tools, equipment, techniques and materials from a wide range. • Evaluate and assess existing products and those that he/she has made using a design criterion. 	<p>Skills</p>	<p>Skills</p>	<p>Skills</p> <ul style="list-style-type: none"> • Design purposeful, functional, appealing products for himself/herself and other users based on design criteria. • Generate, develop, model and communicate his/her ideas through talking, drawing, templates mock-ups and, where possible information and communication technology. • Choose appropriate tools, equipment, techniques and materials from a wide range. • Safely measure, mark out, cut and shape materials and components using a range of tools. • Evaluate and assess existing products and those that he/she has made using a design criterion. • Explore and use mechanisms e.g levers, sliders wheels and axles, in his/her products. 	<p>Skills</p>

<p>Year 3</p>	<p>Africa Knowledge</p> <p>Mechanisms Making a moving African animal</p> <ul style="list-style-type: none"> Understand how mechanical systems such as levers and linkages or pneumatic systems create movement. 	<p>The Victorians Knowledge</p> <p>Textiles Victorian cross stitch Christmas cards</p>	<p>Extreme weather</p>	<p>Stone age</p>	<p>Coasts Knowledge</p>	<p>Cornwall Knowledge</p> <p>Food Making scones</p> <ul style="list-style-type: none"> Talk about the different food groups and name food from each group. Understand that food has to be grown, farmed or caught in Europe and the wider world.
	<p>Skills</p> <ul style="list-style-type: none"> Use knowledge of existing products to design his/her own functional product. Create designs using annotated sketches, cross-sectional diagrams and simple computer programmes. Safely measure, mark out, cut, assemble and join with some accuracy. Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages using them. Investigate and analyse existing products and those he/she has made, considering a wide range of factors. 	<p>Skills</p> <ul style="list-style-type: none"> Use knowledge of existing products to design his/her own functional product. Create designs using annotated sketches, cross-sectional diagrams and simple computer programmes. Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages using them. Investigate and analyse existing products and those he/she has made, considering a wide range of factors. Safely measure, mark out, cut, assemble and join with some accuracy. Strengthen frames using diagonal struts. 	<p>Skills</p>	<p>Skills</p>	<p>Skills</p>	<p>Skills</p> <ul style="list-style-type: none"> Use a wider variety of ingredients and techniques to prepare and combine ingredients safely. Use knowledge of existing products to design his/her own functional product. Create designs using annotated sketches, cross-sectional diagrams and simple computer programmes. Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages using them. Investigate and analyse existing products and those he/she has made, considering a wide range of factors.

Year 4	Tudors Knowledge	Europe Knowledge Food Cooking around Europe <ul style="list-style-type: none"> • Understand what makes a healthy and balanced diet and that different foods and drinks provide different substances the body needs to be healthy and active. • Understand seasonality and the advantages of eating seasonal and locally produced food. 	Evacuees Knowledge	School grounds Knowledge	Romans Knowledge Structures Make a watch out tower <ul style="list-style-type: none"> • Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience. • Use his/her knowledge of techniques and the functional and aesthetics qualities of a wide range of materials to plan how to use them. 	Dynamic Earth Knowledge Electrical systems A model volcano with a buzzer to create an earthquake effect or a red bulb light up volcano to represent lava <ul style="list-style-type: none"> • Use knowledge of existing products to design a functional and appealing product for a particular. • Use his/her knowledge of techniques and the functional and aesthetics qualities of a wide range of materials to plan how to use them.
	Skills	Skills <ul style="list-style-type: none"> • Read and follow recipes which involve several processes, skills and techniques. • Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience 	Skills	Skills	Skills <ul style="list-style-type: none"> • Create designs using exploded diagrams. • Use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. cutting internal shapes, slots in framework. • Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user. • Apply techniques he/she has learnt to strengthen structures and explore his/her own ideas. 	Skills <ul style="list-style-type: none"> • Understand and use electrical systems in products. • Create designs using exploded diagrams. • Use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. cutting internal shapes, slots in framework. • Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user.

<p>Year 5</p>	<p>Vikings Knowledge</p>	<p>Life in a freezer Knowledge</p> <p>Textiles Design and make a hat or gloves</p>	<p>Greeks Knowledge</p> <p>Food Making a Greek themed dessert/savoury dish</p> <ul style="list-style-type: none"> • Understand the main food groups and the different nutrients that are important for health. • Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable/tasty to eat. • 	<p>London Knowledge</p>	<p>Theme parks around the world Knowledge</p>	<p>May the force be with you Knowledge</p> <p>Mechanisms/Electrical systems Design and make an automaton</p> <ul style="list-style-type: none"> • Understand how to use more complex mechanical and electrical systems.
	<p>Skills</p>	<p>Skills</p> <ul style="list-style-type: none"> • Use his/her research into existing products and his/her market research to inform the design of his/her own innovative product. • Create prototypes to show his/her ideas. • Make careful and precise measurements so that joins, hole and opening are in exactly the right place. • Produce step by step plans to guide his/her making, demonstrating that he/she can apply his/her knowledge of different materials, tools and techniques. <ul style="list-style-type: none"> • Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work. 	<p>Skills</p> <ul style="list-style-type: none"> • Use his/her research into existing products and his/her market research to inform the design of his/her own innovative product. • Select appropriate ingredients and use a wide range of techniques to combine them. • Produce step by step plans to guide his/her making, demonstrating that he/she can apply his/her knowledge of different materials, tools and techniques. • Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work. 	<p>Skills</p>	<p>Skills</p>	<p>Skills</p> <ul style="list-style-type: none"> • Use his/her research into existing products and his/her market research to inform the design of his/her own innovative product. • Build more complex 3D structures and apply his/her knowledge of strengthening techniques to make them stronger or more stable. • Use more complex mechanical and electrical systems. • Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work.

Year 6	<p>Mapping it out Knowledge</p> <p>Food Design and make a series of healthy meals from around the world.</p> <ul style="list-style-type: none"> Use information on food labels to inform choices. 	<p>Egyptians Knowledge</p>	<p>WW2 Knowledge</p>	<p>Rainforest survival Knowledge</p> <p>Textiles Design and make an innovative item of clothing to help someone survive in a rainforest</p> <ul style="list-style-type: none"> Use research he/she has done into famous designers and inventors to inform the design of his/her own innovative products. 	<p>Iron Age Knowledge</p>	<p>Moving on – natural disasters Knowledge</p> <p>Electrical systems</p> <ul style="list-style-type: none"> Apply his/her knowledge understanding of computing to program, monitor and control his/her product.
	<p>Skills</p> <ul style="list-style-type: none"> Research, plan and prepare and cook a savoury dish applying his/her knowledge of ingredients and his/her technical skill. Confidently plan a series of healthy meals based on the principles of a healthy and varied diet. Apply his/her knowledge accurate skills to problem solve during the making process. 	<p>Skills</p>	<p>Skills</p>	<p>Skills</p> <ul style="list-style-type: none"> Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities. Apply his/her knowledge accurate skills to problem solve during the making process. Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made. Use a wide range of methods to strengthen, stiffen and reinforce complex structures an can use them accurately and appropriately. 	<p>Skills</p> <ul style="list-style-type: none"> Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities. Apply his/her knowledge accurate skills to problem solve during the making process. <ul style="list-style-type: none"> Apply his/her understanding of computing to program, monitor and control his/her product 	