Year 10

Subject: Design Technology

FOOD PREPARATION

	Unit of work	Key Objectives – what will students learn	Assessment
Year 10	**Unit 1; Food Science** Introduction to GCSE practice and deepening understanding of food science principles.	• Students will conduct product trials of a range of nutritionally well-balanced savoury dishes which include: Lasagne, Thai Fish Cakes with Sweet Chilli Mayonnaise, Chicken Fajitas with Guacamole • Students will explore the science behind the recipes, developing an understanding of why ingredient react to produce the outcome • Students will develop your technical skills, using more advanced manufacturing methods.	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
	Unit 2; NEA 2 Practice An in-depth mock NEA to allow students to fully understand the requirements of the GCSE NEA unit.	• Students will design a baked product that is suitable for sale in a bakery or coffee shop/café that will attract customers and increase sales. • Students will conduct product trials of a range of sweet and savoury baked products which include: Sausage Rolls, Love Buns, Estonian Kringle, Chocolate Eclairs, Lemon Meringue Pie. • Students will evaluate these considering both nutritional content and sensory features before selecting two of these to develop and present as their final products.	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
	Unit 3; Mini Investigation (NEA1) An introduction to conducting a scientific investigation in Food Preparation.	• Students will undertake a practice investigation into the working characteristics, functional and chemical properties of fats in shortcrust pastry. • Students will research the fats traditionally used to make shortcrust pastry and their functional and chemical properties and formulate a prediction (hypothesis) based on these findings. • Students will devise and conduct a range of scientific experiments to investigate the way different types of fat behave in shortcrust pastry making and test their prediction. • Students will collect and analyse data from these experiments, using these to evaluate whether there. prediction was correct	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
Year 11	**NEA 1 (20% of Final GCSE Grade)** **Food Investigation**	• Students will undertake a scientific investigation based on one of the food science principles, these are set by the exam board each year. • This assignment assesses students' understanding of the working characteristics, functional and chemical properties of ingredients.	Student will produce a 1500-2000-word report including photographic evidence of the practical investigations completed. This is assessed internally and moderated externally.
	NEA 2 (30% of Final GCSE Grade) **Food Preparation**	• Students will choose between a range of contexts that are set by the exam board, investigating the context before trialling a range of dishes. • Students will then prepare, cook and present a final menu of three dishes within three hours, planning in advance how this will be achieved.	Student will produce a 10-page portfolio, including photographic evidence of the practical tasks completed.

HIGHGATE WOOD SCHOOL: CURRICULUM MAP FOR KEY STAGE 4

PRODUCT DESIGN

	Unit of work	Key Objectives – what will students learn	Assessment
Year 10	**NEA Practice 1; Design for the Working Environment** Introduction to GCSE practice and working with polymers.	• Students will investigate, design and develop a storage solution for working from home, considering function and aesthetics • Students will develop initial concepts, then develop these using modelling, CAD and sampling to understand the construction of their chosen idea • Students will manufacture a prototype of their chosen idea, using Computer aided design alongside traditional manufacturing techniques.	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
	NEA Practice 2; Design for a Festival An in depth mock NEA to allow students to fully understand the requirements of the GCSE NEA unit and encourage iterative practice.	• Students will research and investigate the design opportunities within the context 'Design for a Festival', working with a target user to understand their wants and needs • Students will develop their own brief and specification for their NEA practice, based on the research undertaken • This will then lead to the design of a range of ideas that fit this brief and specification before the development and prototyping of one of these ideas to a functional prototype working across a range of materials.	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
Year 11	**NEA (50% of Final GCSE Grade)**	• Students will pick from 3 contexts set by the exam board; they will then need to fully investigate this context to understand the design opportunities. • Student will then use this research to develop their own brief & specification before designing a range of ideas that meet the requirements of the context • Students will then fully develop one idea to produce a functional prototype, evaluating its success and identifying areas for further development.	20-page portfolio and final outcome, these are internally marked against the exam board marking criteria and externally moderated by the exam board.
Year 10 & 11	**Exam Content** Throughout year 10 and 11 students will undertake a series of exam units to prepare them for the year 11 exam.	• New and emerging technologies and their impacts • Developments in smart, modern and composite materials and their impacts • The environmental, social and economic challenges involved in design • 20th century design including an investigation into a range of key designers and companies	Students will complete and end of unit assessment at the end of each exam unit.

HIGHGATE WOOD SCHOOL: CURRICULUM MAP FOR KEY STAGE 4

TEXTILE DESIGN

	Unit of work	Key Objectives – what will students learn	Assessment
Year 10	**NEA Practice 1; Pattern Development** Introduction to GCSE practice and adapting patterns to make own designs.	• Students will develop a basic block pattern to produce a creative top design, deepening their understanding of pattern cutting and garment manufacture. • Students will develop a deeper understanding of the opportunities within textiles and the materials/techniques and components that can be used to produce innovative ideas.	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
	NEA Practice 2; Design for a Festival An in-depth mock NEA to allow students to fully understand the requirements of the GCSE NEA unit and encourage iterative practice.	• Students will research and investigate the design opportunities within the context ' Design for a Festival', working with a target user to understand their wants and needs • Students will develop their own brief and specification for their NEA practice, based on the research undertaken • This will then lead to the design of a range of ideas that fit this brief and specification before the development and prototyping of one of these ideas to a functional prototype working across a range of materials. • Students will increase their understanding of a wide range of decorative and embellishment techniques through practical exploration.	Assessment is ongoing throughout the unit based on the GCSE marking criteria.
Year 11	**NEA (50% of Final GCSE Grade)**	• Students will pick from 3 contexts set by the exam board; they will then need to fully investigate this context to understand the design opportunities. • Student will then use this research to develop their own brief & specification before designing a range of ideas that meet the requirements of the context • Students will then fully develop one idea to produce a functional prototype, evaluating its success and identifying areas for further development.	20-page portfolio and final outcome, these are internally marked against the exam board marking criteria and externally moderated by the exam board.
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