Subject Curriculum Overview

Subject: Design Technology / Textiles/ Cooking & Nutrition		Year Group: 7	TERMLY ROTATION
Topic	**Key Learning Points**	**Key Vocabulary**	**Assessments**
Rotation 'A' **DT**	**END POINT: Manufacture a cube pine box using a rebate joint and drop lid, be able to incorporate typography into the lid design** *The Really Useful Box* Students will: • Understand how to analyse a brief for designing / manufacturing for a client's needs identifying a gap in the market. • Learn to analyse existing solutions and materials (aesthetics, durability, usability). • Learn how to draw in oblique and isometric • Learn the computer programme 2D design to draw oblique and isometric shapes • Learn the different types of fonts and how typography is used for branding and identity • Learn to mark out material using core mathematics skills (measuring in millimetres, using a try square to measure within 1 degree of a 90-degree angle) i.e. preparing wood for cutting without waste. • Understand and demonstrate how to be correct & safe using hand and power tools (saws, files, hammers, sanding equipment). • Learn about simple wood joints; uses and manufacturing, e.g. using rebate joint, butt joint or dowel joint. • Learn about different types of fixings; temporary & permanent (screws, nails, panel pins, wood glue, hot glue & contact/grab adhesives). • Learn about, and how to integrate CADCAM (computer aided design/manufacture) into traditional woodwork practises. • Learn the importance of, and be able to, apply decorative finishing techniques to create the typography lid • Learn to self and peer evaluate • Understand about programmable robots and their role in engineering and design	Design brief, renewable, durability, brittle, hardwood, softwood, man-made board, solutions, precision, millimetres, right angle, degrees, tenon saw, rebate joint, adhesive, pine, MDF, panel pin, perimeter, scroll saw, PPE, pillar drill, dowel joint, laser cutter, finish, abrasive, filler, drill bit, primer, oblique, isometric, CAD/CAM, typography, serif, sans serif	Formative assessment, checking understanding & progress during each lesson. 'Forms' Summative assessment used half termly to assess understanding of key learning points.
Rotation 'B' **Textiles**	**END POINT: Manufacture a tie dye cushion using stencil art to create surface decoration techniques, understand about the impact of plastics in our oceans** *Underwater Inspired Tie Dye Cushion* Students will: • Understand the design process through a detailed starting point and be able to research to influence their designs	Tie-dye, Stencil design, Design ideas, design development, Evaluation Sewing machine, Pins, Needles, Thread	Formative assessment, checking understanding & progress during each lesson. 'Forms' Summative assessment used half

	• Learn about the impact on our oceans through microplastics and plastics and the role the textile industry has within this • Be able to present to the group about the impact • Know how to use textile equipment and machinery safely within the classroom • Understand colour theory and palettes to create cohesive designs • Be able to create a range of tie dye patterns and choose the most appropriate method for their design • Be able to safely use a craft knife to cut a stencil pattern for their cushion • Learn how to construct a product using a sewing machine and how to embellish using hand techniques • Learn to peer and self-evaluate	Design, Colour theory, harmonious, contrasting, plastics, microplastics, impact	termly to assess understanding of key learning points.
Rotation 'C' **Food Preparation & Nutrition**	**END POINT: To confidently and safely prepare and cook basic food dishes** *An introduction to Cooking & Nutrition* Students will: • Learn specific kitchen knife skills and when they should be used e.g. bridge and claw technique. • Learn a variety of food preparation skills such as the rubbing in method, creaming method, shaping, cutting, rolling, kneading and proving. • Know how to identify hazards and understand safety rules in a kitchen. • Be able to name kitchen equipment and correctly identify its uses. • Know and understanding the 4Cs for good food hygiene (cleaning, cross-contamination, cooking, and chilling). • Learn how bacteria grows using the 4 key factors; warmth, moisture, food, time. • Safely and confidently know how to use all parts of the cooker (hob, grill, oven). • Know and understand the importance of eating breakfast – healthy/unhealthy, energy, Vitamin B and calcium intake. • Be able to use the 'Eatwell Plate' demonstrating an understanding of portion sizes of protein, carbohydrates, fruit & vegetables, dairy, sugar & fats, and link these to a balanced diet. • Understand different methods of cooking including the effects of cooking methods on food e.g. nutrient loss, ways to cook food to retain flavour and nutrients. • Learn how to shop for food using a budget.	Allergy, analysis, antibacterial, bacteria, baking, boiling, budget, calcium, carbohydrate, chilling, consistency, contamination, fibre, glazing, hygiene, liquidise, mineral, nutrition, obesity, pathogen, protein, simmering, staple, stewing, toxin, vitamin.	Formative assessment, checking understanding & progress during each lesson. Hand written summative assessment used half termly to assess understanding of key learning points.

	• Understand sensory analysis (sight, smell, taste) using a star diagram, and how this helps to test and improve food. • Know how to design a menu for specific client requirements considering culture, allergies, and dietary preferences. • Understand the causes and prevention of food waste within society.		

How parents can support learning in the subject this academic year

- Support independent practical skills by practising recipes / encouraging cooking dinner.
- Support independent practical skills by helping with household DIY / using tools to manufacture ideas within the home.
- Practise using subject specific vocabulary in a sentence.
- Watch cooking, design and manufacturing programmes to encourage enthusiasm and motivation within these subjects.
- Acknowledge and discuss the benefits of these subjects within the wider careers industry, supporting future aspirations.
- Encourage excellent page presentation and explore / research during homework tasks.

Recommended Reading

- You Can Draw – Tom Gates with Liz Pichon
- The Book of Inventions – Tim Cook
- KS3 Design & Technology Study Guide – CJP
- The Complete Cookbook for Young Chefs – America's Test Kitchen Kids
- 100 Things to Know About Inventions – Clive Gifford
- Engineering for Teens – Dr Pamela McCauley
- Foundations KS3 Food Technology – Oxford

Points to note

This is the first year of the KS3 curriculum - Years 7,8 and 9study a different Technology specialism each term. There are approximately 12 weeks of study for DT, textiles and cooking & nutrition. We welcome students taking their products home with them at the end of the rotation, and food at the end of each practical lesson. Whilst we supply materials for DT and textiles we will ask for a voluntary contribution. Cooking ingredients should be purchased by yourselves, and will be uploaded to epraise a minimum of 2 days before they are needed in school.