GCSE Food Preparation and Nutrition

Curriculum Intent 2023-2024

The intent of the Food Preparation and Nutrition curriculum is to develop students understanding of the breadth and depth of nutrition, inspiring students to think about where their food has come from as well as developing an understanding of what is required in a healthy diet. Studying Food Preparation and Nutrition at GCSE will provide students with knowledge which will prepare them for life in terms of understanding food for the future. Understanding food is such an important life skill that is required by each human on the planet and this is why food deserves a place in our curriculum. Studying this course at GCSE will provide students with life-long learning which will prepare them for a healthy future life.

During the course, students will have the experience of learning about food through a wide variety of topics, pushing the boundaries of what they've been taught at key stage 3. Nutrition and health plays a massive role in day-to-day modern life, with more and more people becoming obese and suffering from diet related diseases due to easy access to unhealthy food and a lack of nutritional understanding. Students will learn about macronutrients and micronutrients and understand their roles and importance in the body.

Students will also look into the science behind food; why some cooking methods are better than others in terms of nutrition, how techniques in the kitchen work such as the rubbing in method and studying the functions of ingredients in making products.

The study of food choice is so important, we live in a world where some individual's choices are misunderstood, this section of the course explains about different dietary choices in terms of religion and in terms of moral choice (for example: being a vegetarian), this gives an insight into the amazingly diverse modern world that we live in.

Today we hear a lot on the news about Global Warming and its effects on our world and the way in which we live, the topic on food provenance discusses how certain foods get to us and how food miles play a massive role in CO2 emissions in terms of certain foods coming from different countries. It also discusses easy ways in which we can help reduce and tackle this problem making the world a safer, greener place in the future.

Students will be taught how to prepare, cook and create certain dishes in the kitchen and successfully present their dishes. These practical skills can be taken forward to their cooking exam and future life as an adult. This element of the course not only produces excellent products in the kitchen and reinforces learning, but boosts self-confidence and self-esteem. Students are inspired by a wide range of cooking programs which are available to them such as The Great British Bake Off and Master Chef, such programs help to motivate students to achieve in the kitchen aiding their personal development in the subject.

Each topic in the Food Preparation and Nutrition course is key to help prepare students for future pathways in Food, such as the Level 3 Food Science and Nutrition course at Brine Leas Sixth Form.

Extra-curricular opportunities which involve food include The Brine Leas Bake Off, as well as community involvement by preparing and cooking for the Careers Convention and a potential trip to the Nantwich Food Show.

Trips and visits

Potential trips to the BBC Good Food Show or Nantwich Food Show.

Assessment

Please see website for internal assessment record.
External assessment:
Task 1: Food investigation (30 marks)
Students' understanding of the working characteristics, functional and chemical properties of ingredients. Practical investigations are a compulsory element of this NEA task.

- 15 % of GCSE

Task 2: Food preparation assessment (70 marks)
Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved.

- 35 % of GCSE

Exam: Theoretical knowledge of food preparation and nutrition from
Sections 1 to 5. How it's assessed:

- Written exam: 1 hour 45 minutes
- 100 marks
- 50 % of GCSE

Homework

Homework set as and when required. Students should revise and go over the topics covered each lesson at home.

Clubs and/or intervention

Lunchtime clubs provided on Monday, Tuesday, Wednesday and Friday lunchtimes in CG20 to catch up on classwork or extra support for NEAs.

Parental/Carer support

- NEAs are 50 % of GCSE
- Online textbook can be found on: www.illuminate.digital/aqafood
  Student logon: SBRIN3
  Student password: student3
- Seneca is an excellent revision source which most students find really helpful
- Students can come to T1 on Monday, Tuesday, Wednesday or Friday lunchtimes for extra support or to come and finish work

Helpful sources of information

- Online textbook can be found on: www.illuminate.digital/aqafood
  Student logon: SBRIN3
  Student password: student3
- Seneca is an excellent revision source which most students find really helpful
- All resources can be found on Teams

Connections to future pathways

Careers:

Nutritionist, Chef, Working in the hospitality industry, Dietician, Food science, Chef, Business owner, Environmental Health Officer, Food journalist

Future learning:

Studying Level 3 Food Science and Nutrition at BL6, Other college courses, Work experience

Year 10 Overview

Term	Knowledge	Assessment	Connections to Learning
Autumn 1	**Understanding macronutrients and micronutrients whilst developing confidence in the kitchen** 1. Topic: Health and safety overview (with added new content) 2. Topic: Food, nutrition and health 3. Developing practical skills		

	Health and safety: ➢ Personal hygiene ➢ Clean work surfaces ➢ Separate raw and cooked foods and use of separate utensils ➢ Correct cooking times ➢ Appropriate temperature control including: defrosting and reheating ➢ Appropriate care with high-risk foods ➢ Correct use of food temperature probes	➢ Questioning ➢ Mini quizzes	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development
	Food, nutrition and health: Macronutrients: ➢ The functions ➢ Main sources ➢ Effects of deficiency and excess ➢ Related dietary reference values	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Food, nutrition and health: Water: ➢ The functions of water to eliminate waste from the body, cooling and for digestion ➢ How water is lost from the body ➢ How much water/fluid is needed each day Occasions when extra fluids are needed	➢ Questioning ➢ Mini quizzes ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Focus on practical skills (based on topics covered so far): ➢ Skill 1 – practical skills ➢ Skills 2 – knife skills ➢ Skills 3 – Preparing fruit and vegetables ➢ Skill 4 – use of the cooker ➢ Skill 5 – use of equipment ➢ Skill 6 – cooking methods ➢ Skill 7 – Prepare, combine, shaping ➢ Skill 8 – Sauce making ➢ Skill 9 – Tenderise and marinade	➢ Questioning ➢ Practical assessments and feedback	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development

	➢ Skill 10 – dough ➢ Skill 11 – Raising agents ➢ Skill 12 – Setting mixtures		
Autumn 2	**Understanding micronutrients, developing confidence in the kitchen and developing evaluation skills** 1. Topic: Food, nutrition and health 2. Topic: Food choice 3. Topic: Food science 4. Developing practical skills		
	Food, nutrition and health: Micronutrients (vitamins and minerals): ➢ The functions ➢ Main sources ➢ Effects of deficiency and excess ➢ Related dietary reference values	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Food, nutrition and health AND food choice: ➢ The current guidelines for a healthy diet e.g. Eatwell plate ➢ Nutritional needs for the following life stages: young children, teenagers, adults and the elderly ➢ How to plan a balanced meal for specific dietary groups: vegetarian and vegan, coeliac, lactose intolerant and high fibre diets	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development ➢ SMSC – 6. Cultural Development
	Food choice: ➢ Students must be able to cost recipes and make modifications ➢ Food choice linked to the following religions and cultures: Buddhism, Christianity, Hinduism, Islam, Judaism, Rastafarianism and Sikhism ➢ Food choice linked to the following ethical and moral beliefs: animal welfare, fair-trade, local produce, organic, Genetically Modified (GM) foods ➢ Food choice linked to food intolerances (gluten and lactose) and the following allergies: nuts, egg, milk, wheat, fish and shellfish	➢ Mini quizzes ➢ Questioning ➢ Practical's ➢ Past paper questions	➢ For Year 11 Exams ➢ SMSC – 5. Moral Development ➢ SMSC – 6. Cultural Development

	Food, nutrition and health: ➢ Factors which affect the BMR, such as age, gender and PAL. Their importance in achieving energy balance ➢ The percentage of recommended energy sources from nutrients: ➢ Protein 15 % ➢ Fat 35 % or less ➢ Carbohydrate 50 % (of which 45 % from starches, lactose in milk and fruit sugars and a maximum of 5 % from free sugars) How to carry out nutritional analysis: How to plan and modify recipes, meals and diets to reflect the nutritional guidelines for a healthy diet	➢ Mini quizzes ➢ Questioning Past paper questions	➢ For Y11 exam ➢ For NEA
	Food science: Cooking of food: ➢ Food is cooked to: make food safe to eat, develop flavours, improve texture, improve shelf life, give variety in the diet ➢ How preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food How heat is transferred to food through: conduction, convection, radiation	➢ Mini quizzes ➢ Questioning Practical assessments and feedback Past paper questions	➢ For Y11 exam ➢ For NEA
	Food provenance: Food and the environment: ➢ 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 Sustainability of food: ➢ The challenges to provide the world's growing population with a sustainable, secure, supply of safe, nutritious and	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Y11 Exam ➢ SMSC – 5. Moral Development

	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 and food waste.		
	Focus on practical skills (based on topics covered so far): ➢ Skill 1 – practical skills ➢ Skills 2 – knife skills ➢ Skills 3 – Preparing fruit and vegetables ➢ Skill 4 – use of the cooker ➢ Skill 5 – use of equipment ➢ Skill 6 – cooking methods ➢ Skill 7 – Prepare, combine, shaping ➢ Skill 8 – Sauce making ➢ Skill 9 – Tenderise and marinade ➢ Skill 10 – dough ➢ Skill 11 – Raising agents ➢ Skill 12 – Setting mixtures	➢ Questioning ➢ Practical assessments and feedback	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development
Spring 1	**Nutrition for specific groups and developing confidence in the kitchen** 1. Topic: Food, nutrition and health 2. Topic: Food choice 3. Topic: Food provenance 4. Sensory evaluation 5. Developing practical skills		
	Food provenance: Food sources: ➢ Grown ingredients: fruits, vegetables and cereals ➢ Reared ingredients: meat and poultry ➢ Caught ingredients: fish ➢ An understanding of: organic and conventional farming, free range production, intensive farming, sustainable fishing ➢ Advantages and disadvantages of local produced foods, seasonal foods and GM foods	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Y11 exam ➢ SMSC – 5. Moral Development

	Logos linked to sustainability – Fairtrade, Organic, GM, Red Tractor, sustainable fishing, etc…		
	Food choice: Sensory evaluation: importance of senses when making food choices: sight, taste, touch and aroma ➢ Preference tests: paired preference, hedonic ➢ Discrimination tests: triangle ➢ Grading tests: ranking, rating and profiling ➢ How to set up a taste panel ➢ Controlled conditions required for sensory testing ➢ Evaluating how senses guide ➢ Evaluating a wide range of ingredients and food from How to test sensory qualities of a wide range of foods and combinations	➢ Mini quizzes ➢ Questioning ➢ Practical's ➢ Past paper questions	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development
	Focus on practical skills (based on topics covered so far): ➢ Skill 1 – practical skills ➢ Skills 2 – knife skills ➢ Skills 3 – Preparing fruit and vegetables ➢ Skill 4 – use of the cooker ➢ Skill 5 – use of equipment ➢ Skill 6 – cooking methods ➢ Skill 7 – Prepare, combine, shaping ➢ Skill 8 – Sauce making ➢ Skill 9 – Tenderise and marinade ➢ Skill 10 – dough ➢ Skill 11 – Raising agents ➢ Skill 12 – Setting mixtures	➢ Questioning ➢ Practical assessments and feedback	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development

Spring 2	**Understanding NEA 2, energy needs, the science behind how food is cooked and developing confidence in the kitchen** 1. NEA 2 taster 2. Topic: Food, nutrition and health 3. Topic: Food science 4. Developing practical skills		
	➢ NEA 2: Food preparation assessment. (70 marks) ➢ Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. ➢ Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved. (35% of GCSE) ➢ Mini project set which teaches skills involved for NEA 2.	➢ NEA 2 mock marking ➢ 3 hour practical mock assessment and feedback	➢ For NEA in Y11 ➢ SMSC – 1. Personal Development
	Food science: Functional and chemical properties of food: ➢ Protein (denaturation, coagulation, gluten, foam formation)	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Focus on practical skills (based on topics covered so far): ➢ Skill 1 – practical skills ➢ Skills 2 – knife skills ➢ Skills 3 – Preparing fruit and vegetables ➢ Skill 4 – use of the cooker ➢ Skill 5 – use of equipment ➢ Skill 6 – cooking methods ➢ Skill 7 – Prepare, combine, shaping ➢ Skill 8 – Sauce making ➢ Skill 9 – Tenderise and marinade ➢ Skill 10 – dough ➢ Skill 11 – Raising agents ➢ Skill 12 – Setting mixtures	➢ Questioning ➢ Practical assessments and feedback	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development

Summer 1	**Food science processes (protein, fats and carbohydrates), energy needs and developing confidence in the kitchen** 1. Topic: Food production 2. Topic: Food science 3. Developing practical skills		
	Food production: ➢ 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) ➢ Loss of vitamins through heating and drying	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Y11 Exam ➢ SMSC – 5. Moral Development
	Food science: Functional and chemical properties of food: ➢ Carbohydrates (gelatinisation, dextrinization, caramalisation) ➢ Fats and oils (shortening, aeration, plasticity, emulsification)	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Food science: Cooking of food: ➢ The different methods of heat transfer ➢ Selection of appropriate preparation, cooking methods and times to achieve desired characteristics.	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Focus on practical skills (cooking methods based): ➢ Skill 1 – practical skills ➢ Skills 2 – knife skills ➢ Skills 3 – Preparing fruit and vegetables ➢ Skill 4 – use of the cooker ➢ Skill 5 – use of equipment ➢ Skill 6 – cooking methods ➢ Skill 7 – Prepare, combine, shaping	➢ Questioning ➢ Practical assessments and feedback	➢ For Y11 exam ➢ For NEA ➢ SMSC – 1. Personal Development

	➢ Skill 8 – Sauce making ➢ Skill 9 – Tenderise and marinade ➢ Skill 10 – dough ➢ Skill 11 – Raising agents ➢ Skill 12 – Setting mixtures		
Summer 2	**Understanding of why food is cooked, raising agents, food spoilage, key temperatures and developing confidence in the kitchen** 1. Topic: Food science 2. Topic: Food safety 3. Developing practical skills		
	Food science: Preparing food - fruit and vegetables: ➢ Enzymic browning ➢ Oxidation Raising agents: ➢ Chemical (baking powder, bicarbonate of soda, self-raising flours which produce carbon dioxide), mechanical (whisking, beating, folding, sieving, creaming and rubbing in – all incorporate air into the mixture), steam is produced when the water in any moist mixture reaches boiling point and biological (yeast) ➢ The scientific principles underlying the processes listed above when preparing and cooking food ➢ The working characteristics, functional and chemical properties of raising agents.	➢ Mini quizzes ➢ Questioning ➢ Practical assessments and feedback ➢ Past paper questions	➢ For Y11 exam ➢ For NEA
	Food science: Cooking of food: ➢ The reasons why food is cooked	➢ Mini quizzes ➢ Questioning	➢ For Y11 exam ➢ For NEA
	Food safety: Food spoilage and contamination – microorganisms and enzymes: ➢ The growth conditions for microorganisms and enzymes and the control of food spoilage ➢ Bacteria, yeasts and moulds are microorganisms	➢ Mini quizzes ➢ Questioning ➢ Practical's ➢ Past paper questions	➢ For Y11 exam ➢ For NEA

	➢ High risk foods ➢ Enzymes are biological catalysts usually made from ➢ Protein The signs of food spoilage: ➢ Enzymic action ➢ Mould growth ➢ Yeast action ➢ The use of microorganisms in food production Contamination: ➢ The different sources of bacterial contamination ➢ The main types of bacteria which cause food poisoning ➢ The main sources and methods of control of different food poisoning bacteria types ➢ The general symptoms of food poisoning Buying and storing food: ➢ Temperature control: freezing: -18°C, chilling: 0 to below 5°C, danger zone: 5 to 63°C, cooking: 75°C, reheating: 75°C ➢ Ambient storage ➢ Temperature danger zone ➢ Correct use of domestic fridges and freezers ➢ Date marks ➢ 'Best before' and 'use by' dates ➢ Covering foods		
	Focus on practical skills (cooking methods based): ➢ Skill 1 – practical skills ➢ Skills 2 – knife skills ➢ Skills 3 – Preparing fruit and vegetables ➢ Skill 4 – use of the cooker ➢ Skill 5 – use of equipment ➢ Skill 6 – cooking methods ➢ Skill 7 – Prepare, combine, shaping ➢ Skill 8 – Sauce making	➢ Questioning ➢ Practical assessments and feedback	➢ For Y11 practical NEA exam ➢ SMSC – 1. Personal Development

	➢ Skill 9 – Tenderise and marinade ➢ Skill 10 – dough ➢ Skill 11 – Raising agents ➢ Skill 12 – Setting mixtures		

Year 11 Overview

Term	Knowledge	Assessment	Connections to Learning
Autumn 1	**NEA 1 (15% of final GCSE grade)** 1. NEA 1		
	➢ NEA 1 task released 1st September ➢ NEA 1: Food investigation (30 marks) ➢ Students' understanding of the working characteristics, functional and chemical properties of ingredients. Practical investigations are a compulsory element of this NEA task (15 % of GCSE) ➢ Students will investigate the working characteristics and the functional and chemical properties of a particular ingredient through practical investigation. They will produce a report which will include research into 'how ingredients work and why'.	➢ Assessment and feedback on NEA task	➢ NEA 1 ➢ SMSC – 1. Personal Development
Autumn 2	**NEA 2 (35% of final GCSE grade)** 1. NEA 2		
	➢ NEA 2 task released 1st November ➢ NEA 2: Food preparation assessment (70 marks) ➢ Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved (35 % of GCSE) ➢ In this task, students will prepare cook and present a final menu of three dishes to meet the needs of a specific context. Students must select appropriate technical skills and processes and create 3 – 4 dishes to showcase their skills. ➢ They will then produce their final menu within a single period of no more than 3 hours, planning in advance how this will be achieve Students must work independently e.g. making their own judgements about cooking methods and making changes to recipes to improve palatability. Students must work safely and hygienically. ➢ It is compulsory that students will adhere to food safety principles at all times throughout this assessment.	➢ Assessment and feedback on NEA task	➢ NEA 2 ➢ SMSC – 1. Personal Development ➢ SMSC – 6. Cultural Development

	➢ Students apply their knowledge of food safety principles within the planning for the 3 hour assessment (Section C). The application of food safety principles will be credited and assessed when making the final dishes (Section D). ➢ If a teacher has to intervene to prevent unsafe or unhygienic practices, this should be reflected in the final mark awarded to the student as they will not be demonstrating technical skills or use of equipment competently.		
Spring 1	**NEA 2 (35% of final GCSE grade) and food choice based on religion, moral beliefs, intolerances, allergies and lifestyle** 1. Practical exam (3 hours) 2. Topic: Food choice 3. 3 HOUR PRACTICAL FOOD EXAM – FEBRUARY		
	NEA 2 Practical Food Exam – 3 Hours	-	➢ NEA 2 exam ➢ SMSC – 1. Personal Development ➢ SMSC – 6. Cultural Development
	Food choice contunied: ➢ Physical activity level (PAL) ➢ Celebration / occasion ➢ Cost of food ➢ Preferences ➢ Enjoyment ➢ Food availability ➢ Healthy eating ➢ Income ➢ Lifestyles ➢ Seasonality ➢ Time of day ➢ Time available to prepare/cook	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Year 11 Exam ➢ SMSC – 5. Moral Development ➢ SMSC – 6. Cultural Development

Spring 2	**Understanding labelling and marketing influences on food choice, understanding food sources and genetically modified foods** 1. Topic: Food choice 2. Topic: Food provenance		
	Food choice continued: Labelling and marketing influences: ➢ Mandatory information included on food packaging in accordance with current European Union and Food Standards Agency (FSA) legislation ➢ Non-mandatory information: provenance, serving suggestions ➢ How to interpret nutritional labelling ➢ How food marketing can influence food choice e.g. buy one get one free, special offers, meal deals, media influences, advertising, point of sales marketing	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Year 11 exam
	Food provenance continued: Food sources: ➢ Grown ingredients: fruits, vegetables and cereals ➢ Reared ingredients: meat and poultry ➢ Caught ingredients: fish ➢ An understanding of: organic and conventional farming, free range production, intensive farming, sustainable fishing ➢ Advantages and disadvantages of local produced foods, seasonal foods and GM foods	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Y11 exam ➢ SMSC – 5. Moral Development
	Understanding sustainable eating and living in terms of food choice and understanding technological developments in the food industry 1. Topic: Food production		

Summer 1	Food production continued: Technological developments: ➢ 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 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	➢ Mini quizzes ➢ Questioning ➢ Past paper questions	➢ For Y11 Exam ➢ SMSC – 5. Moral Development
	➢ Revision for the exam	➢ Past papers ➢ Practice exam questions	➢ For Y11 exam ➢ SMSC – 1. Personal Development
Summer 2	Students are in school but are required by BLS to revise for subjects of their choice in preparation for their GCSEs.		