NEA1- Food Science Investigation NEA2- Food Practical Skills

\*All topics can be covered in the End of Year exam.

	Year 7	Year 8	Year 9	Year 10	Year 11
		By the end of the project you	will be able to:		
Nutrition and Health	Explain the nutritional benefits of carbohydrates, protein and fat as part of a balanced diet. Give examples of different food products containing carbohydrates, protein and fat. Explain the importance of calcium in the diet.	Explain the different vitamins and minerals and how they benefit the body.	Explain why we use the Eatwell Guide and follow dietary recommendations.  Describe the dietary needs of a teenager.  Develop suitable dishes to meet the dietary needs of a teenager.	Explain the functions of the following macronutrients with examples in the diet: -Protein -Carbohydrates -Fat Explain the functions of the following micronutrients with examples in the diet: -Vitamins -Minerals Explain the function of fibre in the diet with examples. Explain why we use the Eatwell Guide and follow dietary recommendations. Describe the dietary needs at different ages. Describe the different special dietary needs (e.g. vegetarian and vegan). Describe the causes and prevention of the 6 dietary related illnesses.  How will I be assessed? MOCK NON EXAM ASSESSMENT 2 (35%) Plan, prepare and cook three dishes to meet the needs of a specific dietary need.	Recap and review knowledge from year 10.  How will I be assessed?  NON EXAM ASSESSMENT 2 (35%)  Plan, prepare and cook three dishes to meet the needs of a specific dietary need.  Research /6  Demonstrating practical skills /18  Planning for the final menu /8  Making the dishes /30  Analysis and evaluation /8  Mock Exam (November)  WRITTEN EXAM (50%)
Food Science	Explain how enzymic browning affects fruits and vegetables. Give examples of ways to prevent or slow down enzymic browning when preparing food products.  How will you be assessed? Completion of a Food Science Practical Investigation.	Explain the functions of ingredients in baked products. Explain the functions of eggs in a variety of products. Explain how we use raising agents to make baked products rise.  How will you be assessed?	Explain the function of flour when making sauces (gelatinisation).	End of module exam  Explain why we cook foods and the different heat transfer methods.  Explain the chemical and functional properties of the following: -protein (denaturation, coagulation, gluten and foams) - carbohydrates (gelatinisation, dextrinization and caramelisation) - Fat (plasticity, shortening, aeration and emulsification.  Describe the use of different raising agents in baked goods (mechanical, chemical and biological).  How will I be assessed?	Recap and review knowledge from year 10  How will I be assessed?  NON EXAM ASSESSMENT 1 (15%) Investigate the working characteristics, functional and chemical properties of ingredients through practical investigations Research /6 Investigation /15
		Completion of a Food Science Practical Investigation.		Mock NON EXAM ASSESSMENT 1 (15%) Investigate the working characteristics, functional and chemical properties of ingredients through practical investigations (Enzymic browning) End of module exam	Analysis and evaluation /9  Mock Exam (November)  WRITTEN EXAM (50%)
Food Safety	Prepare foods in a hygienic manner. Store foods correctly and safely to prevent food poisoning. Safely use the following equipment:  - Hob, oven and grill - Sharp knives and equipment  How will you be assessed? Extended writing reflecting on your practical lessons.	Prepare and cook high risk foods safely. Develop complex skills in pastry and bread to make good quality products. Safely use the following equipment:  - Temperature probes - Separate boards for raw meat - Electric whisks  How will you be assessed? Extended writing reflecting on	Develop complex skills in the following products: roux based sauce (macaroni cheese and lasagne), use of a marinade (chicken chow mein), safe storage, preparation and cooking of chicken, presentation techniques, organisation and time management. Safely use the following equipment:  - Temperature probes - Separate boards for raw meat - Food processors - Piping bags  How will you be assessed? Extended writing reflecting on your practical lessons. Extensive review of your practical skill and presentation	Explain how to prepare food safely and hygienically to prevent contamination and food poisoning.  Describe the procedures followed when buying, storing and preparing food to prevent food poisoning.  Describe the different food poisoning bacteria with examples of onset time and symptoms.  How will I be assessed?  MOCK NON EXAM ASSESSMENT 2 (35%)  Plan, prepare and cook three dishes to meet the needs of a specific dietary need.  End of module exam	Recap and review knowledge from year 10.  How will I be assessed?  NON EXAM ASSESSMENT 2 (35%)  Plan, prepare and cook three dishes to meet the needs of a specific dietary need.  Research /6  Demonstrating practical skills /18  Planning for the final menu /8  Making the dishes /30  Analysis and evaluation /8  Mock Exam (November)
Food Choice and Food Provenance	Explain how the following factors can affect food choice:  - Following a balanced diet  - Food allergies and intolerances  - Culture and religion  - The cost of food  - Food preferences  - Social concerns  - Food advertising	your practical lessons.	techniques.  Explain how the following factors can affect food choice:  - The Eatwell guide and dietary recommendations - The cost of food - Food preferences - Social concerns - Food advertising - Different dietary needs (e.g. vegetarian or vegan)	Describe the differences between British cuisine and other multicultural cuisines.  Explain the impact food miles on the environment and food choice.  Explain the importance of sustainability when producing food products.  Explain the different food production methods (primary and secondary processing).  Explain the benefits of using food additives and fortification.  How will I be assessed?  End of module exam	WRITTEN EXAM (50%) Recap and review knowledge from year 10  How will I be assessed? Mock Exam (November)  WRITTEN EXAM (50%)