

Food preparation & Nutrition Scheme of Learning

<u>Year 10 – Term 3 & 4</u>

Intent - Rationale

Using the learning from terms 1 & 2, students will be able to demonstrate the ability to adapt

Sequencing – what prior learning does this topic build upon?	Sequencing – what subsequent learning does this topic feed into?		
Yr. 7 – Seasonality of ingredients Yr. 7 – Seasonality of ingredients Yr. 7 Food Miles & Food Security Yr. 8 Buying Local, Reducing the Carbon Footprint and Food Miles Yr. 8 & 9 Nutritional Analysis Costing Exercises from yrs. 7-9 Yr. Energy Saving Equipment Task All previous practical skills	 Application into future planning, making choices based on SMSC, budgets and the environment. Ongoing practical skills Preparation for NEA2 issued yr11 Preparation for written examination summer 2022 		
What are the links with other subjects in the curriculum?	What are the links to SMSC, British Values and Careers?		
 Mathematics – calculation of Food Miles, Weighing & measuring, Nutritional Analysis English – Following instructions, carrying out research and application of suitable & relevant information Geography – environmental impacts, farming, use of maps, identifying areas & regions History – developments through the ages, impact of significant time periods. Computing – use of IT for the delivery of information. Excel sheets for nutritional analysis, costing calculations and food miles 	 SP: 1. Own beliefs & religions considered with planning and delivery of practical work. Work as a whole group to respect these matters in the classroom 2. Encourage excitement & enjoyment through the classroom activities & their own adaptations of recipes 3. Always looking for creativity in practical work 4. Evaluation of practical work. Dirt time where required M1. Food Safety & H&S key, implications of rules 2. High expectations 3. Debates, conversations effective and respectful SO: 1, 2 & 3 Presentations, team work, sharing of skills. Support for each other C: 1,2 &4 through practical work, selections of recipes, food provenance & the environment. BV 1, 4, 5 Careers> GB4 		
What are the opportunities for developing literacy skills and developing learner confidence and enjoyment in reading?	What are the opportunities for developing mathematical skills?		
Research through reading Use of textbook Gathering of recipes	Mathematics – calculation of Food Miles, Weighing & measuring, Nutritional Analysis, proportions, %, RDA, DRV's		



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Intent - Concepts

What knowledge will students gain and what skills will they develop as a consequence of this topic?

Know

The journey of cereal products to provide for our staple sources of foods. The structures of some cereal, sugars, fruits, vegetables, and the categorisation of these. The advantages of sourcing foods locally and the impact this can have on the local environment but also world-wide. The rearing of meat, fish & poultry, the Quality control, and assurance procedures that are in place for both the animals and the consumers. How intensive farming and organic methods of farming feature in the food production chain, finding the advantages & disadvantages and disadvantages of primary & secondary processing methods; with a focus on milk and milk products, bread and pasta. The importance of temperature and technology in the production and processing of foods. How the United Nations has impacted on the availability of foods in many areas, though the understanding of 'Food Security' to maximise availability, accessibility and utilisation of foods across the globe. How technology has developed to allow for 'safe' and 'lasting' foods can be produced whilst incorporating many forms of additives. Students will develop knowledge in how to read food labels to identify specific additives and processes used in food production. Students will develop grater knowledge in their practical skills, build confidence experiment further with a range of techniques and methods

Apply

Knowledge will be applied through independent work, questions, worksheets, the planning, and delivery of practical work in line with topics being delivered. Homework will be set to deepen knowledge and understanding allowing for application of correct knowledge. Structures of foods will be developed through drawing and labelling exercises. Food science activities will take place with the use of a range of products tested for their thickening ability. Testing for viscosity, taste, texture and appearance through practical activity in groups. The use of demonstration (live & video) in the preparation of meats & fish to develop practical skills, choices of ingredients will respect SMSC & British Values. Milk processing will develop through independent research, models replicated to show differences in milk types, shelf life. Under COVID taste testing will not take place for this activity Students will delve into cupboards at home to investigate food labelling to identify key additives and processes being used. Food Security is a project encouraging students look beyond the shores of the uk to see the impact of a lack of Food Security in many areas, this will then link to prior learning of Malnutrition.

Extend

Students are encouraged to use many of the food programmes available to become more aware of skills, process and food issues in our modern lifestyles whilst considering the implications of food developments over time. They are encouraged to consider the Hunter gatherer, Roman times through the war years into the modern age. Magazines in the library along with a range of resources in Geography & History. The selection of practical skills and dishes is encouraged to challenge beyond student comfort zones whilst considering the budgets, allergies & intolerances.



What subject specific language will be used and developed in this topic?			What opportunities are available for assessing the progress of students?	
 Staple Foods • Cytoplasm, cell wall, vacuole Categorisation of fruits & vegetables – Leaves, Fruits, Root, Flowers, Bulbs, Stems, Tubers, Seeds & Pods, Citrus, Soft/ Berry, Hard Fruits. Seasonality Imports/ Exports Productivity Carbon Footprint / Carbon Offsetting / Eco Footprint/ Food Miles Animal Welfare Organic Farming Intensive Farming Sustainability Pasteurised Sterilisation / aseptic Prove Yeast Enzymes Yogurt 	• Emulsion • Homogenisation • Cook Chill / Blast Chill/ Chilling/ Freezing • Cryogenic Freezing • Dehydration • Modified Atmospheric Packaging (MAP) • Accelerated Freeze Drying (AFD) • Hermetic • Food security • Malnourished • Fairtrade • Genetically Modified • Additives /Preservatives/ Antioxidants/Colourings/ Flavourings/ Flavour Enhancers/ Sweeteners/ Intense Sweeteners/ Bulk Sweeteners/ Thickeners / Gelling Agents • Functional Foods	Classifications of Fish – white, flat, Oily, Shellfish, Molluscs, Crustaceans • Fishing Methods – Trawling, Dredging, Gill Netting, Harpooning, Jigging, Long Lining, • Pole & Line Fishing, Purse seining, Traps & Pots, Cyanide Fishing • Bycatch • Fish Farming Methods – Farming, Sea Rearing, Sea Ranching • Traceability • Primary & Secondary Processing • Milling / Extraction Rate/ Fortified • Chemical Raising Agent • Coeliac Disease	• End of unit assessment • Practical skills/ outcomes • Homework tasks – Teams & paper exercises • Presentations – individual & group • Question & answer sessions • Kahoot quizzes.	



Intent - Concepts

Lesson title	Learning challenge	Higher level challenge	Suggested activities and resources
Food Provenance (2 lessons)	To develop an understanding of food sources and types	To be able to identify origins of a range of products	Sources of Food Booklet
	and how: cereals, sugars, fruits & vegetables are grown.	within this challenge e.g. Variations in rice.	Practical – using a fruit or vegetable
Cereal Based Product (2 lessons)	To be able to identify a cereal-based, product, select recipe and adapt to the needs of individuals	To produce a food label to explain the nutritional value of the dish with a focus on being a good energy source	Ss. Independent selection and making of dish based on a Cereal Ingredient
Food Provenance Continued (3 lessons)	Develop K&U of foods from origins – foods from around the world.	Wider range of products identified, food miles shown and levels of imports and exports	Ss. Use of computers to research and use of maps to identify areas of the globe and foods / traditional foods Practical – International dish
Food Provenance: Food Processing and Production	To be able to identify primary & Secondary Processing	Using examples of methods of production for wheat / flour	Ss. Worksheets – extraction rates / Milling process
Food Provenance: Food Processing and Production	To be able to identify primary & Secondary Processing	Using examples of methods of production for milk / Cheese/ Yogurt & Cream	Ss. Individual research / Use of Textbooks to produce flow charts / tables.
Preservation Methods	To be aware of different processes of preservation and know some key terms and temperatures. Some awareness of nutritional impact	To develop greater understanding to be able to explain the processes, the temperature, and times. Knowledge of loss of nutrients	T led, use ppt , questions & answers
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Assessment -	Past paper questions to allow application of knowledge	Past paper questions to allow application of knowledge	Use of research and prior learning to complete past paper questions – one attempt closed book then revisit in different colour pen and use textbook to develop responses
Labelling and packaging	To be aware of the key information required on packaging / labelling	To be able to identify the information that is required by law, preferred and desired.	T led. use of PPT Design own pizza and produce a food label
Labelling and packaging	To investigate the use of 'explore 'as a nutritional package	To be able to confidently use both Food P6 & Explore in the production of food labelling	Ss to investigate the use of 'Explore' – resources on Teams. To design pizza box ready for practical
Bread Making Revisited	Recall the process of fermentation	Identification of conditions for yeast development, temperature / time/ moisture/food / pH	T led use of PPT
Bread Making Revisited	To revisit the method of Bread Making from Year 8	To be able to explain the process of bread making and fermentation of Yeast	Ss. To write up method, find own recipe for breadbased pizza.
Practical	To produce a rustic pizza with some focus on presentation	To produce a quality product with focus on design, presentation.	Ss to make a pizza
Let us Go Fishing!	Investigate Fishing Methods – key terms to be identified	Details of fishing methods included, along with advantages and disadvantages of each	T led PPT: Fishing Methods, Key Terms textbook page 100-1
Categorise Fish	To categorise Fish types	Be able to describe each category and give examples	Ss. To produce a fact sheet / Image Board of Fish Types. Examples of each fish to be included
How to Fillet a Fish	To understand the process and skill level involved with Filleting	To be able explain the process of Filleting	T led: where possible filleting of fish to be demonstrated, in the event of now availability then the use of You Tube clips to deliver clear understanding of various fish types
Catch up and finish	Use of time to revisit notes, add detail	To expand notes, include images and revisit work where required	Ss. Independent work
Practical Focus: Baked Goods	To be able to identify different pastry types and products that can be produced	To be able to identify the differences, the variations in outcomes with the adaptation of ingredients	Ss. Investigation into baked goods. Image boards with a range of examples for each type of pastry



Rough Puff Pastry	To Know & understand how to make Rough Puff Pastry	To produce excellent quality pastry within time	Ss. Students produce Rough Puff Pastry which is then
		constraints. Explaining the trapping of air and layering	frozen for use the following week
Miele Feuille	To know & understand the stages of making and the	To know & understand the functions of ingredients at	T led: demonstration of Miele Feuille, Students to take
	organisation required to achieve a quality outcome.	each stage of the making	notes and think through their organisation, planning,
			equipment required.
Making of Miele Feuille	To be able to produce a quality product	To be able to identify www / ebi at each stage of	Ss. Independent practical using the pastry made in
		making	previous lesson
Short Crust Pastry Revisited	To contrast the making of SC Pastry with Rough Puff	To be to recall the method, rules and science of making	Ss. Revisiting the high skills of SC Pastry, to produce a
	Pastry.	SC pastry	quality outcome of own selection.