

KS2 : When designing and making, pupils should be taught to:

Design 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

1. generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately

2. 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

Evaluate investigate and analyse a range of existing products

3. evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
4. understand how key events and individuals in design and technology have helped shape the world

Technical knowledge apply their understanding of how to strengthen, stiffen and reinforce more complex structures

5. understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages
6. understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors
7. apply their understanding of computing to programme, monitor and control their products.

Current 3/4 Year A	Christmas stockings- textiles (1, 2, 3)	Programming in computing curriculum (7)	Structure/support (wood) for growing beans (1, 2)
Current 3/4 Year B	Pop up mechanisms -jungle story. (1, 2, 3, 5) Moving models- electricity, pneumatics (1, 2, 3, 5, 6)	Programming in computing curriculum (7) Construction -wood and supports chairs (Tudor History) (1, 2, 3, 4) Healthy sandwiches (1, 2, 3)	Construction of nets (maths link) Roman town (1, 2, 3, 4)
Other opportunities	Containers (<i>History</i>)	Electricity and light (<i>Geography & Science</i>)	Storybooks (<i>History/literacy</i>)

