

KESTEVEN AND SLEAFORD HIGH SCHOOL

Food Science Scheme of Learning Year 9 Rotation UNIT 2

Intent – Rationale

Students will apply prior learning linked to the Eatwell Guide, Nutrition and Healthy Eating. Adapting and changing recipes in line with the demands of the end consumer. Students will cook a variety of dishes incorporating theoretical understanding and knowledge: Choux Pastry / savoury Pies/ Vegetarian and Vegan Dishes/ Homemade Pasta & Sauce

Sequencing – what prior learning does this topic build upon?	Sequencing – what subsequent learning does this topic feed into?		
Using learning from year 7& 8 – Eatwell Guide/ Government Guidelines Use of Food P6 for Nutritional Analysis Seasonal Foods / Food Miles Skills in year 7 & 8	<ul style="list-style-type: none"> GCSE Food Preparation & Nutrition – Science, Nutrition and practical skills Life Skills 		
What are the links with other subjects in the curriculum?	What are the links to SMSC, British Values and Careers?		
<ul style="list-style-type: none"> Geography – Food Miles / Seasonality Maths – Calculations / weighing / measuring Science – nutrients/ functions of ingredients PSHE – Nutrition 	BV4 BV5	GB4a GB4b GB4g GB4d GB4i	SP1,2,3,4 M2,3 SO1, 3 C2, 4
What are the opportunities for developing literacy skills and developing learner confidence and enjoyment in reading?	What are the opportunities for developing mathematical skills?		
<ul style="list-style-type: none"> Presentation skills Reading and following instructions Independent Research FROM THE LIBRARY <i>Olive</i> - Monthly magazine <i>How Does my Diet Affect Me</i> ; P. Westcott-613.2	<ul style="list-style-type: none"> Costing Weighing / Measuring Portioning 		

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Nutrition and Diet; Lisa Firth-613.2
Healthy eating For Kids- A. Bean-664
Eating Right: Making Healthy Choices; T.Orr-613
Looking at Vegetarianism- D.Donnellan- 179
Try it-eat More Veg- C .Humphries-641
Vegetarian Diets- L. Firth-641.56

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Intent – Concepts

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

Know

Needs of the special diets, adaptation of recipes and nutritional awareness of needs within a range of categories.
The controls for making a range of pastry products through research, demonstration and practical.
How to build on skills from year 8- creaming, whisking and folding with higher skilled dishes
How the science behind fats, sugar and flour can impact the outcomes of basic recipes.

Apply

Students will carry out group research to identify the needs of specific consumer groups and use this information to plan for practical work, based upon the four key dietary needs evident in the UK, Vegetarian, Vegan, Coeliac and Diabetes. They will use food P6 to produce food labels to evidence the nutritional content of the dishes.

Research techniques to discover the full range of pastry products, dishes each can be used for, focus on the making of short crust pastry.

Developing skills of from Year 8 of small cake making, to produce a higher skill dish, adapting for preferences and dietary needs.

Extend

Through evaluation and analysis of outcomes to identify areas of improvement to the practical dishes and adaptation of nutritional content.

To involve a panel of taste testers to develop the Organoleptic outcomes of dishes

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What subject specific language will be used and developed in this topic?	What opportunities are available for assessing the progress of students?
<ul style="list-style-type: none"> • Gelatinisation • Gluten • Lamination • Coeliac • Coronary Heart Disease • Athlete 	<ul style="list-style-type: none"> • Protein/ Amino Acids • Nutritional Analysis • Vegetarian / Vegan • Diabetes • Shortening • Sauces – blended/ roux / all in one • Hypothesis • Control

Intent – Concepts

Lesson title	Learning challenge	Higher level challenge	Suggested activities and resources
1. Dietary Needs	To develop knowledge and understanding of specific group	Knowing how and when to apply terminology Using correct	Students to research vegetarian and vegans- how to categorise

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	and their basic dietary need – Vegetarian and Vegan diets	terminology for groups and nutrients	vegetarians. What potential deficiencies may be found?
2. Advice for Dietary Needs	Know how to plan for individual needs, balancing the diet over a week.	Know how to reference the Eatwell guide to guide meal planning	Students to complete research, produce a 5- or 7-day meal plan
3. Planning Practical Needs	Developing the knowledge and application of for selecting appropriate dishes / time awareness	Knowing and applying application Justification of choices	Planning for practical work for Vegetarian/ Vegan – use meal plans to select from & produce FOOD P6
4. Dishes for Vegetarian/ Vegan	Showing knowledge of working within time scale / Food Safety / Health & Safety	Presentation skills / Finishing Techniques	Practical work – 1 dish for either vegetarian or vegan
5. Bring the Science to Food!	Group work- develop knowledge and understanding of how to carry out an investigation into the adaptation of recipes.	Group work – investigation into the adaptation of recipes. Justification of reasoning with scientific explanation, using and incorporating the methods used in science lessons for investigations.	Group to find recipes, write hypothesis, produce shopping list, feedback sheets. Any work not completed to be HWK
6. Is the Hypothesis correct?	Developing knowledge of how to write a Group Practical and understand the term predictions' and apply to investigation	Group Practical and taste testing, use higher level terminology, develop the knowledge of these terms 'Hypothesis'	Working in previously identified groups, to carry out practical work, control taste testing. Photos to be taken at each stage. Write up findings for hwk
7. Coeliac Disease & Diabetes, more common than before!	Independent fact finding for both of these areas. What do each involve/ categories/ food groups required / avoided?	Independent fact finding to identify the deficiencies and implications	Students to produce fact sheet to identify and share
8. Completion / Catch up	Complete / catch up from previous lessons	Complete / catch up from previous lessons	Independently work to complete outstanding work

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9. Practical Coeliac or Diabetic adaptation	Apply prior knowledge of cross contamination to prepare dishes safely suitable for chosen category.	Apply prior knowledge with a focus on portion control, cross contamination and nutritional value to produce dish	Practical work – students to produce a dish suitable for Diabetic or Coeliac in line with the findings of research
10. Pastry	Know the range of possible pastry's and apply dishes to these	To know & understand different skill levels with different pastry's, being able to give examples.	Research / Mind Mapping pastry's/ suitable recipes for each. Rules for Short Crust Pastry 14. Recipes for Savoury Pie
11. Shortening	Application of the knowledge of the rubbing in technique (gained from year 7) , using the golden rules of making	Production of 'Short' pastry with focus on finishing techniques, demonstrating the knowledge and skills previously developed to a higher level.	Making of Short Crust Pastry, use to make a dish of own selection
12. Functions of ingredients. Aeration, Caramelisation and dextrinisation.	Recall of learning from year 8, to develop skills for more complex dishes. Awareness of H&S for hot syrup.	To also focus on the finishing techniques / presentation skills.	Students to produce an upside pudding. With a focus on the understanding of the functions of ingredients.
13. Group work – science of food.	Knowledge of further caramelisation & dextrinisation	Students able to share knowledge and understanding of from investigation work with others. To be able relate understanding of caramelisation & dextrinisation to a range of products.	Students to return to group work, to summarise previous findings, and prepare to present findings. Students to produce visual method of understanding of caramelisation & dextrinisation.

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14. Catch up and completion	To revisit outstanding work, use feedback from others to develop written work.	To revisit and extend responses following feedback from last lesson to deepen understanding and responses.	Students to work independently to revisit and complete book work
15. Final Practical	To revisit and improve a previous dish – explaining why and what needs to be developed.	Select a topic and select alternative or similar dish to produce- justification of decisions.	Independent student practical to use a previous topic or dish to develop / change with written justification for choice of recipe.