

Highfield Primary School



Design & Technology

Topics

Autumn – Little People, Big Dreams

Spring – Express Yourself!

Summer – Vive La France

2022-23							
Autumn term			Spring term			Summer term	
1		2	1	2	1	2	
Nursery	<ul style="list-style-type: none">• Construction• Christmas decorations• To explore materials with different properties• Scissor skills		<ul style="list-style-type: none">• Construction• Occupations• Shrove Tuesday (pancakes)• Scissor skills		<ul style="list-style-type: none">• Construction• Scissor skills• Healthy foods		
	<ul style="list-style-type: none">• Cooking and Hygiene• Making instruments with junk modelling		<ul style="list-style-type: none">• Healthy Living - Healthy Meal Plates• Cooking (Jam Sandwiches, Flapjacks, Pancakes and Easter Bunny cakes/chick nest cakes)• Making The Bog Baby - bonding and sticking in various ways		<ul style="list-style-type: none">• Creating/making the farm of 'What the ladybird heard' so children can retell the story/roleplay.• Ladybird biscuits		
Year 1	<u>Mechanisms (Levers and Sliders)</u> Plan, make and evaluate a product which moves – e.g. Moving puppet/picture animal using sliders and levers.				<u>Textiles</u> Use materials to design appropriate clothing for a particular purpose. For example, design and make an umbrella or a raincoat for a character. Retrieval/review: Differences between materials (EYFS)	<u>Cooking & Nutrition</u> Use the basic principles of a healthy and varied diet to prepare dishes. Begin to understand where food comes from. Plan and prepare a healthy, savoury playtime snack .	

Year 2		<p><u>Textiles (Binka Bookmarks)</u> Evaluate an existing product. Design and make a Binka bookmark.</p> <p>Retrieval/review: Choosing of appropriate materials for the desired product, functional, appealing (Year 1)</p>	<p><u>Cooking & Nutrition</u> Use the basic principles of a healthy and varied diet to prepare dishes. Describe ingredients. Understand where food comes from. Make a salad.</p> <p>Retrieval/review: Where food comes from, hygiene, cut, peel, grate (Year 1)</p>		<p><u>Structures (Freestanding Structures)</u> Design new play equipment for our school playground (e.g. swings and slides) ensuring structures are made strong and stable.</p> <p>Retrieval/review: Joining different materials and making 'small worlds' (EYFS)</p>	
Year 3		<p><u>Textiles (Puppets)</u> Design using sketches & diagrams, make & evaluate a puppet.</p> <p>Retrieval/review: Running stitch, cut, shape, Ann Lowe, Thomas Stevens (Year 2)</p>		<p><u>Cooking & Nutrition</u> Design & make nutritious meals using a heat source (e.g. soup).</p> <p>Retrieval/review: What is a healthy meal? Cut, hygiene, peel, grate, Yotam Ottolenghi (Year 2)</p>		<p><u>Structures (Shell Structure)</u> Design and make packaging for an item to ensure it can be transported safely (e.g. a box for a souvenir from the British Museum). Use stiffening and strengthening techniques to make your packaging durable.</p> <p>Retrieval/review: How freestanding structures are made strong and stable, reinforce, strengthen, assemble, join, Isamu Noguchi (Year 2)</p>

Year 4		<p><u>Cooking & Nutrition</u> Design & make nutritious meals being safe and hygienic. Meals must be prepared using a heat source (e.g. paninis/hot sandwiches).</p> <p>Retrieval/review: How to safely use a heat source when cooking, peel, chop, slice, grate, mix, spread (Year 3)</p>		<p><u>Mechanisms (Levers and Linkages)</u> Design & make a moving picture which uses levers and linkages to help tell a story (e.g. The Iron Man).</p> <p>Retrieval/review: Sliders and levers, join, combine (Year 1)</p>	<p><u>Electrical Systems</u> Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Make a wire loop (buzzer) game using a circuit.</p>	
Year 5		<p><u>Structures (Frame Structures)</u> Architecture/civic planning in harmony with nature. Evaluate impact of design & technology on daily life & wider world. Design and make a model of an eco-friendly building using a frame structure.</p> <p>Retrieval/review: Strengthening and stiffening shell structures, corrugate, laminate, rib, reinforce, assemble (Year 3)</p>		<p><u>Cooking & Nutrition</u> Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. £2 challenge – design and make a healthy family meal for £2.</p> <p>Retrieval/review: Food hygiene (Year 4) What is nutrition? Hygiene, peel, chop, slice, grate, mix, spread (Year 3)</p>	<p><u>Mechanisms (Cams)</u> Use a cams mechanism to create a moving toy that is aimed at KS1 children.</p> <p>Retrieval/review: Levers and linkages, assemble, join, combine, input, process, output, pivot, linear, reciprocating, rotary, oscillating, Mary Anderson (Year 4)</p>	

Year 6		<p><u>3D Printing (CAD)</u> Program, make & evaluate a key ring using the 3D printer. Use market research to form a design brief.</p>		<p><u>Cooking & Nutrition (Bread Making)</u> Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Cooking & nutrition – baking bread – yeast/micro-organisms.</p> <p>Retrieval/review: Budget and nutritional considerations when cooking, hygiene, peel, chop, slice, grate, mix, spread, knead, bake, Miguel Barclay (Year 5)</p>		<p><u>Prop Design</u> Prop design: Use mechanical and electrical systems in a product. Test and evaluate own products.</p> <p>Retrieval/review: Circuits, input, process, output, Ann Makosinski (Year 4)</p>
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