



Subject Curriculum Overview for Academic Year 2022/2023

Subject: Design Technology / Cooking & Nutrition		Subject Leader: Mrs Fox	Year Group: 7	TERMLY ROTATION
Topic	Key Learning Points		Key Vocabulary	Assessments
Rotation 'A' Traditional woodwork 	END POINT: – To confidently and skilfully manufacture a lego style box using a rebate joint and drop lid <i>'The Lego box'</i> Students will: <ul style="list-style-type: none"> Understand how to analyse a brief that allows for designing / manufacturing for a client's needs. Will be able to investigate & analyse existing solutions and materials. Understand how to mark out material using core technical mathematics skills, ie preparing wood for cutting without waste. Know how to be correct & safe using hand and power tools. Will understand simple wood joints; uses and manufacturing, eg using rebate joint or dowel joint. Will know different types of fixings; temporary & permanent. Will understand how to integrate CAD/CAM into traditional woodwork practises. Will understand the importance of, and be able to, apply finishes well. Will be confident to self and peer evaluate via production plan targets. 		Design brief, renewable, durability, brittle, hardwood, softwood, man-made board, solutions, precision, millimetres, right angle, 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.	Formative assessment, checking understanding & progress during each lesson. 'Forms' Summative assessment used half termly to assess understanding of key learning points.
Rotation 'B' Product Design 	END POINT: – To confidently use CAD/CAM (computer aided design/manufacture) to create a bespoke working analogue clock <i>'Bespoke designed Clock'</i> Students will: <ul style="list-style-type: none"> Understand what a design brief is and be able to explore this context. Understand a target market and research existing solutions in correspondence with this. Understand the work of Ettore Sottsass within the Memphis design movement. Be able to describe key features of this work. Draw a variety of design ideas appropriately aimed at a chosen target market and be able to justify this by annotating these designs. Understand how to use the 2D Design software, by accurately measuring and using tools appropriately to replicate the design. Understand how this translates onto the laser cutter. Understand the properties of man-made boards and some plastics. Be able to explain the suitability of MDF and acrylic within this topic. Understand the use of ACCESSFM and why a specification is important to good design principles. Be able to reflect and evaluate progress via these specification targets. 		Design brief, analysis, client, properties, durable, tactile, hard wearing, grain, veneer, acrylic, man-made board, MDF, refine, graphics, gradient, inspiration, presentation, innovative, development, consideration, CAD/CAM, precise, assembly, mechanism, analogue, fixing, net, adhesive, engrave, tabs, requirement, specification, evaluate.	Formative assessment, checking understanding & progress during each lesson. 'Forms' Summative assessment used half termly to assess understanding of key learning points.

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<p>Rotation 'C' Food Preparation & Nutrition</p>	<p>END POINT: – To confidently and safely prepare and cook basic food dishes <i>'An introduction to Cooking & Nutrition'</i></p> <p>Students will:</p> <ul style="list-style-type: none"> • Demonstrate knife skills; bridge and claw technique. • Demonstrate knowledge and preparation skills of; rubbing in method, creaming method, shaping, cutting, rolling, kneading and proving. • Be able to Identify hazards and 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). • Safely and confidently know how to use all parts of the cooker. • Know and understand the importance of eating breakfast – healthy/unhealthy, energy, Vitamin B and calcium intake. • Be able to use the Eatwell Plate and link 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. • Be able to shop for food using a budget. • Understand sensory analysis using a star diagram, and how this helps to test and improve food. • Know how to design a menu for specific client requirements. • Understand the causes and prevention of food waste within society. 	<p>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.</p>	<p>Formative assessment, checking understanding & progress during each lesson.</p> <p>Hand written summative assessment used half termly to assess understanding of key learning points.</p>
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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

100 Things to Know About Inventions – Clive Gifford

The Book of Inventions – Tim Cook

Engineering for Teens – Dr Pamela McCauley

KS3 Design & Technology Study Guide – CJP

Foundations KS3 Food Technology – Oxford

The Complete Cookbook for Young Chefs – America's Test Kitchen Kids

Points to note

Years 7 and 8 study a different Technology specialism each term. There are approximately 12 weeks of study for traditional woodwork, product design or electronics, 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 all materials for manufacture, batteries may need to be purchased by yourselves for products requiring them. Cooking ingredients should be purchased by yourselves, and will be uploaded to epraise a minimum of 2 days before they are needed in school.