Curriculum Map

Subject:

Year:

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content Knowledge	Fruit and Veg Students will gain knowledge on: How/where fruit and vegetables are grown, link to climate, soil types Bring in organic versus non-organic (Soil Association, etc.) Use of pesticides and herbicides – discuss possible impact on health Customer choice (can be linked to cost – discuss Food miles) Seasonality	Dairy How animals are reared, fed and milked. Animal sources of milk Different methods of preserving milk (drying, UHT, pasteurisation, etc.) –link to convenience foods Importance of hygiene for effective food safety (heat treatment) Effect on nutritional content from processing Examples of secondary processing – milk to cream, yoghurt, cheese, etc. Different types of cheese – hard, soft, etc. (link to fat content)	**Cereals** How climate, soil, etc., affects the types of cereals which can grow GM crops – discuss Cereal – as a staple food; impact of crop failure on health of a nation (link to sustainability and world health) General structure of grain – endosperm, germ and bran Suggest focusing on wheat and rice as there are many resources available online Milling of wheat into flour – key processing stages Secondary processing: Breakfast cereals	**Proteins** Links in with provenance Look specifically at an animal of your choice, and review how this animal is farmed/reared and slaughtered (cattle, pigs, sheep, etc.) Link to animal feed (can reference BSE) and shelter How fish (including shellfish) is caught – again, reference sea fish and farmed fish (fish quotas and availability/ethical fishing) Poultry (including eggs) – how poultry is reared and slaughtered/how egg farming is conducted (different	**Fats and Sugars** Food miles (UK verses imported raw materials to make the butter, oil, margarine) Where is sugar cane and sugar beet grown. Organic verses non-organic, GM Butter – how is butter made? Oils/margarine – growing of vegetable crop for oil production, include pressing (mention fish oil) Processing of margarine – different oil types used, fortification Empty calories, link to weight gain,	**Soya, Tofu, Beans, Nuts and Seeds** How soya beans are cultivated Secondary processing: How soya is processed into tofu, TVP (textured vegetable protein), and link back to soya milk How beans (pulses/legumes), nuts and seeds are grown Include: mycoprotein (Quorn TM) – what it is derived from, how it is processed into mycoprotein Secondary processing: Beans (legumes) – link to preservation

		Nutrient requirements (linked to different life stages). Protein – HBV and discuss amino acids Fats – saturated Recap on vitamins and minerals (cover vitamins A and D and calcium), and include complementary actions of the nutrients vitamin D and calcium Fat soluble vitamins A and D Trace element – iodine Effect on nutritional content from processing Chemical and physical structure of dairy based products. Emulsion – explain why milk is an emulsion Denaturation and coagulation of milk proteins Benefits of bacteria in the making of yoghurt, cheese, etc. Effect of heat on cheese	Wheat into bread types, pasta Key stages in the bread making process Key stages in the pasta making process	animal sources as well as hens eggs). Can mention game, briefly Secondary processing: Cuts of meat and poultry, processing into bacon, ham, sausages, pies, etc. (link to methods of preservation) Offal Cuts of fish (whole, steaks, filets, etc.) Eggs – pasteurised whole/white/yolk (link to food safety and convenience)	obesity, dental caries, type 2 diabetes, etc. Free sugars	(drying and canning) Nuts – ground, flaked, nibbed, etc. Seeds – drying, etc.
Skills		secondary processing – milk to yoghurt, cheese, etc.	Investigate the best flour for breadmaking (suggest gluten ball experiment, or		Make rough puff Pastry (fats) Potato salad/Vegetable slaw (focus is on	Written Exam Practice skills.

			making small batches of rolls using different flours and then conduct sensory testing) • Conduct an experiment to show the gelatinisation of a range of starches. Practical skills such as bread making and pasta doughs		making mayonnaise) Meringue - fucus is on sugars Mock NEA 1 Introduce a written brief, conduct an experiment. (research methods, hypothesis setting, plan of action, writing up an experiment, analysis results of experiment and drawing conclusions, referencing sources)	
Key Questions	Which fruits and vegetables turn brown? • Can enzymatic browning be slowed down or stopped? • Does the way in which fruits and vegetables are cut affect their enzymatic browning? • How does the texture of fruits and vegetables change when Cooked? Why is it important to wash fruits and vegetables?	What are suitable conditions for storage? Why? How to avoid cross-contamination Why heat treating raw milk is important – link to food science How should dairy based products be stored? Temperatures Why is UHT milk slightly less white?	What happens when you apply dry heat to starch? What happens when starches are frozen and then defrosted? How healthy are the cereals? Also, link in function of packaging and environmental impact, and marketing of breakfast cereals – who are these cereals aimed at?	What is Saturated fat?	• Demonstrate the creaming properties of fats when making a sponge cake using the creaming method. Which fat produces the best results? Explain why. • Show the shortening properties of fats when making a shortcrust pastry. Which fat produces the best results? Explain why. • Emulsification. what happens during the process . • Conduct an experiment to show which ingredients will help to stabilise mayonnaise and prevent the mix from separating. Sugar and syrup • What happens when sugar (sucrose) is heated?	How soya beans are cultivated and processed into Milk How beans, nuts and seeds are grown? Are peanuts actually a nut?

Assessment	Assessment takes place with a combination of Practicals throughout the term and an end of topic test which is based on exam questions. Written work is also issued each week to check on students' understanding.	Assessment takes place with a combination of Practicals throughout the term and an end of topic test which is based on exam questions. Written work is also issued each week to check on students' understanding.	Assessment takes place with a combination of Practicals throughout the term and an end of topic test which is based on exam questions. Written work is also issued each week to check on students' understanding.	Assessment takes place with a combination of Practicals throughout the term and an end of topic test which is based on exam questions. Written work is also issued each week to check on students' understanding.	Assessment takes place with a combination of Practicals throughout the term and an end of topic test which is based on exam questions. Written work is also issued each week to check on students' understanding.	Assessment takes place with a combination of Practicals throughout the term and an end of topic test which is based on exam questions. Written work is also issued each week to check on students' understanding.
Literacy/numeracy/SMSC/Character	Use of key terms in food theory/ food science/ practical terms	Use of key terms in food theory/ food science/ practical terms	Use of key terms in food theory/ food science/ practical terms	Use of key terms in food theory/ food science/ practical terms	Use of key terms in food theory/ food science/ practical terms	Use of key terms in food theory/ food science/ practical terms
Enrichment opportunities and futures	Encourage students to watch Materchef programmes to focus on plate styling Subject to planning. BBC good food show at the NEC Encourage students to watch episodes of the GBBO to consider styling and technique used . Email Parents/ Guardians about opportunities that are available outside of school. Encourage students to attend food festivals/ to eat out over the summer holidays Encourage students to cook meals at home (Possible talk from a chef working in the industry) Inform students of upcoming open days/ potential food courses post 16 including: ● Entry to AS/A2 Home Economics and degree courses. ● Opportunities to go into catering at college, to work in the restaurant industry and the health sector. ● Opportunities to go into the food science industry. There is a shortage of food scientists. ● Future career pathways as a food buyer, nutritionist, food stylist, home economist, product tester, product developer.					