CURRICULUM PLAN

D&T FOOD PREPARATION & NUTRTION

BRAMHALL HIGH SCHOOL

Curriculum Intent

YEAR 10

The Food Preparation and Nutrition qualification aims to equip students with the knowledge, understanding and skills required to cook and apply the principles of food science, nutrition and healthy eating. The qualification will encourage learners to cook and make informed decisions about a wide range of further learning, opportunities and career pathways as well as develop life skills that enable learners to feed themselves and others affordably, now and in later life.

The heart of our qualification is the development of strong practical cookery skills and techniques as well as a good understanding of nutrition. We believe that learners who learn to cook well are more likely to make better food choices and understand healthy eating. Learners will discover the essentials of food science, nutrition alongside learning how to cook. In addition to this, learners will understand the huge challenges that we face globally to supply the world with nutritious and safe food. This qualification is another step towards creating a healthier society and improving the nation's cooking skills as well as setting some learners on the path to careers in the food and hospitality industries.

YEAR 11

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YEAR 10

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
Term 1a	The importance of a **healthy diet** How to use the major **commodity groups** to make a balanced food choice The application of the **eight tips** for healthy eating Diet-related diseases and conditions: obesity (weight loss and gain), cardiovascular, coronary heart disease (CHD), diabetes, diverticulitis, bone health (osteoporosis), dental health, anaemia and high blood pressure **Balanced** combinations of food, nutrients and correct portion sizes for babies, toddlers, pre-school children, school-aged children, adolescents, adults, older people, pregnant and lactating women Foods that may cause an allergic reaction **Food intolerance**: lactose and gluten (coeliacs) Recommended daily amounts of macro and micro nutrients and energy **Plan recipes**, meals and diets based on nutritional analysis Altering or substituting ingredients,	A 1.1 A 1.2 A 1.3 A 2.1 A 2.2 A 2.3 A3	Theory CPR assessment: Healthy Eating GCSE revision question Theory CPR assessment: Stage of life information leaflet	**PE**: Eatwell Guide and Diets Macronutrients Micronutrients **English**: descriptive adjectives of sensory analysis and evaluation **Mathematics**: Measurement Ratio/Fractions **Geography**: Foods are grown and harvested **Art and Design**: Presentation and decoration	Balanced diet Commodity Cardiovascular Malnutrition Intolerance Modification

	changing the method of cooking or process and changing the portion size Basal metabolic rate (BMR) and physical activity level (PAL) and their importance in determining **energy requirements** Recommended percentage of daily energy intake Sources of energy: protein, fat, carbohydrate and alcohol Units (kcal and kJ) for **measuring energy** Gender, life stage, pregnancy/lactation, size/body weight, genetics, occupation and lifestyle **Protein**: Types and structure: High biological value (HBV) and low biological value (LBV), Functions and deficiency Animal and vegetable **Fat**: Types and structure: fats and oils (saturated, unsaturated and polyunsaturated) Functions and deficiency. Animal and vegetable: visible and invisible **Carbohydrates**: Sugar: monosaccharides, disaccharides, starch: complex carbohydrates and fibre	A 4.1 A 4.2 A 4.3 A5 A6 A7	Practical CPR assessment: Making Lasagna, skills focus	**Science**: Functional and chemical properties of carbohydrates – starch/gelatinisation /gelation Biological raising – fermentation	Energy Balance Deficiency Saturated fat Monosaccharide

	Functions and deficiency Sugar, starch and fibre				
Term 1b	**Vitamins**: Fat soluble vitamins: A (retinol and carotene), D, E, K Water soluble vitamins: B1 (thiamine), B2 (riboflavin), B3 (niacin), B9 (Folate/Folic acid), B12 (cobalamin), C (ascorbic acid) Functions and deficiency. Food sources of vitamins **Minerals**: Calcium, iron, sodium, fluoride, iodine, phosphorus. Functions and deficiency. Foods that supply minerals **Water**: Functions and deficiency. Recommended guidelines for daily intake of water Sources and foods that give us water.	A8 A9 A 10	Practical CPR assessment: : Chicken Portioning and associated dish Theory CPR assessment: Macronutrients test Practical CPR assessment: Pastry making (shortcrust focus) Theory CPR assessment: Micronutrients test	**PE**: Micronutrients & hydration	Micronutrients Vitamin Deficiency Mineral Hydration

Term 2a	**Nutritional content** of each commodity group Advantages and disadvantages of **locally produced** and seasonal foods Where and how they are grown: **organic** and non- organic farming Classification of **fruits and vegetables** Where and how they are reared: intensive farming methods, free-range products, rearing of the animals Classification of **meat, poultry and game** Where and how they are caught: sustainable fish supply Classification of **fish**	A 11 B 1.1 B 1.2 B 1.3 B 1.4 B 1.5 B 1.6 B 1.7 B 1.8	Practical CPR assessment: Fishcakes & H/M mayo- Focus on time management/ time plan Theory CPR assessment: Nutrients in food GCSE revision question		Seasonal Organic Intensive Sustainable
Term 2b	How **wheat** is milled and processed to produce flour Heat treatment of milk The processes that raw food undergoes to transform it into a food product How **milk** is processed to produce butter, cream, yoghurt and cheese How **flour** is used to produce bread and	B 2.1 B 2.2 B 2.3	Practical CPR assessment: NEA2 practice making End of unit practical		Processing Emulsion

	pasta **High temperatures**: pasteurisation, sterilisation (ultra heat treated (UHT) and canning) **Cold temperatures**: chilling, freezing, cook-freeze/blast chilling and accelerated freeze-drying (AFD) Drying and smoking Using acids, salt and sugar Controlled atmosphere **packaging** (CAP)/modified atmosphere packaging (MAP) and vacuum packing **The availability of food**, the access to food, the individual's ability to utilise food **Moral issues**: how Fairtrade affects food producers and workers **Ethical issues**: relating to the development of genetically modified (GM) food **Environmental issues**: food waste Carbon footprint and the transportation of materials and goods Sustainability of resources	B 3.1 B 3.2 B 3.3 B 3.4 B 3.5 B 3.6	Theory CPR assessment	Fairtrade Week	Sterilisation Pasteurisation Preservation Availability Accessibility Fairtrade Genetically modified Environment

Term 3a	The advantages and disadvantages of **fortification** **Additives**: Preservatives, colourings, flavourings and sweeteners, emulsifiers and stabilisers and thickeners, antioxidants Probiotics and prebiotics Recognise traditional ingredients Understand **religious or cultural** factors affecting the cuisine Understand traditional cooking methods, presentation and eating patterns Recognise how the traditional recipes have been adapted to suit today's society **Food choice** can be affected by cost, enjoyment, preference, seasonality, availability, time of day, activity, celebration or occasion Food choice can be affected by related beliefs of major **religions**: Buddhism, Hinduism, Islam, Judaism, Rastafarianism and Sikhism	B 4.1 B 4.2 B 4.3 B 5.1 B 5.2 B 6.1 B 6.2 B 6.3 B 6.4 C1		**Science**: Functional and chemical properties of carbohydrates, proteins, fats, oils, acids, alkalis, enzymes, heat transfer **English**: descriptive adjectives of sensory analysis and evaluation **Mathematics** : Measurement Ratio/Fractions **Geography**: Foods are grown and harvested **PE**: Eatwell Guide and Diets Macronutrients Micronutrients Art and Design:	Fortification Additive Functional foods Traditional Cultural Cuisine Ethical

	Vegetarians (lacto-ovo, lacto, ovo and vegans), animal welfare, local produce, organic food **Foods Science**: Making food safe to eat Making food more digestible/palatable			Presentation and decoration	Bacteria
Term 3b	**Foods Science:** Conduction, convection and radiation Enrichment/loss, increase/reduce calorific value, vitamin losses Texture, flavour, appearance, aroma **Carbohydrates**: gelatinisation, dextrinization, caramelisation **Fats/oils**: shortening, aeration, plasticity, emulsification **Protein**: coagulation, foam formation, gluten formation, acid denature **Fruit and vegetables**: enzymic browning/oxidisation Raising agents: yeast, chemical agents, air and steam	C 1.1 C 1.2 C 1.3 C 1.4 C 1.5 C 1.6 C 1.7 C 1.8	Practical CPR assessment: Theory CPR assessment: GCSE question- Food safety extended writing question	Competition: Tunnock Teacake challenge Young Chef, and competitions promoted by the food industry such as Future Chef	Heat transference Gelatinisation Aeration Coagulate

YEAR 11

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
Term 1a	Changes that happen when food is cooked: texture, appearance, colour taste, sound and aroma The importance of the senses of sight, taste, touch, smell and hearing and how they work when making food choices The five basic tastes recognised by receptors (sweetness, sourness, bitterness, saltiness and umami) How to set up a testing panel Styles and forms of rating, ranking and profiling systems with the use of appropriate descriptive terminology The role of time, temperature, moisture and food availability The role of time, temperature, moisture and food availability	C 2.1 C 2.2 C 2.3 C 3.1 C 3.2 C 3.3 C 3.4 C 3.5 C 3.6 C 3.7	Theory CPR assessment	Intervention Club Homework drop in	Organoleptic Sensory Preferential Bacterial growth

	Natural decay, enzyme action and yeast production Types of micro-organisms and key points Labelling and date marks Visual checks Reputable supplier Types of storage and how to store foods correctly Preventing cross contamination and food poisoning: direct and indirect methods High-risk foods, critical temperatures CONTROLLED ASSESSMENT	NEA1	NEA 1: Research & Planning 9marks NEA 1: Investigation 21marks	Teflon TM Diamond Standard Cookery Awards, The Rotary Club	Micro-organisms Danger zone Spoilage Contamination Cross contamination
Term 1b	CONTROLLED ASSESSMENT	NEA1 NEA2	NEA 1:Evaluation **Year 11 Mock Exams 1:30min** NEA2 PLAN & RESEARCH		

Term 2a	CONTROLLED ASSESSMENT	NEA2	NEA2 PLAN & RESEARCH NEA2 TIMEPLAN NEA2 MAKING NEA2 EVALUATION		
Term 2b	**Revision**		1. GCSE revision question		
Term 3a	**Revision** Yr11 have tailored revision lessons to prepare them for their exam whilst exploring gaps in learning				