




# YEAR 10 SUMMER TERM

'An ambitious curriculum that meets the needs of all'

## Medium Term Planning - Topic: Food Safety and Food Science

<b>Curriculum Intent</b>	<p>In addition to working further on objectives from Year 10, pupils will be taught, following National Curriculum guidelines, the following this term:</p> <ul style="list-style-type: none"> <li>• Microorganisms</li> <li>• Signs of food spoilage</li> <li>• Use of microorganisms in food productions</li> <li>• Bacterial contamination</li> <li>• Personal hygiene</li> <li>• Types of bacteria</li> <li>• Food poisoning</li> <li>• Buying, storing, handling, preparing and cooking foods</li> <li>• Protein food science</li> <li>• Carbohydrate food science</li> <li>• Properties of fats and oils – shortening, aeration, plasticity</li> <li>• Emulsification</li> <li>• Raising agents</li> </ul>
<b>Skills/Assessment Objective Links</b>	
<b>Spiritual, moral, social, and cultural development</b>	<p><b>SMSC:</b> Consideration of others when carrying out practical work, helping others where possible, working as a cooperative team in unit areas. Consider reducing fuel usage in cooking methods section.</p> <p><b>PSHE/British Values:</b> Taking responsibility for personal hygiene and the safety of food.</p> <p><b>Skills Builder:</b> weighing, measuring, personal hygiene, use of equipment, organization, time management, planning investigations, interpreting results, evaluating, drawing conclusions, choosing suitable cooking methods for different foods, knowing about cross contamination and how to avoid it.</p>
<b>Numeracy</b>	Accurate weighing, measuring, use of hob and oven for temperature control, accurate measuring for investigation work, calculating costs of recipes, altering ratios and portions, portion control
<b>Literacy</b>	<p><b>Vocabulary Tier 2:</b> fuel, energy, reduce, modify, adapt, change</p> <p><b>Vocabulary Tier 3:</b> heat transfer, conduction, convection, radiation, raising agent, leavened, unleavened, steam, carbon dioxide, chemical, biological, mechanical, electromagnetic rays, cooking methods, protein, carbohydrate, lipids, fats, oils, denaturation, coagulation, gelatinization, caramelization, dextrinization, aeration, foaming, shortening, emulsifier, emulsification, curdling, marinade/marinate, gluten, plasticity,</p> <p><b>Reading:</b> textbook, fact sheets, PowerPoints, recipes, yeast, bicarbonate of soda, baking powder</p> <p><b>Writing:</b> answers in booklets, instructional writing, evaluations, extended writing, long response exam essays</p> <p><b>Oracy:</b> answering questions, giving opinions, evaluating own and other's work</p>
<b>Becoming future ready</b>	<b>Careers/Employability:</b> food preparation roles, food science laboratory roles, food production roles
<b>Adaptation</b>	Throughout this topic, quality first teaching will provide differentiation:
<b>QFT/SEND Provision</b>	<p><b>By product:</b> through practical work food products will vary in standard and quality depending on ability and support provided</p> <p><b>By resource:</b> Booklets and factsheets provide stretch and challenge and scaffolding, word banks, literacy booklets</p> <p><b>By Intervention:</b> by providing different levels of supervision and support, especially with practical activities</p> <p><b>By Progressive Questioning:</b> exploring pupils' understanding through interactive dialogue including in metacognition starters</p> <p><b>By Grouping:</b> according to prior attainment, gender, social preference, preferred learning style.</p> <p><b>By Task:</b> Pupils will be involved in the identification of targets which are meaningful to them and in the selection of an appropriate task from the given range.</p> <p><b>By Offering Optional Activities:</b> In class or as homework, to extend learning. Pupils will be encouraged to present the meals they make at home as a full meal, meeting the requirements of the Eatwell Guide and Dietary Guidelines. They will be asked to reflect on their own and family's diet and suggest modifications. This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work.</p>
<b>Implementation</b>	<p>To be able to:</p> <ul style="list-style-type: none"> <li>• Carry out practical work safely and hygienically</li> </ul>

<b>Curriculum Delivery</b>	<ul style="list-style-type: none"> <li>• Demonstrate good time management and organisation in practical work</li> <li>• Produce good quality, well finished food products and know how they can be served as : following the guidance of the Eatwell Guide and dietary guidelines</li> <li>• Describe factors that affect choice of cooking methods</li> <li>• Explain why food is cooked</li> <li>• Choose appropriate cooking methods</li> <li>• Know the health aspects of different cooking methods</li> <li>• Use raising agents correctly</li> <li>• Describe the functions of raising agents</li> <li>• Explain how raising agents work</li> <li>• Make well risen food products using a range of raising agents</li> <li>• Describe how protein reacts to heating, acids and mechanical agitation</li> <li>• Describe denaturation and coagulation</li> <li>• Demonstrate foaming and coagulation in practicals</li> <li>• Describe how starches react when heated – moist and dry heat</li> <li>• Describe how sugar reacts to heat</li> </ul>	
<b>Learning Outcomes (Knowledge)</b>	Red denotes interleaving; aspects of knowledge covered previously.	
<b>Current learning to be developed in the future within:</b>	<p>Practical work will continue to be developed with complex skills building throughout the year in preparation for the NEA2.</p> <p>Food science will be studied as an independent investigation for NEA1.</p> <p>Food choice will be linked in to future practicals and included when discussing seasonal, free range versus intensive, organic, ethical concerns.</p>	
<b>Assessment</b>	Refer to assessment maps for formative and summative assessment opportunities.	
<b>Impact</b>	Attainment and Progress – Refer to assessment results / data review documentation.	