

Curriculum Map  
Food Preparation and Nutrition  
Year 10

	What is being learnt?	Remote learning links
<p>Autumn 1</p> <p>Macronutrients and Food Science Protein, Fats and Oils</p> <p>Knife skills Measuring and weighing Food presentation Whisking Kneading</p> <p>Carbohydrates</p>	<p><b><u>Topic Areas</u></b></p> <ul style="list-style-type: none"> <li>• Course introduction</li> <li>• <b>Knife Skills recap</b></li> <li>• Protein Nutrition LBV and HBV excess deficiency</li> <li>• Protein Science all different aspects coagulation, foams gluten formation. Presentation with diagrams</li> <li>• <b>Scrambled egg</b> Practical relating to initial food science including denaturation, coagulation and Dextrinisation.</li> <li>• Protein and food science</li> <li>• Denaturation</li> <li>• <b>Lemon Flan Practical (p108)</b> denaturisation</li> <li>• Gluten Formation</li> <li>• <b>Bread Rolls Practical (p112)</b></li> <li>• Foams</li> <li>• <b>Meringues foams</b></li> <li>• Carbohydrates Nutrition excess deficiency sources and reasons the body requires them</li> <li>• Carbohydrate Science</li> </ul>	<p><a href="https://illuminate.digital/aqafood/">https://illuminate.digital/aqafood/</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/znnqghv/revision/1">https://www.bbc.co.uk/bitesize/guides/znnqghv/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/znnqghv/video">https://www.bbc.co.uk/bitesize/guides/znnqghv/video</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/znnqghv/test">https://www.bbc.co.uk/bitesize/guides/znnqghv/test</a></p> <p><a href="https://www.foodafactoflife.org.uk/">https://www.foodafactoflife.org.uk/</a></p>

<p>Autumn 2</p> <p>Fats and Oils</p> <p>Raising Agents</p> <p>Roux sauce,</p> <p>Carbohydrates recap</p> <p>Micronutrients</p> <p>Vitamins</p> <p>Minerals</p> <p>Hydration</p>	<p><b><u>Topic Areas</u></b></p> <ul style="list-style-type: none"> <li>• Fats nutrition, sources functions excess deficiency</li> <li>• <b>Chocolate Orange Cake Practical (p128)</b></li> <li>• Fat Science <ul style="list-style-type: none"> <li>• Shortening</li> </ul> </li> <li>• <b>Pastry Practical Pasties (p132)</b></li> <li>• Aeration</li> <li>• Emulsification what happens and how. Scientific explanation of this.</li> <li>• Heating Fats and Oils</li> <li>• Raising Agents</li> <li>• Vitamins nutrition</li> <li>• <b>Puff Pastry practical</b> (<a href="https://www.bbcgoodfood.com/recipes/rough-puff-pastry">https://www.bbcgoodfood.com/recipes/rough-puff-pastry</a>)</li> <li>• Micro nutrients – vitamins fat/water soluble Fat soluble: A,D,E,K</li> <li>• Water Soluble: B,C and ACE (Antioxidant vitamins)</li> <li>• The functions • main sources • effects of deficiency and excess • related dietary reference values.</li> <li>• Water soluble: how preparation and cooking affect the nutritional properties of food.</li> <li>• <b>Swiss roll</b></li> <li>• Antioxidant vitamins and function in the body ACE</li> <li>• Minerals</li> </ul>	<p><a href="https://illuminate.digital/aqafood/">https://illuminate.digital/aqafood/</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/znnqghv/revision/1">https://www.bbc.co.uk/bitesize/guides/znnqghv/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/znnqghv/video">https://www.bbc.co.uk/bitesize/guides/znnqghv/video</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/znnqghv/test">https://www.bbc.co.uk/bitesize/guides/znnqghv/test</a></p> <p><a href="https://www.bbcgoodfood.com/recipes/rough-puff-pastry">https://www.bbcgoodfood.com/recipes/rough-puff-pastry</a></p> <p><a href="https://www.foodafactoflife.org.uk/">https://www.foodafactoflife.org.uk/</a></p>
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	<ul style="list-style-type: none"> <li>• Minerals; Identifying all minerals required in the diet.</li> <li>• calcium • iron • sodium (salt) • fluoride • iodine • phosphorus</li> <li>• Hydration</li> <li>• The importance of hydration and the functions of water in the diet</li> <li>• <b>Additional practical, fruit infused water/antioxidant salad</b></li> </ul>	
<p>Spring 1</p> <p>Food poisoning Food safety Food spoilage</p>	<ul style="list-style-type: none"> <li>• Food poisoning, symptoms, causes and prevention. –</li> <li>• Recall Food poisoning bacteria names and types. Food Safety- Legislation- Types of bacterial contamination. Mind map to show all possible causes of Bacterial contamination.</li> <li>• Food Spoilage how bacteria, yeasts and moulds spoil food- Use of enzymes to prevent food spoilage – Enzymic Browning. Enzymes are biological catalysts usually made from protein.</li> <li>• <b>Pasta and white sauce making (100g '00' Flour to 1 egg)</b></li> <li>• Use of bacteria, acids, and microorganisms in food processing – cheese, yoghurt and milk. Demo homemade Cheese/ Video to explain mould used in blue cheeses. Yoghurt- probiotic- Starter: Yakult video – healthy gut bacteria<b>Meatballs and Ragu sauce</b></li> <li>• Buying, preparing and storing food- conditions and ambient temperatures. The growth conditions for</li> </ul>	<p><a href="https://illuminate.digital/aqafood/">https://illuminate.digital/aqafood/</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z77v3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/z77v3k7/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z77v3k7/video">https://www.bbc.co.uk/bitesize/guides/z77v3k7/video</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z77v3k7/test">https://www.bbc.co.uk/bitesize/guides/z77v3k7/test</a></p> <p><a href="https://www.foodafactoflife.org.uk/">https://www.foodafactoflife.org.uk/</a></p>

	<p>microorganisms and enzymes and the control of food spoilage.</p> <ul style="list-style-type: none"> <li>● <b>Eaton Mess (raspberry fruit coulis and meringues)</b></li> <li>● Reheating, thawing and preparing food, safety and prep.</li> </ul>	
<p>Spring 2</p> <p>Included within all other terms work through practical tasks:</p> <p>Recap:</p> <p>How food is cooked</p> <p>Why food is cooked</p> <p>Heat transfer</p> <p>Why food is cooked</p> <p>Making food safe to eat (link to food safety)</p> <p>Food choice</p> <p>Making informed food choices</p> <p>Dietary guidelines</p>	<ul style="list-style-type: none"> <li>● Why food is cooked and how heat is transferred to food. Conduction, Convection, Radiation,</li> <li>● Marinated chicken and flatbreads grilled (chicken breast)</li> <li>● Research task: The reasons why food is cooked and the different methods of heat transfer.</li> <li>● Developing mind maps into explanation of why food is cooked. – plan Vegetable cooking experiment/ hypothesis and background information into each cooking method, predictions made. Student led research.</li> <li>● Food is cooked to: <ul style="list-style-type: none"> <li>● make food safe to eat</li> <li>● develop flavours</li> <li>● improve texture</li> <li>● improve shelf life</li> <li>● give variety in the diet.</li> </ul> </li> <li>● How preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food. How heat is transferred to food through: <ul style="list-style-type: none"> <li>● conduction • convection • radiation.</li> </ul> </li> <li>● <b>Bacon and fried egg roll Part baked bread roll egg and bacon, convection conduction breakfast</b></li> <li>● Recap year 9</li> <li>● Dietary guidelines</li> </ul>	<p><a href="https://illuminate.digital/aqafood/">https://illuminate.digital/aqafood/</a></p> <p><a href="https://www.foodafactoflife.org.uk/">https://www.foodafactoflife.org.uk/</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z7yttv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z7yttv4/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z7yttv4/video">https://www.bbc.co.uk/bitesize/guides/z7yttv4/video</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z7yttv4/test">https://www.bbc.co.uk/bitesize/guides/z7yttv4/test</a></p>

<p>Eight tips for healthy eating Eatwell guide</p>	<ul style="list-style-type: none"> <li>• A balanced diet to provide the correct combination of food and nutrients for good health</li> <li>• The government’s guidelines for a healthy diet and the inclusion of new regulations as they are issued</li> <li>• Dietary needs for different stages of life Food allergies and intolerances</li> <li>• <b>Portioning chicken (choice chicken burgers breast coted fried) or chicken marinade legs and thighs)</b></li> <li>• The dietary reference values (DRVs) Macronutrients and micronutrients Calculation of nutritional values</li> <li>• Factors which influence food choice-</li> <li>• Energy needs Nutritional analysis. Food a fact of life explore food.</li> <li>• <b>Create a meal for teenagers based on dietary guidelines</b></li> <li>• Mind map of food choices-</li> <li>• Adding to food choice- main content- scenario lesson to explain and justify why individuals eat certain dishes and explain with examples.</li> <li>• Major diet related health issues and the relationship between diet nutrition and health. Recap from year 9</li> </ul>	<p><a href="https://www.bbc.co.uk/bitesize/guides/z7fw7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/z7fw7p3/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z7fw7p3/video">https://www.bbc.co.uk/bitesize/guides/z7fw7p3/video</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z7fw7p3/test">https://www.bbc.co.uk/bitesize/guides/z7fw7p3/test</a></p>
<p>Summer 1</p> <p>Religion and food choice</p> <p>Ethical choices</p> <p>Food production</p>	<ul style="list-style-type: none"> <li>• Food choice related to religion, culture, ethical and moral beliefs and medical conditions.</li> <li>• <b>Curry: Marinating meat</b></li> <li>• Fact finding research- share information on tables on different religions. Ethical and moral beliefs</li> <li>• Food labelling and marketing influences:</li> </ul>	<p><a href="https://illuminate.digital/aqafood/">https://illuminate.digital/aqafood/</a></p>

<p>Food labelling Marketing</p> <p>British and international cuisine</p> <p>Modifying and varying recipes</p> <p>Food a fact of life explore food</p>	<ul style="list-style-type: none"> <li>• How information about food available to the consumer, including labelling and marketing, influences food choice: Traffic light labelling lesson- decisions on law and non-law identifying requirements on labels- quiz on how this can influence- real life deals</li> <li>• How labels influence food choice</li> <li>• British and international cuisines: IT bases research to create a presentation on how different cultures cook, eat, and different traditions.</li> <li>• <b>Chelsea buns (enriched dough)</b></li> <li>• Distinctive features and characteristics of cooking</li> <li>• equipment and cooking</li> <li>• methods used, eating patterns, presentation styles, traditional and modern</li> <li>• variations of recipes.</li> </ul>	<p><a href="https://www.bbc.co.uk/food/cuisines">https://www.bbc.co.uk/food/cuisines</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zdr8y9q/revision/4">https://www.bbc.co.uk/bitesize/guides/zdr8y9q/revision/4</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zdr8y9q/video">https://www.bbc.co.uk/bitesize/guides/zdr8y9q/video</a></p>
<p>Summer 2</p> <p>Environmental impact and sustainability</p> <p>Food production and processing</p> <p>Food waste</p>	<ul style="list-style-type: none"> <li>• Food Sources- where and how ingredients are grown, reared and caught. Card sort of caught reared or grown- quiz on PowerPoint, explanations of each, video on Farm to fork – Presentation of each type of food source</li> <li>• Food and the environment:</li> <li>• Discover which foods are in season and understand logos to show sustainability</li> <li>• Differences between buying local foods and supporting farmers and food miles. – students to complete food mile task of different food.</li> </ul>	<p><a href="https://www.foodafactoflife.org.uk/">https://www.foodafactoflife.org.uk/</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zks8jty/revision/1">https://www.bbc.co.uk/bitesize/guides/zks8jty/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zks8jty/video">https://www.bbc.co.uk/bitesize/guides/zks8jty/video</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zks8jty/test">https://www.bbc.co.uk/bitesize/guides/zks8jty/test</a></p>

<p>Nea1 Practice task: Pastry</p> <p>Changing butter</p> <p>Changing flour</p> <p>Use of sensory testing kits</p>	<ul style="list-style-type: none"> <li>• seasonal foods • sustainability e.g. fish farming • transportation • organic foods • the reasons for buying locally produced food • food waste in the home/ food production/retailers • environment issues related to packaging • carbon footprint.</li> <li>• Sustainability of food- Computer based research task to produce information leaflet on how to become more sustainable.</li> <li>• The challenges to provide the world’s growing population with a sustainable, secure, supply of safe, nutritious and affordable high-quality food. Students must have an awareness of: • climate change • global warming • sustainability of food sources • insufficient land for growing food • availability of food • fairtrade • problems of drought and flooding • Genetically Modified (GM) foods • food waste.</li> <li>• Food processing and production:</li> <li>• Primary and secondary stages of processing and production. how processing affects the sensory and nutritional properties of ingredients- research task and information.</li> <li>• Quiz on how different foods are processed.</li> <li>• Technological developments associated with better health and food production:</li> <li>• cholesterol lowering spreads • health benefits of fortification • fortified foods: thiamin, niacin, calcium and iron added to white flour • folic acid and iron added to breakfast cereals • vitamins A and D added to fats and low fat spreads • the</li> </ul>	<p><a href="https://www.dailymotion.com/video/x3c4g04">https://www.dailymotion.com/video/x3c4g04</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zks8jty/revision/3">https://www.bbc.co.uk/bitesize/guides/zks8jty/revision/3</a></p>
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positive and negative aspects of the use of additives: colourings, emulsifiers and stabilisers, flavourings, and preservatives • the positive and negative aspects of Genetically Modified (GM) foods.

NEA1 PRACTICE

- NEA1 practice task. Pastry Different butters flour timings. Use of sensory testing kits
- Excel for graphs
- Scientific write up of results
- Use of Illuminate bundle for layout and guidelines.

<https://www.bbc.co.uk/teach/class-clips-video/design-and-technology-gcse-how-our-sense-guide-food-choices/z78fbdm>

<https://illuminate.digital/aqafood/>