

DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

Year 5

Designing

- Competently research products similar to the one they intend to design and evaluate strengths and weaknesses to be considered when thinking about their own design.
- Research and use ICT where appropriate.
- Design, with a range of initial ideas, after collecting information from investigating existing products.
- Produce a detailed, step-by-step plan.
- Explain how a product will appeal to a specific audience and how it meets the purpose.
- Draw annotated 3D representations of their design on isometric or squared paper from various viewpoints.
- With growing confidence, apply a range of finishing techniques, including those from art and design.
- Start to appreciate how much the product will cost to make.

Making

- Name and use a range of tools and equipment competently.
- Select appropriate materials, tools and techniques (e.g. 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.
- Incorporate mechanical systems (such as pulleys or gears) to enable movement in their product.
- Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor environmental changes and control their products.
- Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment, including ICT.
- Make a prototype before making a final version.
- Carry out finishing techniques to enhance the appearance and function of their product.

DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

Year 5 (continued)

Evaluating

- Evaluate a product against the original design specifications and carry out tests.
- Suggest alternative plans, outlining the positive features and drawbacks.
- Evaluate appearance and function against original criteria.
- Begin to evaluate their product personally and seek evaluation from others.

Technical Knowledge

- Suggest alternative plans outlining the positive features and drawbacks.
- Evaluate appearance and function against original criteria.
- Create a product that incorporates gears.

Food Technology

- Be both hygienic and safe in the kitchen.
- Know how to prepare a meal by collecting the ingredients in the first place.
- Weigh and measure accurately (timings, dry ingredients and liquids).
- Begin to understand that seasons may affect the food available.
- Understand how food sources are processed into ingredients that can be eaten or used in cooking.
- Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.
- Begin to understand that different foods and drinks contain nutrients, water and fibre needed for good health.