High Tunstall College of Science Curriculum Intent

Subject: Food & Nutrition Year: 10 Half term: Autumn 1.3

Topic: Food commodities—flour, protein sources and dairy products Gelatinisation, lamination and dextrinisation

	Food and Nutrition	**Progress**		
Topic	**Key ideas**	**R**	**A**	**G**
Food commodities	I can **explain** the functions of strong plain flour, butter, salt and water within rough puff pastry			
	I can **explain** what lamination is and how this is successfully achieved to create the desired layers and flaky texture within rough puff pastry			
	I can **explain** how to make short-crust pastry and what the functions of ingredients are for plain flour, butter, lard and cold water and how this achieved a short crumb			
	I can **analyse** and **evaluate** the sensory attributes of a short crumbed biscuit using a star profile model. I can **suggest** technical and creative ways to improve the biscuit			
	I can **explain** the functions of ingredients used to make choux pastry and **explain** the gelatinisation process using the key temperatures (60, 80, 100oc) **Explain** what happens to starch if left and not stirred			
	I can suggest a wide variety of gelatinised products and explain what dextrinization is			

Lesson	Learning Focus	Assessment	Key Words
1	Can you explain why we use strong plain flour rather than any other? Can you explain how butter helps trap air? What happens to the water in the oven?	Practical product, photographs, Q&A, ILO	Rough puff pastry, lamination, functions of ingredients, gluten, saturated fats, air, evaporation, flaky, layers
2	Can you explain the lamination process?	Exam question ILO, practical activity, Q&A,	Rough puff pastry, lamination, air, flaky, layers, sealing
3	Can you explain why we use plain flour rather than any other? Can you explain how lard makes a short, crumbly texture? What happens to the water in the oven?	Practical product, photographs, Q&A, ILO	Short-crust pastry, plain flour, low gluten, fat, water, short crumb, texture, rolling. Sponge—all in one/creaming, aeration, dextrinization, coagulation
4	Can you analyse the sensory areas of a shortcake biscuit? Can I mark scores on a star profile framework and suggest improvements for sensory areas?	Formative questioning, practical, ILO	Appearance, aroma, taste, texture, star profile, improvements
5.	Can you explain the gelatinisation process using choux pastry as the product? Can you explain using the key temperatures? Can you explain how steam is created to help the choux pastry rise?	Demonstration, recording sheet, exam questions, assessment and Q&A	Choux pastry, gelatinisation, steam, dextrinization, starch granules, coagulation