

Year 4: DT Medium Term Plan

Autumn	<p><u>Pizza Parlour</u></p> <p>Children design and create recipe for a pizza. Investigate pizza menus and choose selection of different toppings to add to base based on market research. Children will consider the nutritional values of foods and their intended audience when designing.</p>
Spring	<p><u>Emergency Shelters</u></p> <p>Children will create an emergency shelter in response to a natural disaster. They will create a design brief and a set of criteria to work to and test their shelters to see how effective they are.</p>
Summer	<p><u>Building Bridges</u></p> <p>Research on the bridges and shapes within them. Children to make choices around materials and techniques to strengthen and test a bridge. Build a bridge to hold a weight.</p>
Knowledge and Skills	<p><u>When designing and making, pupils should be taught to:</u></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> <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