

Design Technology Curriculum Pathway



Secondary School

Textiles: Waistcoats



Plan and design own waistcoat. Use a template and pattern to mark out and cut design. Use running stitches to join fabric. Attach secure fastenings to the waistcoat, as well as decorative objects. Evaluate own product.

Structures: Waterwheels



Investigate waterwheels and how they work. Design own structure and select appropriate materials to make.

Electrical Systems: Steady Hand Game



Understand what form and function are, identify components of a steady hand game, create a solid base and toy, with a functioning electronic circuit.

Year 6

Mechanical Systems: Pop-Up Book



Design and plan an interactive book, producing structures and assembling components for structure/mechanisms, hiding these mechanisms where needed.

Food: What Could Be Healthier?



To understand the farm to fork principle, present information about what constitutes a healthy meal. Design and make a healthy version of a bolognese sauce and design packaging to promote the healthy ingredients.

Digital World: Monitoring Devices



Understand what a device is and what they can be used for. Write a program that monitors temperature and identify errors/debug them. Create Micro:bit casing and use CAD to improve the product.

Year 5

Electrical Systems: Torches



Investigate electrical products, including switches. Design a working torch, selecting and using appropriate materials and electrical circuits.

Mechanical Systems: Making a slingshot car



Design and make a car chassis, reducing air resistance, making and assembling panels which fit onto the body.

Structures: Pavilions



Produce a free-standing frame structure, which is strong, stable and aesthetically pleasing, selecting appropriate materials for the structure and cladding.

Food: Eating Seasonally



Understand that climate affects where food is grown and the term seasonal. Design and make own tart.

Electric Systems: Electric Poster



Understand the impact of information design. Sketch out ideas. Assemble poster with simple circuit and test

Year 4

Structures: Constructing a Castle



Draw and label the features of a castle, use geometry to plan and assemble the complex castle structure. Evaluate.

Mechanisms: Fairground Wheel



Design and label a wheel, considering materials, shape, construction and mechanisms. Build a stable structure, testing and adapting where necessary.

Mechanisms: Making a Moving Monster



Identify terms for levers, linkages and pivots and analyse toys. Create functional linkages. Design monsters suitable for children. Select and assemble materials.

Year 3

Textiles: Making a Puppet



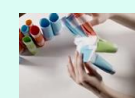
Join fabrics together, design a puppet and use a template, join faces together as one, decorate to design

Food: Fruit and Vegetables



Describe and identify fruits and vegetables, name where they grow, prepare and make a smoothie.

Structures: Baby Bear's Chair



Identify man-made and natural structure, stable and unstable shapes, identify features of stability, make a stable structure

Year 2

Moving Structures: Windmills



Identifying features, appeal, explain design, make a stable structure, make functioning turbines and axles and evaluate.

Year 1

EYFS

Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used. Make use of props and materials when role playing characters

Each unit of work contains these different elements:

- Designing
- Making
- Evaluating
- Technical knowledge