

Fritwell Primary School Design and Technology LTP Year B



Coverage of techniques and topics

Threshold concepts: Master practical skills, design, make, evaluate and improve, take inspiration from design throughout history

	Autumn term	Spring term	Summer term
EYFS	All Around Me/ Robots Food: biscuits, sandwiches for picnic	Wonderful World/ Transport Textiles: stitching	Mini-beasts/ Heroes Construction: junk modelling
Y1 Sticklebacks	Fire and Ice Design and make your own bread rolls use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from.	No Place Like Home Create a Binca collage of your house (stitching) design purposeful, functional, appealing products for themselves and other users based on design criteria 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	Growing and learning Build a Fairy House 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 select from and use a range of tools and equipment to perform practical tasks [for

		<p>ingredients, according to their characteristics</p> <p>evaluate their ideas and products against design criteria Technical knowledge</p>	<p>example, cutting, shaping, joining and finishing]</p> <p>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>build structures, exploring how they can be made stronger, stiffer and more stable</p>
<p>Y2/3 Seahorses</p>	<p>The Stone Age (rock and roll) How to Make Stone Age Life Easier? (Lifting boulders – levers/pulleys)</p> <p>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> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p>	<p>Australia Design a bost for the reef</p> <p>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> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting,</p>	<p>Fab Fitness Recipes to maintain a healthy lifestyle</p> <p>understand and apply the principles of a healthy and varied diet</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</p>

	<p>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>investigate and analyse a range of existing products</p>	<p>shaping, joining and finishing], accurately</p> <p>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>investigate and analyse a range of existing products</p>	
Y4/5 Stingrays	<p>Water water everywhere Design a Well (winding mechanisms)</p> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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>	<p>Romans Your very own 'Roman' pizza</p> <p>understand and apply the principles of a healthy and varied diet</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</p>	<p>Disasters Safety blanket for survival kit</p> <p>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> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>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> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>

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Y5/6 Sharks	<p>Evolve Design a Christmas cushion (back stitching)</p> <p>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> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>select from and use a wider range of materials and components, including construction materials, textiles and</p>	<p>Alpha and Omega Creation Greek dishes</p> <p>understand and apply the principles of a healthy and varied diet</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</p>	<p>Mountains to climb</p> <p>Create battery-powered night lights</p> <p>apply their understanding of computing to program, monitor and control their products</p> <p>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>investigate and analyse a range of existing products</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>

	<p>ingredients, according to their functional properties and aesthetic qualities</p> <p>investigate and analyse a range of existing products</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>		
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