

Design and Technology – Enterprise Project

Title: Dragons’ Den		Year: All Years Duration: 3 weeks
Teaching Ideas	Subject	National Curriculum Objectives
<p>Each class will run their own enterprise project in which they will research, design and make a product for sale (e.g. at Christmas or Summer Fayre; at school tuck shop).</p> <p>This could be linked to / built into another theme or topic from any point in the year, e.g. sculpture, pointillism or sound and music</p> <p>Each class will be given an initial start up budget (e.g. £20-£30). Each class will have to calculate their costings, e.g. of raw materials.</p> <p>Pupils will have the opportunity to research and evaluate existing products and designers. They will design, create models/prototypes and make a finished product.</p> <p>Pupils will pitch their product to a group of experts in the ‘Dragons’ Den’ in an oral presentation, giving pupils the opportunity to develop their spoken language skills. Experts could include members of staff, headteacher, PTA or Governors, as well as local industry experts.</p> <p>Each school/class can set their own theme for the project, which could link to topical / national events (e.g. sporting events); a school theme/issue (e.g. gardens, playground development); linked to the local community or local industry; or a global issue (e.g. environmental).</p>	<p>Focused Objectives: Design and Technology Spoken language</p> <p>Application: Maths Literacy text types linked to project choice Science Art and design Computing</p>	<p>KS2:</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 • 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 • 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 • 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 programs, monitor and control their products.

