## Food Preparation and Nutrition - Medium-Term Plan- Term 2

## Topic: Food Spoilage and Preservation

Year Group 9	Subject: Food Preparation and Nutrition
Prior learning- linked to National curriculum	Students will build on their learning from term 1 and their understanding of food safety and hygiene, food preparation and from a range of practical activities. Students have had the opportunity to cook mostly savoury dishes using a wide range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment and applying heat in different ways]. Students have explored the process of food preparation and experimented with different ingredients in order to complete a range of cooked dishes. This term will look at the food ingredients themselves with particular focus on the safety of our food. Students will know about foods going bad, and this unit is about expanding that knowledge to show the process by which food decomposes. Students will also have the opportunity to explore and be introduced to the hospitality industry and explore the various job opportunities and job roles available within the industry sector.  This scheme of work aligns with the KS3 Design and Technology national curriculum.
Rationale	To develop the understanding of food and food production students will learn about food Spoilage. What it means for food to go off and the various measures that can be taken domestically and commercially to extend the natural shelf life of food. This unit will look at preventing waste and allow students the opportunity to use both pre made and home made ingredients to demonstrate a range of dishes that can be made from store cupboard ingredients and what to do with excess ingredients.
Vocabulary:	Keywords: Shelf Life; Cross Contamination; Sterilisation; Preservation Methods; Pathogenic bacteria; canning; Vacuum Packing; Freezing; Blast chilling; Danger Zone

Cultural Capital:	There are a number of potential external and visiting opportunities for students to learn more about food and the career opportunities these include: Visiting local factory where they produce long life foods ie Diary Farm, Fish Smoke house and canning factory. Link to history with the development of equipment ie refrigeration.
Key assessments- name the assessments	Assessment 1 - Food Spoilage - Baseline test Assessment 2 - Food Spoilage Beat the Baseline Test
What do children know/ can do now (EDSM)	Be able to state become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]
	Emerging- Students will be able to explain what the basic principles of food going off means. Will be able to differentiate between key food safety dates such as Best Before and Use By. Will be able to suggestion 1 or 2 methods of keeping food fresher for longer Developing - Students are able to distinguish between the means of different date coded foods. Will be able to provide a range of at least 4 different food preservation methods that will extend the shelf life of perishable foods. Wil be able to state simply the benefits of food preservation
	Secure - Will be able to explain the reasons why some foods have different dates on the packaging of shortlife foods and provide examples for each category. Students will be able to recall food preservation methods that can extend the life of ingredients beyond its natural shelf life and provide some advantages and disadvantages for a limited range of preservation methods.
	Mastered - students can explain scientifically the difference in food display dates. Explain the process of food spoilage and describe a full range of preservation methods both short and long term suitable for different food groups along with providing advantages and disadvantages for each method
What amendments are you going to make following evaluation of this module?	

Term 2	Lesson objective	Differentiation	Homework
9T2:L1	LO: To Learn what is meant by food spoilage. Understand the signs and conditions for bacterial growth.  Food Practical: None	Assessment 1 - Food Spoilage - Baseline test  Retrieval:Why do we use Best Before and Use By Dates on foods?  SEND: What are the main reasons why food goes bad? Explain why this can be harmful or useful.  Challenge: Explain the causes of food spoilage and the conditions that cause food spoilage  Hinge Questions:How come a dairy product like milk will go off quicker than the dairy product cheese?	
9T2:L2	LO: To learn how microorganisms can extend a foods natural shelf life and change its sensory qualities.  Food Practical:	Retrieval:Why do some foods go off before other foods? SEND: How does different processes affect the shelf life of food? Challenge: Different processes can extend the life of foods but explain why different methods are used for different foods. Hinge Questions: What causes some fruit and vegetables to go brown when they have been cut	
9T2:L3	LO: To compare and contrast the use of fresh vs preserved foods. To learn how to prevent and control methods of enzymic action.	Retrieval:What is enzymic browning? SEND: How do we prevent the "going off" of fruits and vegetables Challenge: Explain the chemical process that	

	Food Practical: Apple Crumble	causes the cut surface of food to go brown. What methods could be used to prevent it. Hinge Questions: What is the preservation method known as when vinegar is used?	
9T2:L4	LO: To learn about the different preservatives methods and to make a preserved product.  Food Practical:	Retrieval:How are baked beans kept safe for over a year? SEND: Recall the different methods of preservation. Challenge: Discuss the effects the preservation methods have on the nutritional properties of certain foods. Hinge Questions:What is the coldest method of preservation known as? What temperature does this occur at?	
9T2:L5	LO: To understand how freezing preserves food and maintains quality.  Food Practical: Burger Making	Retrieval:What is the significance of the temperature -18°C? SEND: Be able to list the conditions needed for the growth of bacteria. Challenge: Explain how the quality of food is maintained when frozen Hinge Questions:What is the definition of a hazard? What hazards could affect food?	
9T2:L6	LO: To learn what HACCP stands for and how it is applied in the food industry. To understand the importance of temperature control.  Food Practical: Burger Cooking and presentation	Retrieval:What are the important temperatures connected with food safety? List 2 of the 5 key temperatures.  SEND: Be able to list the 3 types of hazards regarding food safety. Challenge: Explain what the process of HACCP is and why it's important in the food industry.	

		Hinge Questions:What are the influences that shape world cuisines?	
9T2:L7	LO: To complete an assessment on this module. Complete an evaluation sheet for previous practical. Food Practical: None	Assessment 2 - Food Spoilage Beat the Baseline Test  Retrieval: SEND: Challenge: Hinge Questions:	
9T2:L8	LO: To demonstrate the skills and health and safety aspects of making a product using a preserved fruit.  Food Practical: Seasonal Pies	Retrieval: How can something at minus 22 degrees burn food?  SEND: use of white board and multiple choice questions  Challenge:  Hinge Questions:	