



## CURRICULUM OVERVIEW

### Food Technology



A Lakelands Food Technologist student should be creative when cooking but also have scientific and nutritional knowledge about the food around us.

#### Lakelands Whole Academy Curriculum Intent:

Our aim is to provide a diverse, accessible, challenging and inspiring curriculum for the students of Lakelands, our core purpose to develop well-rounded, confident young people, with the integrity, resilience and high aspirations to thrive in the future. The curriculum is designed to provide them with the core knowledge they need to succeed in education, and to become successful members of society. We encourage them to be curious and open-minded, and develop the necessary critical, creative and problem-solving skills to be able to make a difference in their future lives. All students benefit from a culturally enriching curriculum that has depth, breadth and regular revisiting of knowledge to give them the confidence to succeed. It is a curriculum designed to encourage learners to step outside their comfort zone and embrace challenge. By drawing on the best that's been thought, said and done in each subject, we hope that our curriculum enables our young people to appreciate and participate in the full richness of the human experience.

#### Food Technology Curriculum Intent:

Food and Nutrition in our school will equip students with the knowledge, understanding and skills required to cook and apply the principles of food science, nutrition, and healthy eating. Our curriculum will encourage students to cook and enable them to make informed decisions about a wide range of further learning opportunities and career pathways as well as develop vital life skills that enable them to feed themselves and others affordably and nutritiously, now and later in life. Through food and nutrition, students will demonstrate effective and safe cooking skills by planning, preparing and cooking, using a variety of food commodities, cooking techniques and equipment. They will develop knowledge and understanding of the functional properties and chemical processes as well as the nutritional content of food and drinks. They will learn about the relationship between diet, nutrition and health, including the physiological and psychological effects of poor diet and health. They will examine the economic, environmental, ethical, and socio-cultural influences on food availability, production processes, and diet and health choices. Students will be expected to demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing, cooking and serving food. They will need to understand and explore a range of ingredients and processes from different culinary traditions (traditional British and international), to inspire new ideas or modify.

#### How the Food Technology curriculum links to our core Curriculum Principles:

Lifelong Learning	We equip students to be able to enquire and explore the subject at a greater level and depth. We will ensure they have excellent practical skills as well as sufficient knowledge and understanding to take the next step in their lifelong learning.
Aspiration to succeed	We allow pupils to have sufficient knowledge, skills and enthusiasm to pursue further study, or lifelong learning in the subject of food.
Knowledge building	We build sufficient skills to be able to work independently to utilise what they know to survive outside of the school environment. They will fundamentally be able to produce good healthy food, safely and affordably.
Empathy for others	We encourage students to cooperate effectively, consider different perspectives and appreciate other cultures.

## IMPLEMENTATION

<b>Year 8 Curriculum Implementation</b> In Year 8, our students are introduced to Food technology, some for the first time. Student initially learn about the importance of health and safety and the foundation of making healthy lifestyle choice. This is done through learning about the nutrient that are built up of the Eat Well Guide. During Year 8 they are also introduced to the basics of Food Science which gets developed throughout the years in readiness for KS4. Students then go on to learn about food sources and where the food they eat originates from.		
	Knowledge and skills	Assessment/ Practical's
1	<b><u>Health &amp; Safety:</u></b> Students begin Year 8 by learning the foundations of food Health and Safety. This is to ensure students have a secure understanding of the principles of cleaning, preventing cross-contamination, chilling and cooking food thoroughly. This half term, students will also learn to recall all key health and safety rules in the food room. They will come to understand the expectation and importance of cleaning after cooking. Students will be taught this through methods such as teacher-led demonstration, practicals and theory work to ensure they have a true understanding and can complete basic tasks safely in the classroom. The main practical focus in this half term is to introduce knife safety, grill safety and hob safety. Students will also be introduced to the Eat Well Guide which will be explored more in-depth throughout the year where they will link into practicals.	<b><u>Practical:</u></b> <ol style="list-style-type: none"> <li><b>Rainbow Salad</b> (assessing knife skill)</li> <li><b>Pizza Muffins</b> (assessing grill safety &amp; knife skill &amp; grating)</li> </ol> <b><u>Assessment:</u></b> <ol style="list-style-type: none"> <li>spot the hazards within the kitchen with annotation to what the risk is and how it should be corrected.</li> </ol>
2	<b><u>Macronutrients &amp; The Eat Well Guide:</u></b> Students will start to learn the Eat Well Guide and the functions of nutrients needed by humans. This half term, Year 8 will learn about macronutrients starting with carbohydrates, which will explore complex and simple carbohydrates. To strengthen their knowledge on carbohydrates, they will explore how to read food labels to identify carbohydrates and sugar in food and drinks. This allows them to develop the skill to apply their knowledge in real life. The practical linked to carbohydrates theory is fruit crumble where they will learn knife skills, oven safety and the rubbing in method. Students will then move onto the second macronutrient, protein. They will learn the functions of protein in the body and learn about different types of proteins. Finally, they will learn about the third macronutrient which is fats and oils. Again, students will learn the functions of fats and oils in a person's diet along with excess and deficiency of fats in the diet.	<b><u>Practical:</u></b> <ol style="list-style-type: none"> <li><b>Fruit Crumble</b> (assessing oven and shortening)</li> <li><b>Fats &amp; Oils taste testing</b></li> </ol> <b><u>Assessment:</u></b> <ol style="list-style-type: none"> <li>Case study of someone old/young/illness and research why it is needed- this will be part one of the assessment (carbohydrates or protein). Students should be able to state why that nutrient is needed, make adaptations for that individual, apply that knowledge into recipes and state what would happen if that individual was deficient in that nutrient.</li> </ol>
3	<b><u>Micronutrients &amp; Dairy and Alternatives:</u></b> Building on their knowledge of the Eat Well Guide, the students then will learn about micronutrients in the diet while still exploring the Eat Well Guide. Students will start by learning the functions of fruit and vegetables in the diet as well	<b><u>Practical:</u></b> <ol style="list-style-type: none"> <li><b>Tomato Soup</b> (assessing simmering, hob &amp; electric liquidiser safety)</li> </ol>

	<p>as developing their knowledge of vitamins and minerals found in fruit and vegetables. They then will link their theory knowledge by undertaking a practical in which they will make tomato soup, including vegetables in the soup that are seasonal. Students will develop skills of simmering, safe use of the hob and using the electric liquidiser safely. Year 8 students will then learn about dairy and alternatives and learn about the functions of dairy in the diet and explore where dairy can be sourced from. To strengthen their knowledge on how dairy can be sourced and processed, the class will work in groups and make butter from cream or cheese. This will allow students to understand the foundations of food processing. Finally, to bring all the nutrition unit together, student will take part in a practical where they make muffins. This is to follow guidance of the Eat Well Guide where we use all the nutrients that make up the Eat Well Guide (carbohydrates, dairy, fruit &amp; vegetables, fats and oils). Students gain understanding the importance of food choices that can be made – how the food we eat provides nutrients and energy, whilst considering different requirements through life.</p>	<ol style="list-style-type: none"> <li>2. <b>Muffins</b> (assessing sieve and whisk use to understand raising agents and link into oils)</li> <li>3. <b>Group work of making butter &amp; cheese</b> (assessing students understanding processing of ingredients)</li> </ol> <p><u>Assessment:</u></p> <ol style="list-style-type: none"> <li>1. End of unit test</li> </ol>
4	<p><b>Food Science (Gelatinisation &amp; Shortening):</b></p> <p>This unit Year 8 will learn the introduction of food science and the chemical properties of food. They will start by understanding the meaning of chemical and functional priorities in food. In this unit we will explore gelatinisation and how flour is used as a thickening agent. To strengthen their knowledge this will then be applied by students making Macaroni and cheese where they make their own roux sauce. This will strengthen their knowledge in how gelatinisation happens by seeing it happen. Students will also develop the skill of understanding the scientific reaction that is happening to the food they cook and eat and allow them to understand that food is science. Similar, students will then learn about shortening. They will explore different pastries and how the method and ingredients give them different functions. To develop their understanding students will then make jam tarts where they will be able to undertake the pastry process themselves and identify how ingredients work while making them. Students will develop time management strategies and techniques and be able to plan their time effectively to achieve a finished products.</p>	<p><u>Practical:</u></p> <ol style="list-style-type: none"> <li>1. <b>Mac &amp; Cheese</b> (assessing boiling, gelatinisation in sauce making, multitasking)</li> <li>2. <b>Jam tarts</b> (assessing the skill of making shortcrust pastry)</li> </ol> <p><u>Assessment:</u></p> <ol style="list-style-type: none"> <li>1. A science report of how either gelatinisation happens or shortening</li> </ol>
5	<p><b>Farming &amp; where our food comes from:</b></p> <p>In this unit students will explore farming and where our food comes from, with the focus on meat. Students will learn the process of field to fork and understand different animal and farming sources. This allows students to understand where the food they eat and cook with comes from and the process of how it is sources to then ending up on our plates. Students will then learn about the importance of handling and storing raw meat, this is to progress them onto cooking raw meat in the classroom. Once students knowledge is secure they will then cook spaghetti Bolognese where they will learning the skills to handling and cooking raw meat, knife skills and frying.</p>	<p><u>Practical:</u></p> <ol style="list-style-type: none"> <li>1. <b>Spaghetti Bolognese</b> (assessing handling of meat safely- mince, knife skill, frying &amp; sauté)</li> </ol> <p><u>Assessment:</u></p> <ol style="list-style-type: none"> <li>1. Handling and cooking with raw meat test</li> </ol>
6	<p><b>Food around the world (Internation Cuisine):</b></p> <p>In this unit students will explore food around the world and internation cuisine. They will learn about food miles and the impact that has on the environment and understand ways we can help prevent high usage of food miles. They will then learn about fair trade and understand what it means and how to identify food that is fair trade. This unit allows students to learn and explore food origins, how they are grown and harvested in different countries. They will be able to explore it physically too by taste testing food and drinks from around the world. The practical that links to the theory they are learning is vegetable samosas, where they will learn the skill of presentation, folding and marinating. Students will be able to apply the theory knowledge they have learnt into their practical by working out the food miles they have used in their ingredients.</p>	<p><u>Practical:</u></p> <ol style="list-style-type: none"> <li>1. <b>Cornflake chicken bites</b> (assessing handling raw meat- chicken,</li> <li>2. <b>Vegetable Samosa</b> (assessing presentation, folding, knife skill and marinating)</li> </ol> <p><u>Assessment:</u></p>

		1. Food miles challenge of their own vegetable samosa and adapt how they could make it better for the environment.
<b>Cross-curricular links in Y8:</b> Science: We use science and scientist terms so students can understand and develop the skills of understanding chemical and functional properties in food and understand food reactions when they are cooking. Geography: In year 8 we explore farming and international cuisine where they will draw upon their geography knowledge. Mathematics: A big focus in Year 8, is to encourage students to measure and weigh their ingredients to build independence but also applied mathematics skills. <b>Careers: Healthy &amp; Safety Officer and Food Inspector. Food Blogger &amp; Food Charities. Farming &amp; Farming standards, Food Scientist. Health and Sport Dietitian or Nutrient (NHS, Football and Olympics). Nutrition Marketing and Product Design</b>		

Year 9 Curriculum Implementation		
In Year 9, we ensure all students are equipped with the sufficient life skills to sustain healthy eating. It hopefully may develop a passion for the subject, nurture potential and hopefully inspire thoughts of further study. Both theory and practical work, skills are shown and modelled, practised in a range of tasks and activities and then assessed formally. Repetition of skills allow students to further develop them from Year 8, before securing and mastering these skills independently. It allows students to practice components of part of the GCSE Food, Preparation and Nutrition to prepare them for the level and challenge of both practicals and theory aspects of the new course. Students will also develop on their prior knowledge and skills from Year 8 by understanding more in-depth theory of functions and chemical properties of food as well as extending their knowledge on nutrition and applying it more organically to projects and practical's.		
	Knowledge and skills	Assessment
1	<u><b>Refresher on Food Health and Safety &amp; Protein Alternatives (LBV &amp; HBV):</b></u> Year 9 students will draw upon existing knowledge they have learnt in Year 8 and refresh their knowledge on how to store, prepare and cook food safely and hygienically to create a repertoire of predominantly savoury dishes to feed themselves and others, a healthy and varied diet. Students will be shown how to fillet a fish, where we put food safety into experience. Year 9 students will need to show a high level of understanding of the principles of nutrition and health. They will need to be able to explain and justify food choices and the factors behind these decisions. This will be explored more in depth than when they were in Year 8 and drawing upon more GCSE terms and theory behind factors of the functions of nutrition. Students will then learn about protein alternatives and protein complementation which links into the practical they will do which is Chilli Con Carne. Students will also have the experience of taste-testing alternative proteins where they will carry out a sensory analysis.	<u>Practical:</u> 1. <b>LVB/HBV taste testing and sensory analysis</b> 2. <b>Chilli Con Carne</b> (assessing thickening agents, knife skill, sauté & simmer) 3. <b>Fillet a fish</b> - group work  <u>Assessment:</u> 1. Protein alternative Quiz
2	<u><b>Food Spoilage and contamination &amp; Food science (raising agents):</b></u> Year 9 students will develop their knowledge from Year 8 of handling raw meat and storing/cooking food safely by learning about food spoilage and contamination. They will learn about micro-organisms, enzymes, pathogenics and food poisoning. To put their knowledge into practice they will cook Chicken Chow Mein and consider the food spoilage of chicken and beansprouts. Year 9 students will then learn about the functional and chemical properties of raising agents. They will learn about biological, chemical and mechanical raising agents in depth, and about the reactions they recreate	<u>Practical:</u> 1. <b>Chicken Chow Mein</b> (assessing frying, frying on high heat & knife skill)

	<p>in recipes. To further their scientific research from Year 8, they will carry out a science experiment with yeast and measure how much CO<sub>2</sub> is created in perfect and imperfect conditions. They will then apply this in practice by following and understanding a Dutch Apple Cake recipe. Students will be able to identify and analyse a chemical and mechanical raising agent in this recipe.</p>	<p>2. <b>Apple Dutch Cake</b> (assessing knife skill, use of raising agents &amp; electric whisk)</p> <p><u>Assessment:</u></p> <p>1. Raising agent test</p>
3	<p><b>Research Project with the focus of Italian Cuisine:</b></p> <p>In this project, Year 9 students will learn the skill to undertake a project based on Italian Cuisine. Students will draw upon skills and knowledge learnt in other subjects such as Geography, Science and History. Students will start by learning historic tradition and geographical impacts around Italian cuisine and culture. Students will then carry out a group practical where they will make pasta from scratch using pasta machines and then will follow onto cooking a carbonara. Finally in this project students will undertake the Benedict's Test where they will test the ingredients they used for the carbonara for starch, protein, sugars and fats. This is to show how to explore and research food in-depth with a cross-curricular focus to support. This is to help GCSE progression even if the student does not take Food. They are encouraged to make the connections between Food and other subjects. To assess this project, students will take their booklets home and take part in a talking homework. This is where they talk through and present their project with a trusted adult and the adult gives their feedback. The intention for this is so encourage conversations at home and for students to use their feedback in the next project so it is self and peer-assessed.</p>	<p><u>Practical:</u></p> <ol style="list-style-type: none"> <li>1. <b>Pasta from Scratch</b>- group work (assessing the skill of making dough, pasta machine &amp; boiling)</li> <li>2. <b>Carbonara</b> (assessing egg binding, coagulation)</li> <li>3. <b>Science experiment</b> (assessing students understanding of the chemical properties we see in food)</li> </ol> <p><u>Assessment:</u></p> <p>1. Talking Homework</p>
4	<p><b>Independent Dish and Research Project (mini NEA2 Mock)</b></p> <p>This project is to begin to prepare students for KS4. They will learn how to independently undertake a research project on a country and cuisine of their choice. Students will choose a country and explore its culture, climate, religion, economics and cooking styles. Students are to produce a time-plan where they will develop time management strategies and techniques to be able to plan their time effectively to achieve a finished product. Students will cook their own dish that make links to their country where they can use previously taught techniques and presentation skills. This gives students a chance to be creative and start developing their own cooking identity. Afterwards, students will create a nutritional analysis of their dish where they can apply their previously learnt knowledge of the nutrition of the dish.</p>	<p><u>Practical:</u></p> <ol style="list-style-type: none"> <li>1. <b>Independent dish</b> (assessing presentation, independence and links to their project)</li> </ol> <p><u>Assessment:</u></p> <ol style="list-style-type: none"> <li>1. The whole project to be assessed with both theory and practical aspects.</li> </ol>
5	<p><b>Food choice and factors that influence it &amp; Food and the environment:</b></p> <p>Students will gain the understanding about the importance of food and food choices that can be made. How the food we eat provides nutrients and energy, whilst considering different requirements through life. They will learn different factors that affect food choice including; allergens, intolerances, religions, costings and food availability. This will be applied in a practical where they make Thai Green Curry (with chicken) or sweet potato &amp; chickpea curry. After the practical, students will apply their knowledge and understanding by evaluating allergens, intolerances and religion into the dish they created. Students will also learn about cooking on a budget and undertake a task of designing a dish that costs no more than £1 per portion and taking into consideration the Eat Well Guide.</p>	<p><u>Practical:</u></p> <ol style="list-style-type: none"> <li>1. <b>Chicken Green Thai curry or sweet potato &amp; chickpea curry</b> (assessing their acknowledge of intolerances and allergies)</li> </ol> <p><u>Assessment:</u> Food choice: money and cooking on a budget. Task to design a meal under £1 per portion and taking the EWG in consideration.</p>
6	<p><b>Physical and chemical functions of fats and oils in cooking (mini NEA1 Mock):</b></p>	<p><u>Practical:</u></p>

<p>Students will gain the experience of undertaking a mini Non-Exam Assessment which gives the students a chance to explore Food Technology at GCSE level and can help with the transition. Students will explore and investigate the chemical properties and functions of fats and oils. Students will underpin their experiment with knowledge of plasticity, emulsification, aeration so they have a true understanding of what reactions are taking place in their practical experiments. Students will then undertake a investigation where they investigate fats and oils in a cake. Once students have completed their research and practical investigation they will present their findings on a report.</p>	<ol style="list-style-type: none"> <li>1. <b>Sponge Cake-</b> fats experiment in group work</li> <li>2. <b>Swiss Roll</b> (assessing students' knowledge of functional and chemical properties)</li> </ol> <p><u>Assessment:</u> Science report on chemical functions of fats and oil</p>
<p><b>Cross-curricular links in Y9:</b></p> <p>Science: We used science and scientist terms so students can understand and develop the skills of understanding chemical and functional properties in food and understand food reactions when they are cooking.</p> <p>English: Students will develop their descriptive writing skills by continuously working on their evaluations.</p> <p>Mathematics: Students use applied mathematics by practising real budgeting for their dishes they created in their projects.</p> <p>RE: Students will learn about the history and culture of different cuisines and how certain religions may impact on a persons food choice.</p>	
<p><b>Careers: Health and Sport Dietitian or Nutritionist (NHS, sport and personal training). Food Scientist &amp; Food Inspector (Government standards). Food Research jobs &amp; research.</b></p>	

<p><b>Year 10 Curriculum Implementation</b></p> <p>GCSE Food Preparation and Nutrition is delivered with a strong practical emphasis. Pupils will become expert at preparing and making a range of products using a variety ingredients, cooking techniques and a range of equipment. The AQA syllabus outlines the knowledge, understanding and skills required to cook and apply these to the 5 key areas of the course: Nutrition and health, Food science, Food safety, Food choice and Food provenance. The course requirements outline 12 practical key skills areas to be assessed. Skills that students have built in KS3 will help their transition into KS4 go more efficiently as they will draw upon skills and knowledge of health and safety, functions of food, food sources and food choice as well as having the routine in which the food room operates to ensure lessons run as effectively as possible.</p>		
	Knowledge and skills	Assessment/ Practical
1	<p><b>Introduction to the course/Practical challenges:</b> To understand and apply appropriate hygiene and safety procedures when preparing, cooking and serving food.</p> <p><b>Food safety when buying and storing food:</b> To understand the food safety principles when buying and storing food. To know and apply key temperatures. To understand the different sources of bacterial contamination.</p> <p><b>Food safety when preparing and cooking food:</b> To understand the food safety principles when preparing, cooking and serving food. To know how to correctly use a food probe. To understand how to prevent cross contamination.</p> <p><b>Nutrition- Protein/Sensory testing:</b> functions of protein in the diet. main food sources in the diet (plant and animal, HBV and LBV). effects of deficiency and excess complementation of proteins. To understand the protein alternatives. TVP, soya, mycoprotein and tofu. To develop knowledge and understanding of sensory testing and fair testing.</p>	<p><b>Meat stew/Casserole/Thai curry/</b></p> <p>Skill 3: Preparing fruit and vegetables: cut and dice</p> <p>Skill 8: Sauce making – reduction: curry sauce</p> <p><b>Fish/Quorn potato topped pie:</b></p> <p>Skill 2: Knife skills: bridge hold, claw grip, peel, slice. Skill 3: Preparing fruit and vegetables, peel, pipe</p>



	<p><b>Preparation skills: Protein/Fish and Sauce making:</b> To develop making skills/processes when using fish. To develop sauce making skills and finishing techniques. To know and practice filleting fish. To develop food preparation skills when using fish.</p>	<p>Skill 8: Sauce demonstrating starch gelatinisation: roux, all-in-one, ratio affecting viscosity.</p> <p><b>Filleting a Fish:</b> Skill 2: Knife skills: fillet fish</p> <p><b>Theory Assessment (Test)</b></p>
2	<p><b>Protein: Functional and chemical properties – denaturation and coagulation:</b> Students to understand the meaning and functions of denaturation and coagulation. <b>Practical investigation:</b> Frying, scrambling, poaching and boiling eggs. Record results.</p> <p><b>Protein: Function and chemical properties – gluten formation and foam formation:</b> Students to understand the meaning and functions of gluten formation. <b>Practical investigation:</b> Making bread rolls with different flours to produce gluten balls. To understand the gluten formation and foam formation.</p> <p><b>Food production:</b> To know the difference between primary and secondary processing. To understand the processing of milk to make cheese and yogurt. To further reinforce denaturation and coagulation. To understand the use of micro-organisms in food production.</p> <p><b>Carbohydrates: Function and chemical properties – gelatinisation:</b> To understand the: functions of carbohydrates in the diet (starch, sugars and fibre). To learn what the main food sources in the diet are. To understand the effects of deficiency and excess and related dietary reference values. To understand the scientific principles related to carbohydrates: gelatinisation. To understand the heat transference methods: conduction and convection.</p> <p><b>Carbohydrates: Function and chemical properties – caramelisation and dextrinization:</b> To understand the scientific principles related to carbohydrates: caramelisation, dextrinization. To understand the heat transference methods: conduction and convection. To understand how to make successful shortcrust pastry. <b>Practical investigation:</b> Melting sugar.</p>	<p><b>Lasagne/Cannelloni/Sweet and sour sauce:</b> Skill 8: Sauce demonstrating starch gelatinisation: roux, all-in-one, ratio affecting viscosity, blended, Béchamel. Skill 6: Cooking methods: dry frying. Skill 8: Sauce making- Reduction: tomato sauce.</p> <p><b>Chilled lemon flan/Swiss roll/Lemon curd/Crème caramel/Grilled salmon and tomato pasta:</b> Skill 6: Cooking methods. Skill 11: Eggs as a raising agent –whisked sponge Skill 12: Setting mixtures – use of Protein. Practical: Meat/fish or vegetable dish to demonstrate how the acids denature protein:</p> <p><b>Chicken fajitas/Kebabs:</b> Skill 9: Tenderise and Marinate. Skill 7: Prepare, combine and shape</p> <p><b>Flavoured bread/Bread rolls/Cajun spiced bread:</b> Skill 10: Dough – Making a dough: gluten formation Skill 10: Shaping and finishing: proving and resting</p> <p><b>Theory Assessment (Test)</b></p>

3	<p><b>Food production:</b> To know the difference between primary and secondary processing. To understand the processing of wheat to make flour. To understand how processing affects the nutritional value.</p> <p><b>Nutrition- Fats and oils:</b> To understand the: a. functions of fat in the diet and the types of fat (saturated and unsaturated) b. main food sources c. effects of deficiency and excess d. related dietary reference values.</p> <p><b>Fats: Function and chemical properties – shortening and plasticity:</b> To understand the scientific principles related to fats and oils: shortening and Plasticity. To understand how to make shortcrust pastry.</p> <p><b>Fats- Emulsification:</b> To understand the scientific principles related to fats and oils: emulsification. <b>Practical challenge:</b> Making a Hollandaise sauce/Mayonnaise.</p> <p><b>Fats: Function and chemical properties – aeration/Raising agents:</b> To understand the scientific principles related to fats and oils: aeration. To understand the scientific principles of raising agents (chemical/mechanical). To understand the scientific principles of raising agents (steam/biological). To understand how different raising agents work in different recipes.</p>	<p><b>Tortellini/Ravioli:</b> Skill 10: Making a dough: pasta. Skill 10: Making a dough: shaping and finishing. Skill 5: Use of equipment – pasta machine.</p> <p><b>Roasted Mediterranean vegetable quiche/Apple tart/Tarte tatin/Sun-dried tomato palmiers:</b> Skill 10: Making a dough: create layers – palmiers. Skill 10: Making a dough – shortening, shaping and finishing.</p> <p><b>Quiche/Meat or vegetable:</b> Skill 10: Making a dough: pastry. Skill 10: Making a dough – shortening, shaping and finishing. Skill 2: Knife skills: bridge hold, claw grip, peel, slice, batons, julienne Skill 3: Preparing fruit and vegetables: peel. Skill 11: Raising agents – whisking egg whites.</p> <p><b>Choux pastry/Batter/Savoury choux Buns:</b> Skill 11: Raising agents: use of steam in mixture: choux pastry, batter. Skill 11: Raising agents: Biological use of yeast.</p> <p><b>Theory Assessment (Science report)</b></p>
4	<p><b>Nutrition- Vitamins and minerals:</b> To understand the: functions, sources, effects of deficiency and excess, and related dietary reference values for: fat and water soluble vitamins. Students will then learn how the selection of appropriate preparation and cooking methods can conserve or modify nutrition value. For students to understand the: functions, sources, effects of deficiency and excess, and related dietary reference values for: minerals. The important of hydration and the functions of water in the diet.</p> <p><b>Enzymic browning and oxidation:</b> To understand the scientific principles related to fruits and vegetables: enzymic browning and oxidation. To understand the process emulsification.</p> <p><b>Nutritional needs:</b> students will learn how and what the current guidelines for a healthy diet are. To understand nutritional needs for different life stages. To major diet related health risks. To know the recommended percentage of energy provided by protein, fat and carbohydrates.</p> <p><b>Functional and chemical properties of food:</b> To produce and analyse a dish that shows a range of food preparation skills and demonstrates some of the functional and chemical properties of food.</p>	<p><b>Prepare a salad with accompanying dressing to show emulsification:</b> Skill 3: Preparing fruit and vegetables: controlling enzymic browning/garnishing.</p> <p><b>Roasted vegetable and pasta medley/Jambalaya/Fish cakes/Cottage pie with Cheddar sautéed leek mash/Lemon chicken:</b> Skill 2: Knife skills: bridge hold, claw grip, peel, slice, batons, julienne. Skill 3: Knife skills: meat and fish. Skill 3: Preparing fruit</p>



	<p><b>Nutritional analysis:</b> To know how to carry out nutritional Analysis. To analyse a recipe and be able to modify the dish to improve the nutritional content.</p>	<p>and vegetables: various skills. Skill 10: Making a dough: pasta. Skill 10: Making a dough: shaping and finishing. Skill 5: Use of equipment – pasta machine.  <b>Lemon Meringue Pie</b>  <b>Vegetable/Meat &amp; Bean Cobbler</b></p>
5	<p><b>Dietary groups:</b> To understand the nutritional requirements for specific dietary groups: vegetarian, vegan, coeliac, lactose intolerant, reduced fat and high fibre.</p> <p><b>Heat transference and reasons for cooking food:</b> To understand the reasons for cooking food. Experimental work: Conduction, convection and radiation.</p> <p><b>Portioning a chicken/Selecting cooking method:</b> To understand the reasons for cooking Food. To understand how different cooking methods affect food. To develop complex knife skills, e.g. portioning a chicken.</p> <p><b>Sensory Evaluation:</b> To understand the term sensory evaluation. To know the different methods for carrying out sensory evaluation. To understand the conditions and controls required when carrying out sensory evaluation.</p> <p><b>NEA Practice task –Food Investigation:</b> To understand the expectations of the NEA Investigation task. To carry out a modified task (not a full investigation) Possible tasks: NEA specimens</p> <ol style="list-style-type: none"> <li>1. Investigate what type of flour is best for bread making</li> <li>2. Investigate the use of raising agents in baked products</li> <li>3. Investigate the ingredients used to thicken sauces and soups</li> </ol>	<p><b>To plan, prepare, cook and modify the recipe for:</b> low fat diet/high fibre diet  <b>Curry/Kedgeree/Spiced poached pears/Steamed sponge pudding/Apple and apricot crumble/Carrot cake muffins/ Cannelloni/Vegetable stir fry:</b></p> <p>Skill 11: Raising agents. Skill 2: Knife skills  Skill 5: Use of equipment. Skill 6: Cooking Methods  <b>Chicken casserole/Chicken chasseur/Sweet and sour chicken/Lemon roasted chicken with mustard and onion mash:</b> Skill 2: Knife skills: Fillet a chicken  breast, portion a chicken, remove fat and rind Skill 6: Cooking methods.</p> <p><b>Theory Assessment (Report)</b></p>
6	<p><b>Food choice:</b> To understand the factors that affect food choice. To have the knowledge of different dietary groups/life stages. Activity: Concept plans to show the factors which affect different groups, e.g. Single, low income, e.g. student, elderly person, Low income, family, Family with 4 children and busy lifestyle, Elderly couple living on a pension, Adult couple concerned about environmental sustainability.</p> <p><b>Food choices and international cuisine:</b> To understand food choice related to religion, culture, ethical, moral beliefs and medical conditions. To develop research skills. To understand the expectations of the NEA Food Preparation tasks</p> <p><b>Food and the environment:</b> Discuss issues surrounding: seasonal foods, sustainability, organic foods, locally produced food, carbon footprint, packaging and food waste. Prepare a dish using English or locally grown fruits. The recipe must demonstrate food styling, e.g. garnishes and decorative techniques, e.g. Strawberry petal cake, fruit flan, apple pie.</p>	<p><b>NEA 2 Research Task</b>  <b>Theory Assessment (Report)</b></p>

	<p><b>Food sources:</b> Examine reared ingredients: meat and poultry; caught ingredients: fish; grown ingredients: fruits, vegetables and cereals. Discuss issues surrounding: organic and conventional farming, free range production, intensive farming, sustainable fishing, and genetically modified foods.</p> <p><b>Sustainability of food:</b> Discuss issues surrounding: climate change, global warming, sustainability of food sources, and insufficient land for growing food, availability of food, fairtrade, food waste, drought and flooding. To understand the impact of food and food security on local and global markets.</p>	
<p><b>Cross-curricular links in Y10:</b></p> <p>Science: students will learn and investigate the chemical properties and functions of food.</p> <p>PHSEE: In year 10 students learn about the impact and influences of food choice with cover subjects such as finances, religion and choice.</p> <p>Mathematics: Students are encouraged to build confidence with weighing and measuring food. Student also use budgeting techniques in their dish evaluations.</p>		
<p><b>Careers: Year 10 attend a trip to Cadburys world where they learn about food production and food sources. We also cover careers links such as, food scientist, food nutritionist, influencers, sensory analysis jobs, health and safety jobs, food critics, chefs, farmers and cooking jobs within the military.</b></p>		

Year 11 Curriculum Implementation		
<p>In Year 11, our students will build on skills and knowledge they have learnt and evolved from the last four years. Students spend their final Year applying their skill and knowledge into Non-Exam Assessments which is then followed by a written exam. Students are taught in depth evaluation and analysis which also allows them to develop further skills in working independently, ready for the next stage of education and the working world.</p>		
	Knowledge and skills	Assessment
1	<p><b>Signs of food spoilage/ Micro-organisms and enzymes:</b> To understand the growth conditions for micro-organisms. To examine enzymic action (apple test).</p> <p><b>Recap on chapter 4:</b> The chemical and functional properties of food. Recap from Year 10.</p> <p><b>Non-Exam Assessment (NEA 1):</b> Food Investigation task. <b>Analyse/break</b> down the task Carry out secondary research focusing on the working characteristics, functional and chemical properties of the ingredients to be investigated using different sources. Conclude the research and use the findings to plan the practical investigation. Establish a hypothesis/predict an outcome. Plan practical work.</p>	<p><b>NEA Tracking document used to track student progress</b></p>
2	<p><b>Non-Exam Assessment (NEA 1):</b> Food Investigation task. <b>Investigation:</b> Through practical experimentation investigate and evaluate how ingredients work and why. Each investigation should be: related to the research, have a clear aim and be concluded. The number of investigations will be determined by the time available and the complexity of the investigations. Use a range of testing methods to record the results, e.g. rating charts/sensory profiles, etc. Record and evaluate the results of the investigation using: annotated photographs, charts, variety of sensory testing methods, images, viscosity testing, etc. Results of each investigation should be used to inform the next stage of the investigation</p>	<p><b>Mock Exam</b> (in the Hall)</p>

	with reasoning. <b>Analysis and evaluation:</b> Analyse and interpret the results of the investigative work. Link the results to the research explaining the working characteristics, functional and chemical properties of the ingredients. Conclude the hypothesis/prediction with justification. Explain how the results can be applied in practical food preparation and cooking. Bibliography.	
3	<b>Non-Exam Assessment (NEA 2):</b> Food Preparation task: <b>Researching the task.</b> Analyse the task, e.g. through mind mapping/key words, etc. Explain the research requirements. <b>Relevant research and analysis:</b> life stage, dietary group or the culinary tradition. Identify a range of dishes – mind mapping/annotated images, etc. Select and justify a range of dishes to trial with explanation related to suitability and Skills. <b>Demonstrating technical skills:</b> Make a variety of dishes to experiment/trial skills and processes, e.g. choux pastry/sauce making/meat/fish preparation (3/4 dishes should allow for a variety of skills to be showcased). An opportunity for students to showcase/practise their making skills. Identify technical skills within each dish. Evaluate the understanding of ingredients and processes, e.g. working properties of ingredients.	NEA Tracking document used to track student progress
4	<b>Non-Exam Assessment (NEA 2):</b> Food Preparation task: <b>Planning for the final menu:</b> Use the results of the skills trial to select 3 final dishes (the expectation is that all three dishes are not all remakes of the original dishes to allow students to demonstrate a wide variety of technical skills). Justify the appropriateness of the final dishes(technical skills, nutrition, ingredients, cooking methods, food provenance, sensory properties, portion size, etc.). Produce a detailed time plan/flow chart for the production of the final 3 dishes. Explain the food safety principles when preparing, cooking and presenting food. <b>Making the final dishes:</b> To prepare, cook and present the final dishes. Demonstrate: use of a range of skills/equipment and process, execution of the technical skills with accuracy. knowledge and application of food safety principles. organisation and good planning by using the time plan and dovetailing tasks. presentation of the final dishes. <b>Analyse and evaluate:</b> Record and evaluate the sensory properties (taste, texture, aroma and appearance) of the final practical dishes Nutritional analysis of the 3 final dishes. Cost the final dishes. Explain improvements/further modifications to the final dishes.	NEA Tracking document used to track student progress
5	<b>Food labelling:</b> To know the information that is legally required to be on food packaging. To understand the information on nutrition labels <b>Additives:</b> To understand the use of natural and artificial additives in food production. To consider advantages and disadvantages of food additives in food production. <b>Technological development:</b> Examine fortification and modified foods, e.g. Cholesterol lowering spreads, fortified breakfast cereals.  <b>Revision for Written Exam (50%)</b>	
<b>Cross-curricular links in Y11:</b> Science: students will learn and investigate the chemical properties and functions of food. PHSEE: In year 10, students learn about the impact and influences of food choice with cover subjects such as finances, religion and choice. Mathematics: Students are encouraged to build confidence with weighing and measuring food. Students also use budgeting techniques in their dish evaluations. <b>Careers: Food scientist, food nutritionist, influencers, sensory analysis jobs, health and safety jobs, food critics, chefs, farmers and cooking jobs within the military. We also cover then wide range of further educational courses available.</b>		

### IMPACT OF THE FOOD CURRICULUM

As part of their journey in Food Technology, students will be taught how to cook healthy, nutrition and budget friendly dishes as well as applying the principles of nutrition and healthy eating. The purpose is to encourage students to have an enjoyment for cooking that allows students to also be creative. By students learning how to cook they will learn a crucial life skill that enables students to cook independently, affordability and healthily, now and in later life. Students will underpin their practical skills with theory around design and technology, Science and Personal, Social, Health and Economic education (PSHE). A students progress in Food Technology is closely linked to assessments of both practical and theory knowledge with teacher feed forward comments to build progression in both theory and practical and confidence in cooking to create independent practical skills which they will transfer out of the school environment. Throughout their learning journey there is also numerous of internal assessments where students will complete written assessments as well as retrieval practise throughout lessons to ensure a student is on target with their learning journey. students have continuously access to the detail and standards required to master the subject for each topic and year group. To encourage engagement in the lessons it is ensured that the lessons are relevant and relatable to students and their lifestyles and it is ensured for students to see clear progress outcomes in their cooking as well as developing their progress in theory. It is clear from the uptake at GCSE that students at Lakelands Academy enjoy and progress through their learning of Food Technology.

### WIDER CURRICULUM OFFER

The following sections clarify how areas such as Personal development, Careers and Cultural Capital are woven into the intention, implementation and impact of the subject curriculum.

#### Personal Development within the food curriculum

Personal Development	Equip students to be able to enquire and explore the subject at a greater level and depth. Ensure they have excellent practical skills as well as sufficient knowledge and understanding to take the next step in their lifelong learning. Allow pupils to have sufficient knowledge, skills and enthusiasm to pursue further study, or lifelong learning in the subject of food. Students will develop sufficient skills to be able to work independently to utilise what they know to survive outside of the school environment. Fundamentally be able to produce good healthy food, safely and affordably.
SMSC	<ul style="list-style-type: none"> <li>• Student learn about Food provenance, types of food production and manufacture, seasonal food, environmental factors, food waste, composting food and recycling</li> <li>• Student will understand the process of GM Foods, organic and fair trade and how they impact the environment.</li> <li>• Student will learn about the wide range of issues focussing of food choices: Religious and cultural beliefs and needs, Health implications and healthy lifestyles, nutrients and nutrition including deficiencies, obesity, diet, and other issues such as allergies and special diets.</li> <li>• Students will be able to produce costings for ingredients and recipes, look at budgeting and cheaper alternatives and substitutes to create similar products</li> </ul>
British Values	Students begin the subject by looking at the importance of the importance of safe working practices, as a result, students respect the fact they are in a catering kitchen and understand the importance of working together to support one another and ensure each other is safe. Opportunities for students to develop their self-esteem and growth mind-set are embedded throughout the curriculum at both KS3/KS4. Multicultural projects are completed in all year groups. Students who do not eat specific foods due to religious reasons are always considered and an alternative suggestion for the recipe is provided for them. Religion is a key part of the food course and through class discussion we dispel any misconceptions that students have of other cultures or religions and their beliefs with regards to food. It is important for students to build their confidence in the kitchen, students are given the opportunity to create their own dishes and experiment with flavours and textures. This in turn develops a passion for food in students and opens up discussion with regards to what each student has created and how it has

	turned out. Students also consider the environmental issues that their consumption of food can have including; increasing our carbon footprint, the amount of food we throw away, recycling, fair trade and the importance of seasonality.
Extracurricular & Enrichment	Students have the opportunity to take part in a cooking workshop that is ran by the Royal Navy. Students all have the opportunity to participate in the Rotary Chef Competition where it can lead to district finals. KS3 also get the experience of going on a food factory trip to see food production and processing take place.
<b>Careers in the food curriculum</b>	
Studying Food technology allows students to develop skills that they could transfer into their future careers such as time management, high level practical skills, knowledge and understanding of functions and chemical properties and healthy and safety. These can lead into careers such as hospitality, chefs, factory work, nutritionists and health and safety roles.	
<b>Cultural Capital in the food curriculum</b>	
<i>The essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement</i>	
Students will be able to show that they understand what constitutes a healthy lifestyle and diet. Student will also be able to demonstrate knowledge of the foods that are important to their culture and be able to compare and contrast them with other foods that are important to society.	