# **Food Preparation & Nutrition Scheme of Learning**

### <u>Year 10 – Term 2</u>

#### <u>Intent – Rationale</u>

The importance of developing the nutritional understanding and application to planning and making of foods. Giving deeper understanding of understanding. This unit will develop the use of the human senses and properties. Students will become more confident in understanding and applying Food

Sequencing – what prior learning does this topic build upon?	Sequencing – what subsequer
Year 7-9 Food Safety Year 9 the impact of Vegetarian/ Vegan with potential lack of nutrients Year 7 – 9 continuation of practical skills.	<ul> <li>Planning and delivery for NEA1Food Science in</li> <li>Planning and delivery of NEA2 Practical task</li> <li>Written paper for mocks, and summer examin</li> </ul>
What are the links with other subjects in the curriculum?	What are the links to SM

The Science of Food – chemistry, Biology and Physics	BV 1. GB4 a,b,c,d,e,f,t,h
PE – Nutrition	• BV2
History of Food, Public Health	• BV 4
	• SMSC 2,4
	• M1, 2, 3
	• SO1, 2
	• C1, 2
What are the opportunities for developing literacy skills and developing learner confidence and enjoyment in reading?	What are the opportunities
Reading and responding to recipes.	Weighing/ Measuring
<ul> <li>Use of Textbooks and reference books to develop further reading skills</li> </ul>	• Costing
Written responses	Budgeting
	Portioning
	Measurements / Conversions

# **Food Preparation & Nutrition Scheme of Learning**

Term 2 – 2020-21

Intent – Concepts

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

#### Know

Categorisation of Vitamins & Minerals as Micronutrients and their necessity in the body. The importance of Nutrients and water for the well being and the reduction of Malnutrition. Food preparation within these topics will encompass the food science and how to use the human senses to improve the quality of the product. Food Safety will as always be key in food production.

#### **Apply**

This knowledge will be applied to all areas of selection and planning for specific nutritional needs, groups of people such as Athletes, Pregnant & Lactating. The use of Food Analysis software to support and evidence these choices and suggestions.

#### **Extend**

Link to previous learning in term 1, taking forward in food studies when selecting methods of cooking, food preservation and storage.

What subject specific language will be used and developed in this topic?			What opportunities are available for assessing the progress of students?	
<ul> <li>Functions of nutrients</li> <li>Fat soluble</li> <li>Water Soluble</li> <li>Osteomalacia</li> <li>Rickets</li> <li>Osteoporosis</li> <li>Fortification</li> </ul>	<ul> <li>Retinol</li> <li>Beta carotene</li> <li>Cholecalciferol</li> <li>Tocopherol</li> <li>Thiamine</li> <li>Riboflavin</li> <li>Niacin</li> <li>Folate</li> <li>Cobalamin</li> <li>Ascorbic Acid</li> </ul>	<ul> <li>Iron</li> <li>Calcium</li> <li>Phosphorus</li> <li>Sodium</li> <li>Anaemia</li> <li>Deficiency</li> <li>Hydration</li> <li>Organoleptic</li> </ul>	<ul> <li>Homework assignments</li> <li>Mid unit test</li> <li>End of unit test</li> <li>Practical assessments</li> <li>Presentations</li> </ul>	

### <u>Intent – Concepts</u>

Lesson title	Learning challenge	Higher level challenge	Suggested activities and resources
1. Water Soluble Vitamins	Understanding the importance of each one to the functioning of the body and the sources in food.  Identifying the needs for some additional nutrients for the correct absorption and usage of some.	Being able to show how cooking methods can impact on the presence or loss of specific water-soluble vitamins. Being able to use the chemical name of each water-soluble vitamin.	<ul> <li>Textbook pg. 60-62</li> <li>Worksheet- listing food sources</li> <li>Vitamins.ppt</li> </ul>
2. Fat Soluble Vitamins	Understanding the importance of each one to the functioning of the body and the sources in food.  Identifying the needs for some additional nutrients for the correct absorption and usage of some.	Being able to show how cooking methods can impact on the presence or loss of specific fat-soluble vitamins.  Being able to use the chemical name of each fat-soluble vitamin	<ul> <li>Vitamins.ppt</li> <li>Worksheet – listing food sources</li> <li>Text book pg 58-59</li> </ul>
3. Minerals	Develop knowledge & Understanding of the functions in the diet, the main sources, issues of deficiency or excess	Through the selection of ingredients to demonstrate the presence in specific dishes and advising specific groups of people on their needs.	<ul> <li>Textbook Pg. 63-65</li> <li>Planning for practical – dish providing Calcium &amp; vitamin D or Iron &amp; Vitamin C</li> </ul>
4. ½ Group Practical ½ Group producing recipe booklet	½ group to produce a quality dish rich in the specific nutrients with a focus on time and aesthetics	½ group focus on finishing techniques, presenting with nutritional analysis of evidence ½ group include nutritional evidence and potential	<ul> <li>Practical work</li> <li>Nutritional analysis – Food PC</li> <li>Production of recipe booklet for Pregnant / lactating woman or Vegan</li> </ul>

5.	Water to avoid Dehydration	½ group demonstrate knowledge & understanding of specific groups  To know & understand the functions of water diet, impact of deficiency or excess. Be able to give guidance of daily intake in line with government guidelines. Be able to identify good sources water from food.	Iabelling to support choices by specific groups  To be able to describe the scientific explanation of the functions of water in the body – transference of gases, effects on organs digestive system, membranes.	<ul> <li>Textbook pgs. 66-68</li> <li>Carry out survey of average water intake in class</li> <li>Identify range of foods which supply a good source of water</li> <li>Discuss the times when water is required in larger quantities and why.</li> </ul>
6.	Nutrients in Food	Linking prior learning of fruits, vegetable and cereals from year 8 to develop knowledge and understanding of nutrients provided.	To be able to link the loss/ maintenance / fortification during production/ manufacture / treatment	Nutrients - cereals, fruits and veg.ppt  Textbook pg 69-73 Research into new food products that include cereal – gather labels and explain content.
7.	Nutrients in Food	Linking prior learning of fruits, vegetable and cereals from year 8 to develop knowledge and understanding of nutrients provided.	To be able to link the loss/ maintenance / fortification during production/ manufacture / treatment	Research into new food products that include cereal – gather labels and explain content catch up and complete
8.	Planning for practical using a combination of Cereal & Fruit / Vegetables	To demonstrate understanding of the functions of these ingredients to combine to produce a nutritious dish.	Selection to suit a specific group of people. Explanation and analysis of ingredients	<ul><li>Research ingredients</li><li>Write time plan</li><li>Use Food P6 for analysis</li></ul>

9. ½ group Practical ½ investigation into Protein and Cooking Methods	Production of good quality outcomes, demonstrating preparation techniques to maintain the presence of essential nutrients.	Being able to explain the impact of cooking methods on the nutrients in chosen dishes. Focus on portion control and use of food pc outcomes to explain the benefits	<ul> <li>Practical work</li> <li>Individual investigation into the effects of cooking on Protein</li> </ul>
10. ½ group Practical ½ investigation into Protein and Cooking Methods	Production of good quality outcomes, demonstrating preparation techniques to maintain the presence of essential nutrients.	Being able to explain the impact of cooking methods on the nutrients in chosen dishes. Focus on portion control and use of food pc outcomes to explain the benefits	<ul> <li>Practical work</li> <li>Individual investigation into the effects of cooking on Protein</li> </ul>
11. Nutrients – Protein foods	To understand the presence of nutrients in High Protein Foods, be able to plan for practical whilst considering the maintenance of nutrients	To understand and explain using Higher level terminology, and the implications of destroying nutrients on individuals	Nutrients protein - meat, fish, eggs milk
12. Nutrients – Protein foods – continued	To understand the presence of nutrients in High Protein Foods, be able to plan for practical whilst considering the maintenance of nutrients	To understand and explain using Higher level terminology, and the implications of destroying nutrients on individuals	Nutrients protein - meat, fish, eggs milk  • Card sort
13.Milk Production – processing	To understand the primary and secondary process of producing milk. Identifying with alternative milk sources (non-diary)	Being able to explain the impact of processing on the nutrients within milk.	Food Processing & Preservation method  Set up and carryout milk taste testing
14. Completion of Milk studies	To understand the primary and secondary process of producing milk. Identifying	Being able to explain the impact of processing on the nutrients within milk.	Planning for milk or dairy alternative practical

15. ½ group practical –	with alternative milk sources (non-diary)  Demonstration of skills in the	Demonstrating through	Practical work
'Cooking with Milk ' ½ group – practice questions	coagulation of milk in food products to produce a quality dish within the timescale Apply knowledge and understanding in the completion of practice questions	practical work and explanation of the higher-level terminology, techniques and temperatures	<ul> <li>Practical work</li> <li>Practice questions – closed book – self marking</li> </ul>
16. High in Sugars & Fats !!	To be able to produce guidance to specific groups of people based on dietary needs. Demonstrating understanding of the processes involved in producing specific foods.	To be able to identify free sugars and non-sugars, saturated and unsaturated fats/ alternatives as oils, able to explain the benefits of the alternatives.	Nutrients - foods & drink high in sugar  • Collection of packaging and labelling/ analysis of labelling
17. End of unit Test	Be able to demonstrate knowledge and understanding through the completion of all questions	Be able to use higher level terminology, scientific names and processes to achieve higher response marks.	Past Paper questions
18. Group Marking	Can self-mark and understand how marks have been lost and can be gained next time	Is able to revisit questions of concern to restructure using the marking scheme.	<ul> <li>Reissue written paper and mark scheme.</li> <li>Students change pen colour</li> <li>On completion teacher to collect.</li> </ul>