



Food Preparation and Nutrition

Key Stage 4 Framework for Learning

Year 10 2017-2018: Successful Foundations

Syllabus:
GCSE Food Preparation and Nutrition

Autumn 1

<p>Knowledge</p>	<p>Students will know:</p> <p>Food Science</p> <ul style="list-style-type: none"> ○ Functional and chemical properties of food ○ How Proteins work in food: denaturation; coagulation and gluten formation discussing the scientific principles underlying these processes when preparing and cooking food. ○ The functional properties of carbohydrates in food: gelatinisation; dextrinization and caramelisation discussing the scientific principles underlying these processed when preparing and cooking food. <p>Students will know:</p> <p>Food Science</p> <ul style="list-style-type: none"> ○ The functional properties of Fats and oils in foods: shortening, aeration, plasticity, emulsification discussing the scientific principles underlying these processed when preparing and cooking food. ○ The functional properties of raising agents in food products: working characteristics, functional and chemical properties of raising agents. <p>Sensory Evaluation</p> <ul style="list-style-type: none"> ▪ Understand the difference between sensory analysis methods. Selecting appropriately. ▪ How to ensure a test is fair. ▪ How to test sensory qualities of a wide range of foods and combinations. <p><i>Students will use their knowledge of Food science to apply it to a sample Food investigation Task. This will provide students with the knowledge and understanding of how to carry out a piece of NEA, the expectations of the task as well as familiarising them with the mark scheme.</i></p>
<p>Skills</p>	<p>SKILLS:</p> <p>Skill 1: General practical skills (weigh and measure, prepare ingredients and equipment, cooking times, test for readiness, judge and modify sensory properties)</p> <p>Skill 2: Knife Skills (fruit and vegetables and meat fish or alternatives) (Links to Vitamins and minerals and proteins)</p> <p>Skill 3: Preparing fruit and vegetables (Links to vitamins and minerals, effects of preparation on foods e.g nutritional loss, sensory appeal)</p> <p>Skill 4: Use of the cooker including grill and oven. (effect of cooking on food products e.g proteins)</p> <p>Skill 5: Use of equipment including electrical</p> <p>Skill 6: Cooking methods: Water based using the hob and dry heat and fat based methods using the hob. (effect of cooking on nutrients in foods)</p> <p>Skill 7: Prepare, combine and shape</p> <p>Skill 8: Sauce making including starch bases, emulsion and reduction. (gelatinization theory taught through practical)</p> <p>Skill 9: Tenderise and marinate</p> <p>Skill 10: Dough including making a variety of doughs (bread, pastry and pasta) and shaping and finishing. (links to shortening, development of gluten)</p> <p>Skill 11: Raising agents: eggs as a raising agent; chemical raising agents; steam as a raising agent and biological raising agents. (Functions of eggs taught through practical e.g. aeration)</p> <p>Skill 12: Setting mixtures including removal of heat and use of protein. (links to coagulation)</p> <p>NEA skill practice with research and investigations linked to the topic being studied.</p> <p>Students will also learn about the science of food through practical tasks when learning the knowledge behind it.</p> <p>Students will learn exam technique e.g. how to plan an extended answer questions</p>
<p>Assessment</p>	<p><i>Marking Point 1:</i></p> <p>A piece of practical work Students will complete an evaluation of a chosen practical session.</p>



	<p><i>Marking Point 2:</i> A piece of classwork: Extended Exam style question linked to food science. e.g raising agents.</p> <p><i>Marking Point 3:</i> A home learning task: Students will complete home learning task 2 - Research into chosen brief.</p>
Cultural enrichment	<p>Rewards Classroom rewards and opportunities will follow CHS reward criteria for routine points, star of the lesson etc. Individual rewards could be used as incentives to engage and enthuse students further in lessons.</p> <p>Great British Bake off (episodes of the show will assist students with understanding the functions of foods and how this can be applied to different food products this could include an in house bake off between students. Food Unwrapped- here students can gain further insight into the science behind foods. The secrets of your food- students can watch clips of the show to gain further insight into the science of different foods.</p>
Character	<div style="text-align: center;"></div> <p>QoS – Optimism</p> <p>Optimism- Students will be encouraged to show optimism when completing tasks by working beyond expectations and pushing themselves by believing they can succeed.</p> <p>Self-Responsibility- Responsibility for own learning and completing homework tasks and in class tasks on time and to the best of their ability ready for marking.</p> <p>Self- Help- Students should show independence and responsibility when completing tasks by using the resources available to them. This will be structured to meet the learner’s needs.</p>
Autumn 2	
Knowledge	<p>Students will know:</p> <p>Food Science</p> <ul style="list-style-type: none"> ○ Functional and chemical properties of food ○ How Proteins work in food: denaturation; coagulation and gluten formation discussing the scientific principles underlying these processes when preparing and cooking food. ○ The functional properties of carbohydrates in food: gelatinisation; dextrinization and caramelisation discussing the scientific principles underlying these processed when preparing and cooking food. <p>Students will know:</p> <p>Food Science</p> <ul style="list-style-type: none"> ○ The functional properties of Fats and oils in foods: shortening, aeration, plasticity, emulsification discussing the scientific principles underlying these processed when preparing and cooking food. ○ The functional properties of raising agents in food products: working characteristics, functional and chemical properties of raising agents. <p>Sensory Evaluation</p> <ul style="list-style-type: none"> ▪ Understand the difference between sensory analysis methods. Selecting appropriately. ▪ How to ensure a test is fair. ▪ How to test sensory qualities of a wide range of foods and combinations. <p><i>Students will use their knowledge of Food science to apply it to a sample Food investigation Task. This will provide students with the knowledge and understanding of how to carry out a piece of NEA, the expectations of the task as well as familiarising them with the mark scheme.</i></p>
Skills	<p>SKILLS:</p> <p>Skill 1: General practical skills (weigh and measure, prepare ingredients and equipment, cooking times, test for readiness, judge and modify sensory properties)</p> <p>Skill 2: Knife Skills (fruit and vegetables and meat fish or alternatives) (Links to Vitamins and minerals and proteins)</p> <p>Skill 3: Preparing fruit and vegetables (Links to vitamins and minerals, effects of preparation on foods e.g nutritional loss, sensory appeal)</p>



	<p>Skill 4: Use of the cooker including grill and oven. (effect of cooking on food products e.g proteins)</p> <p>Skill 5: Use of equipment including electrical</p> <p>Skill 6: Cooking methods: Water based using the hob and dry heat and fat based methods using the hob. (effect of cooking on nutrients in foods)</p> <p>Skill 7: Prepare, combine and shape</p> <p>Skill 8: Sauce making including starch bases, emulsion and reduction. (gelatinization theory taught through practical)</p> <p>Skill 9: Tenderise and marinate</p> <p>Skill 10: Dough including making a variety of doughs (bread, pastry and pasta) and shaping and finishing. (links to shortening, development of gluten)</p> <p>Skill 11: Raising agents: eggs as a raising agent; chemical raising agents; steam as a raising agent and biological raising agents. (Functions of eggs taught through practical e.g. aeration)</p> <p>Skill 12: Setting mixtures including removal of heat and use of protein. (links to coagulation)</p> <p>NEA skill practice with research and investigations linked to the topic being studied.</p> <p>Students will also learn about the science of food through practical tasks when learning the knowledge behind it.</p> <p>Students will learn exam technique e.g. how to plan an extended answer questions</p>
<p>Assessment</p>	<p><i>Marking Point 1:</i> A home learning task: Students will complete home learning assignment 1 Investigation write up</p> <p><i>Marking Point 2:</i> A piece of classwork: Evaluation and Analysis of results</p> <p><i>Marking Point 3:</i> Progress Test: Formal Assessment At a time decided by the school management, all students will sit a progress test.</p>
<p>Cultural enrichment</p>	<p>Rewards Classroom rewards and opportunities will follow CHS reward criteria for routine points, star of the lesson etc. Individual rewards could be used as incentives to engage and enthuse students further in lessons.</p> <p>Great British Bake off (episodes of the show will assist students with understanding the functions of foods and how this can be applied to different food products this could include an in house bake off between students. Food Unwrapped- here students can gain further insight into the science behind foods. The secrets of your food- students can watch clips of the show to gain further insight into the science of different foods.</p>
<p>Character</p>	<div style="text-align: center;">  <p>Empathy</p> </div> <p>QoS – Empathy</p> <p>Empathy- self and peer assessment and group discussions. Students will work in teams and buddies during the practice NEA so this will allow them so support and nurture one another.</p> <p>Caring for others- working with others during the practice NEA. Students will be encouraged to support one another during completion.</p> <p>Equality and Equity- working as a team and all taking on an equal role.</p>
<h2>Spring 1</h2>	
<p>Knowledge</p>	<p>Students will know:</p> <p>The different macronutrients (Protein; Fat and Carbohydrates)</p> <ul style="list-style-type: none"> • Effects on health of deficiency and excess of nutrients. • Explain effects of deficiency and excess. • Related dietary reference values for each. • The percentage of recommended energy sources from nutrients (protein 15%, fat 35%, and carbs 50%) <p>The different micronutrients (vitamins, minerals and water)</p> <ul style="list-style-type: none"> • associated deficiencies • Identify the fat and water soluble vitamins • The importance of hydration and the functions of water in the diet. • Related dietary reference values • The difference between fat and water soluble vitamins



	<ul style="list-style-type: none"> • How preparation and cooking affect the nutritional properties of water soluble vitamins • The role of antioxidants in protecting body cells from damage and reducing the risk of cancer and heart disease. <p>How to carry out nutritional analysis</p> <ul style="list-style-type: none"> • How to use current nutritional information and data e.g food tables, nutritional analysis software to calculate energy and nutritional value. <p>Factors affecting food choice: Students will recap some factors affecting food choice linking to diet and health</p> <ul style="list-style-type: none"> • PAL • Healthy Eating • Lifestyles. • Special Diets
Skills	<p>SKILLS:</p> <p>Skill 1: General practical skills (weigh and measure, prepare ingredients and equipment, cooking times, test for readiness, judge and modify sensory properties) (food production)</p> <p>Skill 2: Knife Skills (fruit and vegetables and meat fish or alternatives) (food production, links to vitamins and minerals and proteins)</p> <p>Skill 3: Preparing fruit and vegetables (vitamins and minerals, balanced diets)</p> <p>Skill 4: Use of the cooker including grill and oven.</p> <p>Skill 5: Use of equipment including electrical (equipment choice and reasons)</p> <p>Skill 6: Cooking methods: Water based using the hob and dry heat and fat based methods using the hob. (nutrient loss)</p> <p>Skill 7: Prepare, combine and shape</p> <p>Skill 8: Sauce making including starch bases, emulsion and reduction.</p> <p>Skill 9: Tenderise and marinate (effects on meat fibers)</p> <p>Skill 10: Dough including making a variety of doughs (bread, pastry and pasta) and shaping and finishing.</p> <p>Skill 11: Raising agents: eggs as a raising agent; chemical raising agents; steam as a raising agent and biological raising agents.</p> <p>Skill 12: Setting mixtures including removal of heat and use of protein.</p> <p>Exam skill practice with exam style questions linked to the topic being studied. Students will learn exam technique e.g. how to plan an extended answer questions</p>
Assessment	<p><i>Marking Point 1:</i> A piece of classwork: Students will complete a task on deficiencies and excess of nutrients.</p> <p><i>Marking Point 2:</i> A home learning task: Analysis of nutritional labelling.</p> <p><i>Marking Point 3:</i> A piece of classwork: Students will produce a piece of work where they look at different scenario factors which affect food choice.</p>
Cultural enrichment	<p>Nutritionist (potential visit in school from a registered nutritionist to speak to students about Healthy eating guidelines and their role in the community.</p>
Character	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>QoFS – Creativity & Curiosity</p> <p>Creativity- Students will have the opportunity to show creativity through tasks such as adapting recipes for special dietary needs, creating and adapting dishes and through their cooking skills.</p> <p>Curiosity- Students will be encouraged to show curiosity when exploring different nutrients, their uses and deficiencies. Curiosity will also be shown through analyzing data and labels.</p> <p>Social Responsibility- students will have the opportunity to work with others taking on various roles such as leader.</p>
Spring 2	
Knowledge	<p>Students will know: Food provenance:</p>



	<ul style="list-style-type: none"> • Where and how ingredients are grown, reared and caught. • Sustainable farming (free range, organic, GM etc.) • Environmental issues associated with food (seasonal, sustainability, transportation, locally produced, carbon footprint, environmental issues related to packaging) <p>Sustainability of food</p> <ul style="list-style-type: none"> • Climate change • global warming • Fairtrade • effects of drought and flooding • Availability of food. <p>Food Processing:</p> <ul style="list-style-type: none"> • How processing affects the sensory and nutritional properties of ingredients including understanding how vitamins are lost through heating and drying. <ul style="list-style-type: none"> ○ Understand the effect of heating and drying on the sensory characteristics of milk. <p>Sensory Evaluation</p> <ul style="list-style-type: none"> ▪ Understand the difference between sensory analysis methods. Selecting appropriately. ▪ How to ensure a test is fair. ▪ Evaluate how senses guide. ▪ How to test sensory qualities of a wide range of foods and combinations
<p>Skills</p>	<p>SKILLS:</p> <p>Skill 1: General practical skills (weigh and measure, prepare ingredients and equipment, cooking times, test for readiness, judge and modify sensory properties) (food production)</p> <p>Skill 2: Knife Skills (fruit and vegetables and meat fish or alternatives) (food production, links to vitamins and minerals and proteins)</p> <p>Skill 3: Preparing fruit and vegetables (vitamins and minerals, balanced diets)</p> <p>Skill 4: Use of the cooker including grill and oven.</p> <p>Skill 5: Use of equipment including electrical (equipment choice and reasons)</p> <p>Skill 6: Cooking methods: Water based using the hob and dry heat and fat based methods using the hob. (nutrient loss)</p> <p>Skill 7: Prepare, combine and shape</p> <p>Skill 8: Sauce making including starch bases, emulsion and reduction.</p> <p>Skill 9; Tenderise and marinate (effects on meat fibers)</p> <p>Skill 10: Dough including making a variety of doughs (bread, pastry and pasta) and shaping and finishing.</p> <p>Skill 11: Raising agents: eggs as a raising agent; chemical raising agents; steam as a raising agent and biological raising agents.</p> <p>Skill 12: Setting mixtures including removal of heat and use of protein.</p> <p>Exam skill practice with exam style questions linked to the topic being studied. Students will learn exam technique e.g. how to plan an extended answer questions</p>
<p>Assessment</p>	<p><i>Marking Point 1:</i> Home learning task: Students will complete a project on an area of sustainability.</p> <p><i>Marking Point 2:</i> A piece of classwork: Exam question on the moral, ethical and environmental impacts of sustainable farming.</p> <p><i>Marking Point 3:</i> Progress Test: Formal Assessment At a time decided by the school management, all students will sit a progress test.</p>
<p>Cultural enrichment</p>	<p>Farm Visit- To see how sustainable farming takes place. To understand the running of a farm and animal welfare.</p> <p>Food Inc- here students can explore globalization and the effects on the food industry.</p>
<p>Character</p>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>QoS – Responsibility & Reflection</p>



	<p>Responsibility- Practical work assessment tasks, Health and safety links. (students will show responsibility through working independently and safely in the kitchen and setting their own personal targets)</p> <p>Reflection- evaluation tasks, self and peer assessment opportunities. (Students will reflect on their own learning through MAD time and during evaluation tasks where they will reflect on the practical they have just completed).</p> <p>Social responsibility- discuss and reflect on links to developed and developing world and the impact of farming and food production on society and the environment</p>
<h2>Summer 1</h2>	
<p>Knowledge</p>	<p>Students will know:</p> <p>British and International Cuisine</p> <ul style="list-style-type: none"> ▪ Develop traditional and modern variations of recipes showing creativity. ▪ Select the correct cooking equipment and methods explaining reasons for choice. ▪ Show awareness of eating patterns and presentation styles used by different cultures. <p>Food processing and production</p> <ul style="list-style-type: none"> • Primary processing related to the: rearing, fishing, growing, harvesting and cleaning of the raw food material (milling of wheat to flour, heat treatment of milk, pasteurised, UHT, sterilised and micro-filtered (milk) • Secondary processing related to: how the raw primary processed ingredients are processed to produce a food product (flour into bread and/or pasta, milk into cheese and yoghurt, fruit into jams) <p>How to carry out nutritional analysis</p> <ul style="list-style-type: none"> • How to use current nutritional information and data e.g. food tables, nutritional analysis software to calculate energy and nutritional value. <p>Sensory Evaluation</p> <ul style="list-style-type: none"> ▪ Understand the difference between sensory analysis methods. Selecting appropriately. ▪ How to test sensory qualities of a wide range of foods and combinations <p><i>Students will complete a mini Food Preparation NEA linked to British and international cuisines. Students will also make links to special diets and age ranges.</i></p> <p><i>Students will look at food processing and production during the skills development sections of the NEA. Here they will trial a number of high and medium level skills, before then cooking their final dishes.</i></p>
<p>Skills</p>	<p>SKILLS:</p> <p>Skill 1: General practical skills (weigh and measure, prepare ingredients and equipment, cooking times, test for readiness, judge and modify sensory properties) (food production)</p> <p>Skill 2: Knife Skills (fruit and vegetables and meat fish or alternatives) (food production, links to vitamins and minerals and proteins)</p> <p>Skill 3: Preparing fruit and vegetables (vitamins and minerals, balanced diets)</p> <p>Skill 4: Use of the cooker including grill and oven.</p> <p>Skill 5: Use of equipment including electrical (equipment choice and reasons)</p> <p>Skill 6: Cooking methods: Water based using the hob and dry heat and fat based methods using the hob. (nutrient loss)</p> <p>Skill 7: Prepare, combine and shape</p> <p>Skill 8: Sauce making including starch bases, emulsion and reduction.</p> <p>Skill 9: Tenderise and marinate (effects on meat fibers)</p> <p>Skill 10: Dough including making a variety of doughs (bread, pastry and pasta) and shaping and finishing.</p> <p>Skill 11: Raising agents: eggs as a raising agent; chemical raising agents; steam as a raising agent and biological raising agents.</p> <p>Skill 12: Setting mixtures including removal of heat and use of protein.</p> <p>Students will have the opportunity to showcase a range of skills in relation to their chosen brief as part of their sample NEA (Food preparation).</p> <p>Skills will vary depending on students chosen task, final dishes chosen and target grade.</p>
<p>Assessment</p>	<p><i>Marking Point 1:</i> A piece of classwork: Research into the History of British Cuisine.</p> <p><i>Marking Point 2:</i> Home learning task: Research for chosen brief (NEA sample Task).</p> <p><i>Marking Point 3:</i> A piece of classwork:</p>



	Technical skills task.
Cultural enrichment	<p>Chef demonstration (students may have the reward of a chef coming into school and participating in a cook along or demonstration)</p> <p>Paul Hollywood city bakes (students can see traditional foods from different countries and cultures and how they are made through this tv series)</p> <p>Food Tasting (international cuisine) (students will be given the opportunity to sample a variety of multi-cultural foods from different cultures this can be done in food or via a visit to a food establishment e.g La Tasca.</p>
Character	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>QofS – Practice & Resiliency</p> <p>Practice- high level practical skills will need to be continually practiced and students will need to become faster and more adept. Each student will have a clear idea of what they need to work on in order to reach targets or exceed them.</p> <p>Resiliency- Ongoing practical tasks, and target setting. (Students will continuously reflect on their practical ability setting targets and working on these targets in the coming practical sessions.) Feedback loops.</p> <p>Openness- sharing ideas, thoughts and opinions on factors affecting food choice focusing on cultural influences. (This will be embedded in class discussion around cultural influences and modern and traditional cuisines)</p>

Summer 2

Knowledge	<p>Students will know:</p> <p>British and International Cuisine</p> <ul style="list-style-type: none"> ▪ Develop traditional and modern variations of recipes showing creativity. ▪ Select the correct cooking equipment and methods explaining reasons for choice. ▪ Show awareness of eating patterns and presentation styles used by different cultures. <p>Food processing and production</p> <ul style="list-style-type: none"> • Primary processing related to the: rearing, fishing, growing, harvesting and cleaning of the raw food material (milling of wheat to flour, heat treatment of milk, pasteurised, UHT, sterilised and micro-filtered (milk) • Secondary processing related to: how the raw primary processed ingredients are processed to produce a food product (flour into bread and/or pasta, milk into cheese and yoghurt, fruit into jams) <p>How to carry out nutritional analysis</p> <ul style="list-style-type: none"> • How to use current nutritional information and data e.g. food tables, nutritional analysis software to calculate energy and nutritional value. <p>Sensory Evaluation</p> <ul style="list-style-type: none"> ▪ Understand the difference between sensory analysis methods. Selecting appropriately. ▪ How to test sensory qualities of a wide range of foods and combinations <p><i>Students will complete a mini Food Preparation NEA linked to British and international cuisines. Students will also make links to special diets and age ranges.</i></p> <p><i>Students will look at food processing and production during the skills development sections of the NEA. Here they will trial a number of high and medium level skills, before then cooking their final dishes.</i></p>
Skills	<p>SKILLS:</p> <p>Skill 1: General practical skills (weigh and measure, prepare ingredients and equipment, cooking times, test for readiness, judge and modify sensory properties) (food production)</p> <p>Skill 2: Knife Skills (fruit and vegetables and meat fish or alternatives) (food production, links to vitamins and minerals and proteins)</p> <p>Skill 3: Preparing fruit and vegetables (vitamins and minerals, balanced diets)</p> <p>Skill 4: Use of the cooker including grill and oven.</p> <p>Skill 5: Use of equipment including electrical (equipment choice and reasons)</p> <p>Skill 6: Cooking methods: Water based using the hob and dry heat and fat based methods using the hob. (nutrient loss)</p> <p>Skill 7: Prepare, combine and shape</p> <p>Skill 8: Sauce making including starch bases, emulsion and reduction.</p> <p>Skill 9; Tenderise and marinate (effects on meat fibers)</p>



	<p>Skill 10: Dough including making a variety of doughs (bread, pastry and pasta) and shaping and finishing. Skill 11: Raising agents: eggs as a raising agent; chemical raising agents; steam as a raising agent and biological raising agents. Skill 12: Setting mixtures including removal of heat and use of protein.</p> <p>Students will have the opportunity to showcase a range of skills in relation to their chosen brief as part of their sample NEA (Food preparation). Skills will vary depending on students chosen task, final dishes chosen and target grade.</p>
Assessment	<p>Students will be completing work which will form a portfolio of evidence and will be marked in line with AQA requirements (examining body). <i>The marking of this work in contribute towards 30% of students final grade (Pass- Distinction*)</i></p> <p>Marking Point 1 Assessment of research task that contributes to the <u>planning and development</u> phase of the controlled assessment. (Up to 12 marks available).</p> <p>Marking Point 2 Assessment of research task that contributes to the <u>planning and development</u> phase of the controlled assessment. (Up to 12 marks available).</p> <p>Marking Point 3 Assessment of research task that contributes to the <u>planning and development</u> phase of the controlled assessment. (Up to 12 marks available).</p>
Cultural enrichment	<p>Chef demonstration (students may have the reward of a chef coming into school and participating in a cook along or demonstration) Paul Hollywood city bakes (students can see traditional foods from different countries and cultures and how they are made through this tv series) Food Tasting (international cuisine) (students will be given the opportunity to sample a variety of multi-cultural foods from different cultures this can be done in food or via a visit to a food establishment e.g La Tasca).</p>
Character	<div data-bbox="466 1104 544 1182" data-label="Image"></div> <p>QofS – Motivation</p> <p>Motivation- self and peer assessments tasks and feedback from teacher assessments. (students will be motivated from feedback and responses to wishes)</p> <p>Self Help- Seek help independently using resources available.</p> <p>Self- Responsibility- Responsibility for own learning and completing homework tasks and in class tasks on time and to the best of their ability ready for marking.</p>