

DT Curriculum Map



Connaught

Junior School

"Caring, Confident, Committed"

Cooking and nutrition: Where food comes from, balanced diet, preparation and cooking skills.
Mechanical systems: Mimic natural movements using mechanisms such as cams, followers, levers and sliders.
Textiles: Fastening, sewing and decorative fabric techniques including cross stitch, blanket stitch and appliqué.
Electrical systems: Functional series circuits, individual circuit components, circuit diagrams and electrical products.
Structures: Material functional and aesthetic properties, strength and stability, stiffen and reinforce structures.

Year 7 and beyond -
The prime aim of Design and Technology is to provide students with the necessary skills and knowledge to solve real life problems and create products to improve everyday life. Such problems rarely have just one possible solution and require students to develop a different set of thinking skills to those in normal academia. Through the study of Design and Technology, students are involved in applying knowledge and principles to enable them to analyse, design, plan, manufacture and evaluate.
The application of these skills is realised in practical products through iterative design.

Textiles: Waistcoats

Using a combination of textiles skills such as attaching fastenings, appliqué and decorative stitches, design, assemble and decorate a waistcoat for a chosen purpose.



Food: Come dine with me

Develop a three-course menu focused on three key ingredients, as part of a paired challenge to develop the best class recipes. Explore each key ingredient's farm to fork process.

Mechanical systems: Automata toys

Develop a functional automata window display, to meet the requirements in a design brief. Explore and create cam, follower and axle mechanisms to mimic different movements.

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Textiles: Stuffed toys

Design a stuffed toy and make decisions on materials, decorations and attachments (appendages), after learning how to sew a blanket stitch.

Mechanical systems: Pop-up book

Create a functional four-page pop-up storybook design, using lever, sliders, layers and spacers to create paper-based mechanisms.



Textiles: Fastenings

Analyse and evaluate a range of existing fastenings, then devise a list of design criteria to design, generate templates and make a fabric book sleeve.

Food: What could be healthier?

Discover the farm to fork process, understand the key welfare issues for rearing cattle. Compare the nutritional value of existing sauces and develop a healthier recipe.



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Mechanical systems: Making a slingshot car

Using a range of materials, design and make a car with a working slingshot mechanism and house the mechanism using a range of nets.

Food: Adapting a recipe

Work in groups to adapt an existing biscuit recipe, whilst taking into account the cost of the ingredients and other expenses against a set budget.

Textiles: Cushions

Learn and apply two new sewing techniques - cross-stitch and appliqué. Utilise these new skills to design and make a cushion.

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Mechanical Systems: Pneumatic toys

Explore pneumatic systems, then apply this understanding to design and make a pneumatic toy including thumbnail sketches and exploded diagrams.

Food: Eating seasonally

Learn about various fruits and vegetables, and when, where and why they are grown in different seasons. Discover the relationship between colour and health benefits.

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From Year 2 -
To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
To build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
To critique, evaluate and test their ideas and products and the work of others.
To understand and apply the principles of nutrition and learn how to cook.

