## YR7:MTP:T3:L1-7

## Food Preparation and Nutrition - Medium-Term Plan- Term 3 of 3

## The Science of Cooking Food

## Rotational Groups 1-3 Term Repeat with seasonal variation

Year Group 7	Subject: Food Preparation and Nutrition	
Prior learning- linked to National curriculum	This scheme of work builds on prior knowledge, where students have gained knowledge and experience in using cooking equipment and utensils, basic cutting skills, and selecting appropriate ingredients from The Eatwell Guide. It also builds on the KS2 Science National Curriculum that introduces scientific disciplinary thinking, vocabulary, and classification, and builds on the role of fibre and organs from Year 7 Science. The scheme of work aligns with the KS3 Design and Technology: Cooking and Nutrition curriculum (England 2014) and introduces cooking methods that will be further developed in KS3 Science.	
Rationale	Teaching "The Science of Cooking Food" is essential in helping students understand how different cooking methods cook food in different ways, thus emphasising the relevance of these lessons. Students will gain hands-on experience in cooking and learning the different cooking methods, such as stir-fry (conduction), and comparing them by cooking a potato in multiple ways. These lessons build on health and safety and introductory skills and address the misconception that all cooking methods are suitable for all types of food. Additionally, students will demonstrate their ability to plan, prepare, and cook a dish in a set timeframe, while applying the science of cooking. By creating their meals and adapting recipes, students will apply the knowledge and skills learned in Term 2, based on their personal preferences. The importance of these lessons is highlighted in Year 8 Term 2, where students will retrieve and build on these skills with new cooking techniques, focusing on applying this science in cooking.	

Misconceptions	<ul> <li>All cooking methods are equally suitable for all types of food, and they produce the same result.</li> </ul>	
	<ul> <li>Cooking is simply a matter of applying heat to food, and the way you cook it doesn't affect its nutritional value or taste.</li> </ul>	
	Food will cook faster if you turn up the heat or cook it for longer, regardless of the cooking method.	
	You don't need to follow a recipe or measure ingredients carefully to create a delicious meal.	
	Cutting skills are not essential, and food can be prepared without much effort or technique.	
Vocabulary:	Keywords:	
, coasata, y.	Eatwell Guide; Time management, Conduction, Radiation, Convection, Boiling, Simmering, Stir Frying, Frying, Roasting, Baking, Steaming, Microwave	
Cultural Capital:	To enhance students' learning and broaden their exposure to the field of food and nutrition, there are a number of potential external and visiting opportunities available, such as attending a chef demonstration by a local chef or visiting City College Catering Department.	
Key assessments- name the assessments	Assessment 1 - FPN: Science of Cooking Food:Practical assessment on Planning, Preparing and making a nutritious dish [Stir Fry]	
	Assessment 2 - FPN: Science of Cooking Food: Cooking Methods & Eatwell Guide. Online test on the Eatwell guide and basic cooking methods.	
What do children know/ can do now (EDSM)	Acquire and demonstrate skills in hob cooking, boiling, simmering, baking, and roasting.      Create a dish using the factost and most putritious way of eaching (stir fr.) and	
	Create a dish using the fastest and most nutritious way of cooking (stir-fry) and demonstrate knife skills, mixing, using the hob, and draining.  Demonstrate the ability to also are and apply a dish in a cet time from a second s	
	<ul> <li>Demonstrate the ability to plan, prepare, and cook a dish in a set time frame.</li> </ul>	

	<ul> <li>Explain different cooking methods and provide suitable suggestions for particular foods.</li> <li>Investigate and evaluate the effects of cooking vegetables.</li> <li>Acquire and demonstrate skills in weighing, measuring, peeling, grating, mixing, folding, dividing a mixture, and using the oven to prepare and cook muffins.</li> <li>Prepare and cook Cheese and Courgette Muffins.</li> <li>Emerging- To describe the reasons for cooking food</li> <li>Developing - To describe the methods of cooking and apply to different foods</li> <li>Secure - To be able to explain how different cooking methods cook foods and suggest suitable foods to these methods.</li> <li>Mastered - To explain the different types of heat transfer and suitable cooking methods with examples of the pros and cons of these methods.</li> </ul>
What amendments are you going to make following evaluation of this module?	This scheme of work has been adapted to include the role of fibre to reference the KS3 Science curriculum and aims to use common language from KS3 Science.

Lesson objective	Differentiation	Homework
LO: To understand the different methods of cooking food and heat control	Retrieval:What is the difference between a mollusc and a crustacean - give an example of each	Watch video, complete sorting activity
To acquire and demonstrate skills, using the hob, boiling and simmering,baking and roasting	SEND: Sorting and matching cards for each cooking method Challenge:Explain why it is important to	
L m c	O: To understand the different nethods of cooking food and heat ontrol o acquire and demonstrate skills, using the hob, boiling and	O: To understand the different nethods of cooking food and heat ontrol  O: To understand the different nethods of cooking food and heat ontrol  Retrieval:What is the difference between a mollusc and a crustacean - give an example of each  SEND: Sorting and matching cards for each cooking method

		and cooked foods.  Hinge Questions: Which method of cooking will retain the most nutrients and cook foods quickly?
2	LO: To create a dish using the fastest, and most nutritious way of cooking.  To acquire and demonstrate knife skills, mixing, using the hob (stir-frying, boiling and simmering), and draining (if using dried noodles) to prepare and cook a stir-fry.  Food Practical: Stir fry	Assessment 1 - FPN: Science of Cooking Food: Practical assessment on Planning, Preparing and making a nutritious dish [Stir Fry]  Retrieval: Which method is best for retaining the most nutrients and uses the least amount of added fat?  SEND: Recipe cards and now and next instructions  Challenge: explain why stir frying is considered a healthier cooking method than others.  Hinge Questions: List the sections of the Eatwell Guide that the recipe Smokey Chickpeas and Fried egg on toast belong to. Say what ingredient belongs to which section.
3	LO: To demonstrate your ability to plan,	Retrieval:Why is stirfrying a good method

	prepare and cook a dish in a set time frame Food Practical; Smokey Chickpeas and Fried Egg on Toast	of vitamin retention? SEND: Activity sort card, timing details and ingredients prepared  Challenge:explain what a timeplan is and how it can help to produce a dish. Hinge Questions: How many methods of cooking can you name?	
4	LO: To be able to explain different cooking methods and provide suitable suggestions for particular foods  To investigate and evaluate the effects of cooking vegetables.  Food Practical; Food investigation	Retrieval:What method of heat transfer is used to grill toast  SEND: Using word frame, pictorial representations of cooking methods, select names for correct cooking method  Challenge:Independent research into the various cooking methods. To be able to explain the advantages and disadvantages of different cooking methods.  Hinge Questions: What nutrients are found in vegetables and cheese?	
5	LO: To demonstrate your understanding of how to follow a recipe independently to produce a batch of muffins.  Food Practical:Cheese and Courgette Muffins	Retrieval: What is a cooking method called for making cakes? What method of heat transference is this?  SEND: Using word frames, pictorial representation of cooking methods.  Challenge: To be able to explain the advantages and disadvantages of cooking	

		food in an oven.  Hinge Questions:List the different methods of heat transference and a recipe you have cooked at school using these methods.	
6	LO: To compete a knowledge review of subject so far  To appraise and evaluate their learning journey.  To evaluate their practical cooking experiences.	Assessment 2 - FPN: Science of Cooking Food: Cooking Methods & Eatwell Guide. Online test on the Eatwell guide and basic cooking methods.  Retrieval: What method of heat transference was used to make the muffins?  SEND: Using word frame, pictorial representation, identify methods of cooking food.  Challenge: Explain how the effects of heat can alter the sensory qualities of food.  Hinge Questions: What guidelines should we follow in order to have a healthier diet.	
7	Depending on Time Table	Retrieval: SEND: Challenge:	

	Hinge Questions:	