

Curriculum Knowledge Map



CHS Computing and Technology 2023/2024

GCSE Food Preparation and Nutrition

Year 11	AUTUMN		SPRING	SUMMER
	NEA 1: Food investigation (30% of coursework grade)		NEA 2: Food preparation assessment (70% of coursework grade)	Exam Preparation
	NEA 1 Task	Mock Examinations and Assessment	NEA 2 Task	Study Skills for Food Preparation and Nutrition
Declarative <i>What should they know?</i>	<p>During this NEA task Students' will evidence their understanding of the working characteristics, functional and chemical properties of ingredients. <i>This task links to Food Science (studied in Year 10)</i></p> <p>Cooking of food and heat transfer</p> <ul style="list-style-type: none"> Why food is cooked and how heat is transferred to food. Selecting appropriate cooking methods <p>Functional and chemical properties of food</p> <ul style="list-style-type: none"> Proteins <ul style="list-style-type: none"> protein denaturation protein coagulation gluten formation foam formation Carbohydrates <ul style="list-style-type: none"> gelatinisation dextrinisation 	<p>Students will be completing the first of their Year 11 mock exam assessments. These assessment papers are exam board papers designed to assess students' knowledge and understanding form across the course and from prior learning.</p> <p>Topics include:</p> <ul style="list-style-type: none"> Food, nutrition and health – Macro Nutrients, Micronutrients, Nutritional Needs and Health. Food science – Cooking of food, Heat Transfer and the Functional and Chemical Properties of Food. Food safety – Food Spoilage, Contamination and the Principles of Food Safety. Food choice – Factors affecting Food Choice, 	<p>During this NEA task Students' will evidence knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. <i>Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved.</i> <i>This task evidences student's food preparation and nutrition skills covered throughout their practical lessons.</i></p> <p>Skills: Students must know how and when these food preparation skills can be applied and combined to achieve specific outcomes.</p> <p>Skill 1: General practical skills</p> <ul style="list-style-type: none"> Weigh and measure Prepare ingredients and equipment. Select and adjust cooking times. Test for readiness Judge and modify sensory properties. <p>Skill 2: Knife skills</p> <ul style="list-style-type: none"> Fruit and vegetables Meat, fish or alternatives <p>Skill 3: Preparing fruit and vegetables.</p> <ul style="list-style-type: none"> Preparing fruit and vegetables <p>Skill 4: Use of the cooker</p> <ul style="list-style-type: none"> Using the grill 	<p>Food Nutrition and Health</p> <ul style="list-style-type: none"> Macronutrients (fats, protein, carbohydrates) Micronutrients: Vitamins (fat soluble, water soluble, antioxidant functions). Minerals (calcium, iron, sodium, fluoride, iodine, phosphorus) Water Nutritional needs and health Making informed choices for a varied and balanced diet Energy needs Nutritional analysis Diet, nutrition and health <p>Food Science</p> <ul style="list-style-type: none"> Cooking of food and heat transfer Functional and chemical properties of food (proteins, carbohydrates, fats, fruit and vegetables, raising agents) <p>Food Safety</p> <ul style="list-style-type: none"> Food spoilage and contamination Principles of food safety <p>Food Choice</p> <ul style="list-style-type: none"> Factors affecting food choice. Food choices

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	<ul style="list-style-type: none"> ○ caramelisation • Fats and oils <ul style="list-style-type: none"> ○ shortening ○ aeration ○ plasticity ○ emulsification • Fruit and Vegetables <ul style="list-style-type: none"> ○ enzymic browning. ○ oxidation • Raising agents <ul style="list-style-type: none"> ○ chemical (baking powder, bicarbonate of soda, self-raising flours which produce carbon dioxide) ○ mechanical (whisking, beating, folding, sieving, creaming and rubbing in – all incorporate air into the mixture) ○ steam is produced when the water in any moist mixture reaches boiling point. ○ biological (yeast). 	<p>British and International Cuisines, Sensory Evaluation, Food Labelling and Marketing.</p> <ul style="list-style-type: none"> • Food provenance – Environmental Impact and Sustainability of Food, Food Processing and Production. 	<ul style="list-style-type: none"> • Using the oven <p>Skill 5: Use of equipment</p> <ul style="list-style-type: none"> • Using equipment <p>Skill 6: Cooking methods</p> <ul style="list-style-type: none"> • Water based methods using the hob. • Dry heat and fat-based methods using the hob. <p>Skill 7: Prepare, combine and shape.</p> <ul style="list-style-type: none"> • Prepare, combine and shape. <p>Skill 8: Sauce making.</p> <ul style="list-style-type: none"> • Starch based. • Reduction • Emulsion <p>Skill 9: Tenderise and marinate.</p> <ul style="list-style-type: none"> • Tenderise and marinate. <p>Skill 10: Dough</p> <ul style="list-style-type: none"> • Making a dough (bread, pastry, pasta) • Shaping and finishing <p>Skill 11: Raising agents.</p> <ul style="list-style-type: none"> • Eggs as a raising agent • Chemical raising agents • Steam as a raising agent • Biological raising agent <p>Skill 12: Setting mixtures.</p> <ul style="list-style-type: none"> • Removal of heat • Use protein 	<ul style="list-style-type: none"> • Food labelling and marketing influences • British and International cuisines • Sensory evaluation <p>Food Provenance</p> <ul style="list-style-type: none"> • Environmental impact and sustainability of food. • Food Processing and production
<p>Procedural <i>What should they be able to do?</i></p>	<p>Contexts released September for NEA 1</p> <p>Section A: Research (6 marks) Students carry out research into the ingredients to be investigated. The research will demonstrate how ingredients work and why. The outcome of the research should clearly inform the nature of the practical investigation and be used to establish a hypothesis or prediction for the food investigation task. Students should:</p>	<p>Demonstrate knowledge and understanding of business concepts and issues.</p> <p>AO1: Demonstrate knowledge and understanding of nutrition, food, cooking and preparation.</p> <p>AO2: Apply knowledge and understanding of nutrition, food, cooking and preparation.</p> <p>AO3: Plan, prepare, cook and present dishes, combining appropriate techniques.</p>	<p>Contexts released November/December for NEA 2</p> <p>During their NEA task students should be able to:</p> <ul style="list-style-type: none"> • demonstrate effective and safe cooking skills by planning, preparing and cooking using a variety of food commodities, cooking techniques and equipment. • develop knowledge and understanding of the functional properties and chemical processes as well as the nutritional content of food and drinks. • understand the relationship between diet, nutrition and health, including the physiological and psychological effects of poor diet and health. • understand the economic, environmental, ethical, and socio-cultural influences on food availability, production processes, and diet and health choices. 	<p>Demonstrate knowledge and understanding of business concepts and issues.</p> <p>AO1: Demonstrate knowledge and understanding of nutrition, food, cooking and preparation.</p> <p>AO2: Apply knowledge and understanding of nutrition, food, cooking and preparation.</p> <p>AO3: Plan, prepare, cook and present dishes, combining appropriate techniques.</p> <p>AO4: Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</p>

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	<ul style="list-style-type: none"> analyse the task, explaining the background research. carry out secondary research, using different sources, focusing on the working characteristics, functional and chemical properties of the ingredients. analyse the research and use the findings to plan the practical investigation. establish a hypothesis/predict an outcome as a result of the research findings. The hypothesis should be a statement which may be proved or disproved. <p>Section B: Investigation (15 marks) Students carry out practical investigations, related to the hypothesis or prediction, which demonstrate understanding of how ingredients work and why. Students will record the results of the practical investigation. Students should:</p> <ul style="list-style-type: none"> Investigate and evaluate how ingredients work and why through practical experimentation. Each investigation should be related to the research and have a clear aim which can then be concluded. The number of investigations will be determined by the complexity of the investigations. A range of appropriate testing methods should be 	<p>AO4: Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</p> <p>Skills</p> <ul style="list-style-type: none"> Exam technique- how to tackle a big question. Time management in an exam. Understand how to critically analyse a chart, table or food product. Understand the context of an exam question. Analysing a task Conducting relevant research into chosen task area, linking to prior knowledge 	<ul style="list-style-type: none"> demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing, cooking and serving food. understand and explore a range of ingredients and processes from different culinary traditions (traditional British and international), to inspire new ideas or modify existing recipes. <p>Skills which should be evidenced throughout Practical examination include:</p> <p>Skill 1: General practical skills Skill 2: Knife skills Skill 3: Preparing fruit and vegetables. Skill 4: Use of the cooker Skill 5: Use of equipment Skill 6: Cooking methods Skill 7: Prepare, combine and shape. Skill 8: Sauce making. Skill 9: Tenderise and marinate. Skill 10: Dough Skill 11: Raising agents. Skill 12: Setting mixtures.</p> <p>Section A: Researching the task (6 marks) Students will research and analyse the: life stage/dietary group or culinary tradition related to the task. Students should:</p> <ul style="list-style-type: none"> analyse the task by explaining the research requirements. carry out relevant research and analysis related to the: life stage, dietary group or culinary tradition. identify a range of dishes e.g. by mind-mapping or using annotated images. select and justify a range of technical skills to be used in the making of different dishes. <p>Section B: Demonstrating technical skills (18 marks) Students will make 3–4 dishes to showcase their technical skills. Students should:</p> <ul style="list-style-type: none"> demonstrate technical skills in the preparation and cooking of three to four dishes. Refer to the Food preparation skills (page 9) section of the specification. select and use equipment for different technical skills in the preparation and cooking of selected dishes. Food safety 	<p>Skills</p> <ul style="list-style-type: none"> Exam technique- how to tackle a big question. Time management in an exam. Understand how to critically analyse a chart, table or food product. Understand the context of an exam question. Analysing a task <p>Conducting relevant research into chosen task area, linking to prior knowledge</p>
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	<p>identified and carried out to record the results e.g. annotated photographs, labelled diagrams, tables, charts, sensory testing methods, viscosity tests.</p> <p>Section C: Analysis and evaluation (9 marks) Students will analyse and evaluate the results of the investigation and reflect upon their findings. Explanations will demonstrate how the results can be applied in practical food preparation and cooking. Students should:</p> <ul style="list-style-type: none"> analyse and interpret the results of the investigative work. The results will be linked to the research and data explaining the working characteristics, functional and chemical properties of the ingredient(s) evaluate the hypothesis/prediction with justification. explain how the results/findings can be applied in practical food preparation and cooking. 		<p>principles should be demonstrated when storing, preparing and cooking.</p> <ul style="list-style-type: none"> identify the technical skills within each dish. Photographic evidence will be needed to authenticate the technical skills. students will select three dishes to make which allow them to showcase their technical skills to make for their final menu. The final dishes will relate to the task and research and be dishes that have not been made previously. <p>Section C: Planning for the final menu (8 marks) As a result of demonstrating technical skills, students will provide explanation for the final three dishes related to e.g., ingredients, processes, technical skills, nutrition, food provenance, cooking methods and portion size. A time plan will be produced for the final three dishes demonstrating dovetailing of different processes. Students should:</p> <ul style="list-style-type: none"> justify the appropriateness of the final dishes in terms of e.g., technical skills, nutrition, ingredients, cooking methods, food provenance, sensory properties and portion size. produce a detailed time plan for the production of the final three dishes including appropriate techniques. Within the plan, food safety principles will be demonstrated when storing, preparing, cooking and presenting the final dishes. demonstrate appropriate use of the three hours to dovetail tasks to prepare, cook and present the final three dishes. not repeat any dishes from the 'demonstrating technical skills' stage when making their final menu. <p>Section D: Making the final dishes (30 marks) Students will prepare, cook and present a menu of three dishes within a single period of no more than three hours. Students should prepare, cook and present the final dishes, demonstrating:</p> <ul style="list-style-type: none"> selection and use of equipment for different technical skills in the preparation and cooking of the final three dishes. knowledge and application of food safety principles (including temperature control) when storing, preparing, cooking and presenting the final three dishes. selection, knowledge and use of ingredients when producing different dishes. appropriate use of the three hours to demonstrate: technical skills, processes and the use of equipment. execution of a range of technical skills with accuracy good judgement with regard to cooking times and methods and the sensory properties of 	
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			<ul style="list-style-type: none"> • each dish • organisation and good planning using the time plan and linking tasks within the 3 hours. • a range of finishing techniques to produce a high standard of presentation of the final dishes. <p>Section E: Analyse and evaluate (8 marks) Students will carry out sensory evaluation and record the results for all of their practical dishes. For the final dishes, students will carry out and record nutritional analysis, costing and identify improvements to their dishes.</p> <p>Students should:</p> <ul style="list-style-type: none"> • record and analyse the sensory properties (taste, texture, aroma and appearance) of the three final practical dishes. • carry out nutritional analysis of the three final dishes. • analyse the cost of the three final dishes. 		
Disciplinary Literacy <i>(Tier 3 Vocab)</i>	<p>Tier 3 Disciplinary literacy linked to the unit of study:</p> <ul style="list-style-type: none"> • Research • Investigation • Analysis and evaluation <p><i>When writing their NEA portfolio students should be able to use and recall their prior learning terminologies as part of their communication through the folder.</i></p> <p><i>This will be personalised and specific to students learning and context chosen. RWCN strategies will be taught to support student progress.</i></p>	<p>Tier 3 Disciplinary literacy linked to the unit of study:</p> <ul style="list-style-type: none"> • Recall • Identify • Assess • Describe • Explain • Discuss • Evaluate • Mark scheme 	<p>Tier 3 Disciplinary literacy linked to the unit of study:</p> <ul style="list-style-type: none"> • Research • Investigation • Analysis and evaluation <p><i>When writing their NEA portfolio students should be able to use and recall their prior learning terminologies as part of their communication through the folder.</i></p> <p><i>This will be personalised and specific to students learning and context chosen. RWCN strategies will be taught to support student progress.</i></p>	<p>Tier 3 Disciplinary literacy linked to the unit of study:</p> <ul style="list-style-type: none"> • Recall • Identify • Assess • Describe • Explain • Discuss • Evaluate <p>Mark scheme</p>	
Assessment	<p>Food Preparation and Nutrition Baseline assessment: At the start of the autumn term students will complete a baseline assessment for GCSE Food Preparation and Nutrition that covers the course content across all 6 units of the course (including practical skills). This will help identify areas/topics of strength and areas for</p>	<p>College Entry Mock examination: Students will have a Mock exam during the exam window for Year 11 students. They will have 1 assessment paper, that reflect the Paper format for the summer examination. Feedback will be generated from these two assessments to enable students to develop their skills, knowledge and</p>	<p>Spring Mock examination: Students will have a Mock exam during the exam window for Year 11 students. They will have 1 assessment papers, that reflect format for the summer examination. Feedback will be generated from these two assessments to enable students to develop their skills, knowledge and</p>	<p>NEA Assessment: The students will complete their NEA 2 assessment. This will be assessed throughout the coursework task and cover the 5 marking points/sections:</p> <ul style="list-style-type: none"> • Section A: Researching the task. • Section B: Demonstration of technical skills 	<p>Students will prepare for their final summer examination 50% of the final grade for the students.</p> <p><i>Each assessment paper will consist of multiple-choice questions, 4, 6, 9 and 12 mark responses to case study information.</i></p>

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	<p>development as we continue to pursue learning in Year 11.</p> <p>NEA Assessment: The students will complete their NEA 2 assessment. This will be assessed throughout the coursework task and cover the 5 marking points/sections:</p> <ul style="list-style-type: none"> • Section A: Researching the task. • Section B: Investigation • Section C: Analysis and Evaluation <p>NEA makes up 15% of the final grade.</p>	<p>understanding with assessments.</p>	<p>understanding with assessments.</p> <p><i>The focus here will be to see how student have developed their assessment practice since November to support for their summer exams.</i></p>	<ul style="list-style-type: none"> • Section C: Planning for the final menu • Section D: Making the final dishes. • Section E: Analyse and evaluate. <p>NEA makes up 35% of the final grade.</p>	
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