

Year 7 Design & Technology 2021 2022

Carousel 1 (Product Design)	Carousel 2 (Engineering)	Carousel 3 (Combined skills)	Carousel 4 (Food and Nutrition)
Project: Chocolate mould	Project: Novelty light	Project: Helicopter launcher	Projects... Carrot & Coriander Soup, Apple Crumble, Pizza & Fajitas and moulded chocolates.
Project focus... - Plastics: -Sources, categories & applications - Plastic processes: -Common processes and applications Packaging design and nets	Project focus... - Electronic components: -Common examples and applications	Project focus... - Movement and mechanisms: -Common examples and applications	Project focus... - What is a balanced diet? - An introduction to the Eatwell guide. -Personal hygiene -How to clean correctly -Exploring the Eatwell guide -The importance of vitamins
Additional topics... - Environmental impact of plastics -Land fill -Recycling -Pollution -Reduce -Packaging life cycle -Transport -Disposal	Additional topics... - Sustainability and energy use -Energy production -Sustainable energy use	Additional topics... - Evolution of toys/ play -Interaction vs electronic	Additional Topics... -The seasons, climate change and their impact on food sources -Exploring nutrients -Weighing and food preparation -Cross curricular, using products from other DT lessons (cookie cutter)
Keywords: -Extraction -Crude oil -Chemical processing -Thermoplastics -Thermosets -Injection moulding -Vacuum forming -3D Printing -Blow moulding	Keywords: -Filament lamp -Light Emitting Diode -Switch (Rocker, slide push button) -Motor -Resistor -Printed Circuit Board	Keywords: -Motion -Rotary -Linear -Reciprocating -Oscillating -Mechanisms -Gears -Pulleys -Chain and sprocket -Cams	Keywords: -Seasons -Rubbing in method -Vitamins -Hygiene -Safety -Dairy -Whisking -Flavour -Function
Health and Safety: Basic workshop safety Profile cutter, Pillar drill and disc sander			Health & Safety: Getting to know the food room and hazard spotting and preventing.
Keywords: -Personal Protective Equipment (PPE) -Apron -Safety goggles -Visor/ face shield -Machine guard -Safety zone -Hazard -Precaution -Signs and symbols			Keywords: -Apron -handwashing -Hair tied back -Hot water -Washing up liquid -Drying

Year 8 Design & Technology 2021 2022

Carousel 2 (Engineering)	Carousel 3 (Combined skills)	Carousel 4 (Food and Nutrition)
Project: USB LED light	Project: Cube calendar	Projects... Mac & Cheese, Turkey Burgers, Cheesecake, Banana Bread
Project focus... -Circuit design: -Component symbols & circuit diagrams Power sources	Project focus... -Woods and timber: -Sources, categories and applications	Project focus... -What is the function of food? -Exploring the benefits of each food group. -Sauce making -Chilling foods to set -Cooking meat products thoroughly
Additional topics... -Environmental impact of batteries -Sustainable power sources -Recycling -Recharging -Solar/wind-up	Additional topics... -Environmental impact of wood production -Deforestation -Sustainable forestry (FSC)	Additional Topics... -Different functions of foods in the body -Cross curricular, using products from other DT lessons (chocolate mould)
Keywords: -Inputs (Switch, sensor etc) -Output (Lamp, LED, motor etc) -Power sources (USB, battery, cell, rechargeable etc.)	Keywords: -Forestry -Deforestation (FSC) -Hardwood -Softwood -Coniferous -Deciduous -Manufactured board -Pine -Oak/Teak/Mahogany MDF/Chipboard/MDF	Keywords: -Fat -Protein -Starchy Carbohydrates -Sugary -Slow release -Dairy -Fruits -Food poisoning
Health and Safety: Workshop safety refresher Specific machine safety (Hazard identification)		Health & Safety: Food hygiene -4 C;s (cooking, chilling, cleaning and cross contamination) -Hand washing -cleaning equipment -Avoiding the danger zone
Keywords: -Types of PPE -Hazard identification -Precautions -Specific machine safety		

Year 9 Design & Technology 2021 2022

Carousel 1 (Product Design)	Carousel 2 (Engineering)	Carousel 3 (Mixed materials)	Carousel 4 (Food and Nutrition)
Project: Design styles clock	Project: Pewter casting	Project: Sweet dispenser	Projects... Breakfast Muffins, Chicken Stir-Fry, Sausage rolls and Potato Wedges.
Project focus... -History of design: -Design timeline, movements and product examples	Project focus... -Metals: -Sources, categories and applications	Project focus... -Sustainable design: -Environmental impact, The 6Rs and sustainability	Project focus... -The nutritional value of food -The health benefits of a balanced diet. -The role of nutrients in our bodies. -dairy alternatives -function of carbohydrates on our bodies
Additional topics... -Environmental impact of mining -Recycling metals -Energy use -Land use -Pollution -Recycling	Additional topics... -Product evolution -History of design -Arts and crafts -Industrial revolution -Mass production	Additional topics... -Sustainable product design -Impact of recycling -Pollution -Up-cycling	Additional topics: -Finishing techniques -Food risks -Allergies -Consuming too much or not enough in diets.
Keywords: -Design movement -Arts and crafts/Art Nouveau -Art Deco -Streamlining -Modernism/Memphis	Keywords: -Mining -Ferrous (Iron, steel) -Non-Ferrous (Aluminium, copper, gold, tin) -Alloys (Stainless steel, brass)	Keywords: -Up-cycling -Sustainable -Single use -Land fill -Recycling	Keywords: -Macro and micro nutrients -complex proteins -Pescatarians -vegetarians -vegans -saturated and unsaturated
Health and Safety: Planning for safe working Risk assessments			Health and safety: -Knowing the difference between cooking at home, in the food room and a catering industry. -cutting skills -Hazard identification
Keywords: -Risk assessment -Hazard identification -Likelihood -Severity -Control measure			