

Design and Technology Subject Content and Key Assessment Criteria

Key Stage 1	As a designer:
Pupils should be taught:	<p>Design:</p> <ul style="list-style-type: none"> • 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 <p>Make:</p> <ul style="list-style-type: none"> • 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 ingredients, according to their characteristics <p>Evaluate:</p> <ul style="list-style-type: none"> • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • build structures, exploring how they can be made stronger, stiffer and more stable • explore and use mechanisms for example, levers, sliders, wheels and axles, in their products. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from.
Key Assessment Criteria	
Year 1	<ul style="list-style-type: none"> • I use my own ideas to make something. • I describe how something works. • I cut food safely. • I make a product which moves. • I make my model stronger. • I explain to someone else how I want to make my product. • I choose appropriate resources and tools. • I make a simple plan before making.
Year 2	<ul style="list-style-type: none"> • I think of an idea and plan what to do next. • I choose tools and materials and explain why I have chosen them. • I join materials and components in different ways.

	<ul style="list-style-type: none"> • I explain what went well with my work. • I explain why I have chosen specific textiles. • I measure materials to use in a model or structure. • I describe the ingredients I am using.
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Key Stage 2	As a designer:
Pupils should be taught:	<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> <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 • understand how key events and individuals in design and technology have helped shape the world <p>Technical knowledge</p> <ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products for example, gears, pulleys, cams, levers and linkages • understand and use electrical systems in their products for example, series circuits incorporating switches, bulbs, buzzers and motors • apply their understanding of computing to program, monitor and control their products.

	<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.
Key Assessment Criteria	
Year 3	<ul style="list-style-type: none"> • I prove that my design meets some set criteria. • I follow a step by step plan, choosing the right equipment and materials. • I design a product and make sure that it looks attractive. • I choose a material for both its suitability and its appearance. • I select the most appropriate tools and techniques for a given task. • I make a product which uses both electrical and mechanical components. • I work accurately to measure, make cuts and make holes. • I describe how food ingredients come together.
Year 4	<ul style="list-style-type: none"> • I use ideas from other people when I am designing. • I produce a plan and explain it. • I evaluate and suggest improvements for my designs. • I evaluate products for both their purpose and appearance. • I explain how I have improved my original design. • I present a product in an interesting way. • I measure accurately. • I persevere and adapt my work when my original ideas do not work. • I know how to be both hygienic and safe when using food.
Year 5	<ul style="list-style-type: none"> • I come up with a range of ideas after collecting information from different sources. • I produce a detailed, step by step plan. • I suggest alternative plans; outlining the positive features and draw backs. • I explain how a product will appeal to a specific audience. • I evaluate appearance and function against original criteria. • I use a range of tools and equipment competently. • I make a prototype before make a final version. • I show that I can be both hygienic and safe in the kitchen.
Year 6	<ul style="list-style-type: none"> • I use market research to inform my plans and ideas. • I follow and refine my plans. • I justify my plans in a convincing way. • I show that I consider culture and society in my plans and designs.

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| | <ul style="list-style-type: none">• I show that I can test and evaluate my products.• I explain how products should be stored and give reasons.• I work within a budget.• I evaluate my product against clear criteria. |
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