

DT Substantive Knowledge 2024- 2025

The national curriculum for design technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

Food		Textiles	Structures	Electrical Systems
EYFS	All about me/Celebrations Learn to manipulate clay to the desired effect	Toys/ Helping Hands Choose appropriate materials for a purpose, understanding how to join materials.	Growing/ Off we go Share creations, explaining the process they have used, what they like about their work and how they could improve it.	
Year 1/2	Wacky Windmills Explore windmills, identifying the key parts, choosing materials for suitability to make and evaluate a windmill from a variety of materials.	Puppets Create a glove puppet through exploring with different sewing techniques, working safely with a variety of materials and creating a design to adapt and then follow as a plan for their final piece.	Perfect Pizzas Learn where pizzas are from, ingredients to make a good pizza base, healthy options to then design and follow criteria to create a healthy and balanced pizzas.	

Year 3/4	Seasonal Stockings Learn about the tradition of Christmas stockings, use their exploration and knowledge of different sewing skills to create a stocking with decoration purposeful to their intended audience.	Making mini greenhouses Learn about the purpose of a greenhouse and how it helps plants to grow, explore the effectiveness of a mini greenhouse, investigate materials suitable for making a mini greenhouse through designing and comparing materials.	Sandwich snacks Explore different food groups, learning how to translate these into healthy, balanced sandwiches, designing, making and tasting before evaluating healthy sandwich snacks.
Year 5	Chinese Inventions Explore the innovative culture of ancient China and discover the inventions that have helped shape the world.	DT Alarms Experiment with circuits and switches to then design, make and evaluate an alarm system for an intended purpose	Burgers Understand combining flavours to produce tasty, healthy meals through designing, cooking, tasting and evaluating burgers.
Year 6	Great British Dishes Learn about national dishes of England, Scotland and Wales; exploring sweet and savoury dishes to then move onto exploring cuisines from other countries and how these influence what is eaten in Britain today.	Fairground Explore creating rotating fairground rides through investigating suitability of materials and moving parts.	Micro: bit Investigate variables to design and program the micro: bit for an intended purpose and audience, through techniques of planning, coding and debugging.