LAWN MANOR ACADEMY

Design Technology KS3

INDEPENDENCE

KNOWLEDGE / LITERACY / NUMERACY / ORACY / AGENCY

CONTENT / TOPICS / CONCEPTS

Year 7

Food: fruit salad, crumble, bread rolls, pizza, shortbread, cheese straws, rock cakes ,scones, raspberry buns, nutrition, time plan, food testing, food labelling,

Graphics: logo design, fonts, packaging, advertising

Product Design: product analysis, packaging analysis, design a pizza

Textiles: Pattern making, fabric cutting, pinning, applique

Technology: CAD Tnkercad, linkages and levers

Health, hygiene and safety: kitchen safety rules, identifying hazards, personal hygiene

Evaluation : evaluate existing products, IACT , star profiles ,

Year 8

Food, Pizza pin wheels, mac 'n' cheese, sausage rolls, spring rolls, star bread, Scotch eggs, quiche, biscuits, jam tarts, cheese triangles, miniature cakes, food waste, nutrition, time plan, adapting recipes

Graphics: orthographic drawing, template drawing, typography ,decoration

Product design: clock designs and advances, Bags analysis, product development, biomimicry and design,

Textiles: using a pattern, making a soft toy to meet a brief

Technology: Mechanisms, gears, CAD/CAM: Sketchup, resistant materials, template making, cutting,

Health, hygiene and safety: kitchen/ workroom rules, risk assessment

Evaluation : evaluate existing products, IAC , star profiles ,

Year 9

Food: Vegetarian curry, Naan bread risotto, spaghetti carbonara, Chow Mein, frittata, apple pie, focaccia, samosas, Danish pastries, upside down cake, chili co carne, cheesecake, nutrition , food provenance, seasonality, function of ingredients, food waste

Product design : sustainable design, recycling, trends, choices, meeting a brief

Textiles: embroidery, fabric manipulation , using sewing machine

Technology: sensors, input/output, mechanical systems, micro controllers

Health, hygiene and safety: food safety and bacteria, HACCP , risk assessments , rules for sewing machines

Evaluation : sustainability of school, eco design webs, evaluate topic, IAC , star profiles, lifecycle analysis

VOCABULARY

aesthetic, annotate, applique, commercial, consumer, crockery, cutlery, evaluation, innovative, manufacturer, nutrient, original, seasoning, slogan, textiles, texture, typography, utensil,

Batch (production), mechanism, processed, blend, consistency, fibre, macronutrient, biomimicry, pattern, prototype, assembly, perspective, orthographic , specification, analyse, product, brief, marketing

poultry, component, biodegradable, function, properties, structure, sustainable, economic, convenience, degradation, reduce, culinary, sanitise, modify, scenario, embroider, food provenance, micronutrient

SKILLS

Design-: use research and exploration to identify and understand user needs. Identify and solve own problems, and know how to reformulate problems given.
Develop specifications to inform design of innovative functional, appealing products.
Use a variety of approaches to generate creative ideas .
Develop and communicate design ideas using annotated sketches, detailed plans, 3D and mathematical modelling, oral and digital presentations and computer based tools.
Make– select from and use specialist tools, techniques, processes, equipment precisely. Select from and use a more complex range of materials, components and ingredients.
Evaluate– analyse work of past and present professionals, investigate new and emerging technologies, test evaluate and refine their ideas and products against a specification. Understand developments in design and technology, its impact on individuals, society and the environment and the responsibility of designers, engineers and technologists.

ASSESSMENT

To be able to follow the design process
To be able to use the specific skills required in each specialism to create a final piece.
To be able to work to the age related expectations of each specialism.

Formative assessments to include IACT comments, teacher , self and peer assessment
Summative assessments in booklets to assess design process, research, make and evaluate

ATTITUDE

Understanding others, behaviour and attitudes, SMSC, PHSE

DT will support in developing skills, knowledge, understanding, qualities and attitudes which they need to understand, contribute to and appreciate different cultures. They will develop their abilities to make moral decisions and act on them They will develop the willingness to participate and take part in activities that will help them to make an active contribution to their families and communities.

RESILIENCE

Character, personal Development, wellbeing and CIAG

DT will support in developing skills, knowledge, understanding, qualities and attitudes which they can foster in the own lives and help with their well-being. The opportunities for students to develop self-esteem and self-confidence are richly embedded in the open ended projects at all key The projects allow students to discover themselves through encouraging creative and innovative solutions to design and make problems.