

DT Medium Term Plan Spring Term		
NC Objectives	Key Knowledge	Vocabulary
<p>EYFS</p> <ul style="list-style-type: none"> To provide children with a range of materials to construct with and encourage them to think about and discuss what they want to make. To encourage children to discuss problems and how they might be solved as they arise. Reflect with children on how they have achieved their aims. Teach children different techniques for joining materials, such as how to use adhesive tape and different sorts of glue. 	<p>To know how to manipulate materials to achieve a planned effect.</p> <p>To know which resources are needed to achieve a planned effect.</p> <p>To know how to effectively join materials together.</p> <p>To know how to use simple techniques and tools such as scissors correctly.</p>	<p>model, construction, material, tool, plan, glue, scissors.</p>
<p>Year 1 Spring 2 – Design and make a puppet (finger puppets and glove puppets)</p> <ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based upon design criteria. Generate, develop, model and communicate their ideas. Select from and use a range of tools and equipment. Select from and use a wide range of materials and components. Explore and evaluate a range of existing products. 	<p>To understand what a product is and who they are designing it for.</p> <p>To know what a variety of puppets are made from.</p> <p>To know the purpose of a puppet.</p> <p>To know how to evaluate existing puppets; how they are made.</p> <p>To understand how we share our ideas in a plan.</p> <p>To know the properties of a material we will use.</p>	<p>Product, toy, design, plan, tools, materials, draw, puppet, properties – flexible, soft, bendy, smooth, stiff, hard...</p> <p>Purpose, ideas, glue, tape, scissors, staples, evaluate, edit, change</p>

<ul style="list-style-type: none"> Evaluate their ideas and products against design criteria 	<p>To know the best medium for joining materials (glue, tape, staples.) our puppet</p> <p>To know how to change / edit their ideas during the making process.</p> <p>To know how to evaluate their product, what went well, what their challenges were and what they would do better next time.</p>	
<p>Year 2</p> <p>Not covered this term</p>		
<p>Year 3</p> <p>Spring 2 – Tropical Fruit Salad</p> <p>Cooking and Nutrition</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. <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 	<p>To know what a balanced diet is.</p> <p>To know there are different food groups.</p> <p>To know which food groups the chosen ingredient belongs to.</p> <p>To know the basic principles of preparing food.</p> <p>To know how to use the correct tools required to prepare a fruit salad.</p> <p>To understand that foods grow in different season.</p> <p>To know how some foods are grown, caught and processed.</p>	<p>Balanced, diet, prepare, dishes, utensils exotic fruits (individually named) food groups, nutrition, healthy, unhealthy, hygiene, seasons, grown, reared, processed. domestic; edible; <i>exotic</i>; exquisite; extracted; non-seeded; nourishing; <i>nutritious</i>; <i>fruit cocktail</i>, vitamins, zest, minerals</p>

<ul style="list-style-type: none"> • generate, develop, model and communicate <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 <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 	<p>To know how to evaluate their fruit salad by tasting it (if they choose) and suggesting how it could be improved (adding different fruits for taste)</p>	
<p>Year 4 Spring 1 (Computing Link only)</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>	<p>LEGO Mindstorms (Computing Link) Understand how to use the IPAD App to design an obstacle program</p> <p>To know how to assemble pulleys, levers and gears to allow a robot to move freely.</p> <p>To understand how to troubleshoot issues during robot assembly, identify the wrong brick or use a substitute brick to complete the robot.</p> <p>To understand how to link ports with electrical wires to turn on a motor.</p> <p>To know how to input a command</p> <p>To understand that I need to put the commands in order and talk about this as an algorithm.</p> <p>To know how to test my program and debug.</p>	<p>Pulleys, gears, motors, ports, wires, command, program algorithm, debug, troubleshoot, substitute</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 <p>Technical knowledge</p> <ul style="list-style-type: none"> apply their understanding of how to strengthen, stiffen and reinforce more complex structures <p>COMPUTING LINK</p> <ul style="list-style-type: none"> Understand and use electrical systems in their products, (for example incorporating switches, buzzers, bulbs and motors) Apply their understanding of Computing to program, monitor and control their products. 	<p>Evaluate my robot and suggest ideas about how to improve it for next time.</p> <p>Outcome - Follow instructions to make a LEGO Mindstorms robot and create a simple programme to move the robot, sound the buzzer and use the sensor to avoid obstacles)</p>	
<p>Year 5 Spring 2</p> <ul style="list-style-type: none"> Design: generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Make: select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 	<p>Know the key features of a Viking longship and include these in a design.</p> <p>Know how to design using an exploded diagram.</p> <p>Know how to securely join pieces of clay using slip or scoring.</p> <p>Know how to use ribs and scrapers to shape clay.</p>	<p>longship, exploded diagram, slip, scoring, ribs, shapers</p>

<p>Year 6</p> <ul style="list-style-type: none"> • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • apply their understanding of how to strengthen, stiffen and reinforce more complex structures 	<p><u>Spring 2</u></p> <p><u>Mod Roc Islands</u></p> <p>Know using wire mesh creates a base for a model.</p> <p>Know that modrock is applied as a liquid and hardens over time.</p> <p>Know how to choose materials (paper/wire/cardboard) for the base of their island based on their properties.</p> <p>Know how to give constructive criticism about another person's work.</p> <p>Know how to layer materials to create shape and texture.</p> <p>Know how to read contour lines showing altitude on a map.</p>	<p>mesh hardens properties aesthetics constructive criticism layer shape texture contour altitude</p>
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