

Designing

- gather information about the needs and wants of particular individuals and groups
- develop their own design criteria and use them to inform their design
- make design decisions that take account of the availability of resources
- describe the purpose of their product and how their product works

Making

- mark out, cut and shape materials and components
- assemble, join and combine materials and components
- apply a range of finishing techniques
- make design decisions that take account of the availability of resources
- Order the main stages of making

Evaluating

- refer to their design criteria as they design and make
- use their design criteria to evaluate their completed product

Cooking and Nutrition

- that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world
- that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eatwell plate

Term:	Topic:	Knowledge	Skills:	Key Questions
Autumn	Food Making Bread	<p>Know how to use appropriate equipment and utensils to prepare and combine food</p> <p>Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.</p> <p>Know and use relevant technical and sensory vocabulary appropriately.</p>	<p>Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p> <p>Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches,</p> <p>Order the main stages of making.</p> <p>Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products.</p> <p>Explain their choice of materials according to functional properties and aesthetic qualities.</p> <p>Select from and use materials and components, including ingredients,</p> <p>Investigate and evaluate a range of products including the ingredients</p>	<p>Can the children investigate and analyse products according to their characteristics?</p> <p>Can the children taste different breads and analyse the texture, smell, appearance and flavour?</p> <p>Can the children summarise the findings of the market research?</p> <p>Can the children develop a design criteria?</p> <p>Can the children shape dough into different shapes?</p> <p>Can the children think of original ideas for a product based on a design criteria?</p> <p>Can the children develop designs based on my design criteria and clearly communicate my final design.</p> <p>Can the children select ingredients and kitchen equipment to help me follow a bread making recipe?</p> <p>Can the children knead and bake?</p> <p>Can the children evaluate the product against their design?</p>

			Test and evaluate their own products against design criteria and the intended user and purpose. Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	
	Key Vocabulary	name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, , stitch, seam, seam allowance		
		Cultural Capital: visit tesco bread counter		
Spring	Structures Shell structures (including computer-aided design) Kites	Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project	Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, Order the main stages of making. Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products. Explain their choice of materials according to functional properties and aesthetic qualities. Select from and use materials and components, including ingredients, Investigate and evaluate a range of products including the ingredients Test and evaluate their own products against design criteria and the intended user and purpose. Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	Can the children communicate their existing understanding about kites? Can the children name and explain the function of the different parts of a kite? Can the children investigate kite shapes? Can the children select from and use different materials and components? Can the children develop a design criteria, explaining why each part is important? Can the children develop and communicate their kite design? Can the children accurately measure and cut the shape if the body of the kite and join it to the frame structure? Can the children make a strong and stiff frame structure to support the kite? Can the children test and evaluate their kite based on their design?
	Key Vocabulary	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing		
		Cultural Capital:		
Summer	Mechanical Systems	Understand and use lever and linkage mechanisms.	Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products	Can children recognise products that contain lever and linkage systems?

	Story books	<p>Distinguish between fixed and loose pivots. Know and use technical vocabulary relevant to the project.</p>	<p>that are fit for purpose, aimed at particular individuals or groups. Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, Order the main stages of making. Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products. Explain their choice of materials according to functional properties and aesthetic qualities. Select from and use materials and components, including ingredients, Investigate and evaluate a range of products including the ingredients Test and evaluate their own products against design criteria and the intended user and purpose. Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.</p>	<p>Can children explain why a particular mechanism has been used for a particular purpose? Can children use technical vocabulary to describe lever and linkage systems? Can children cut and shape materials with some precision to make their mechanisms work? Can children join and combine materials and components in a variety of ways? Can children mark out and measure accurately? Are children aware that different fonts and graphic techniques need to be suited to their purpose? Can children experiment to create a range of different fonts and graphic techniques? Can children explain which designs they like best/ least and why? Can children create a design for a particular purpose? Can children choose suitable mechanisms to create moving parts in their storybook? Can children choose appropriate fonts and graphic techniques to use in their design? Can children follow a design to create a storybook? Can children create moving mechanisms that works well? Can children create pages that are neat, accurate and creative? Can children evaluate other people's finished products fairly and constructively? Can children evaluate their own finished product fairly and constructively? Can children explain what they would do differently if they were to make their product again?</p>
	Key Vocabulary	mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating		
		Cultural Capital: Library visit looking at books		