# St Michael's Church of England High School – Scheme of Learning Overview

Subject: Design & Technology Year group: 7 (1 term)

#### **Unit: Food and nutrition rotation**

# Overview (including links to Big Ideas)

As part of their work with food, pupils will be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Students will be taught to understand and apply the principles of nutrition and health, cook a repertoire of dishes so that they are able to feed themselves and others a healthy and varied diet, 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], Understand the source, seasonality and characteristics of a broad range of ingredients.

Our big ideas in food technology are sequenced across years 7, 8 and 9, allowing students to investigate, explore and build upon their knowledge through a combination of theory based and practical lessons and regular homework tasks. Our big ideas include:

Designing	Adapting recipes to suit different target users
Problem solving	Research the school canteen menus
Manufacturing techniques and processes	Hand techniques including use of tools and equipment, use of appliances, measuring, weights and quantities.
CAD/CAM	pros and cons compared to traditional methods of manufacturing in the food industry
User needs	Products in society, impact on culture, specifications, target users, cultural and religious values.
Tools & equipment	Understanding and applying health and safety rules in the specialist food technology), hand tools, equipment and appliances.

# Links to Prior and Future learning (Why this? Why now?)

Prior learning at KS1/2 should include the ability to use the basic principles of a healthy and varied diet to prepare dishes and understand where food comes from, understand and apply the principles of a healthy and varied diet, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, understand seasonality, know where and how a variety of ingredients are grown, reared, caught and processed.

This year 7 project will allow students to build upon knowledge and practical ability to enhance a deeper understanding of applying the principles of nutrition and health so that students are able to feed themselves and others a healthy and varied diet.

Knowledge Goals	Lesson sequence
<ul> <li>Tools &amp; equipment, Health &amp; safety</li> <li>Understand hygiene practices when carrying</li> <li>out practical work.</li> <li>Understand the basic rules of healthy eating.</li> <li>Work safely in the food workshop.</li> <li>Manage appliances safely.</li> </ul>	<ul> <li>Week 1-2</li> <li>Introduction to food technology</li> <li>Aims and knowledge/skill goals</li> <li>Expectations &amp; routines</li> <li>Health and safety in a food technology room</li> <li>Introduction to tools/equipment</li> </ul>

# **Problem solving**

- Understand different methods of cooking
- Understand how food waste and packaging can be reduced.
- Be able to modify recipes to meet dietary requirements and alter aesthetic qualities of an outcome.
- Analyse and Evaluate your own/others work.
- Analyse existing food products through
- product and sensory analysis
- Understand local food history.

# User needs

- Develop an understanding of social and ethical issues surrounding the origin of ingredients and manufacturing of products.
- Understand the Eatwell guide
- Be able to modify recipes to suit different user diets, including allergies.

### Manufacturing skills

- Be able to read and follow instructions.
- Demonstrate peeling, slicing, chopping, mixing, claw grip, bridge hold, dividing, rolling and whisking.
- Demonstrate using a variety of preparation and cooking tools, equipment, and appliances.

# Class theory (Silver CGP books) and Knowledge organiser homework topics

- 1. Cooking equipment (p, 62-63)
- 2. Nutrition & healthy eating (p,49-50)
- 3. Selecting ingredients (p,51)
- 4. Properties of ingredients (p, 52)
- 5. Sourcing ingredients (p,54)
- 6. Keywords/terms & definitions

- Teacher demo: Dippy divers, knife skills
- Student practical: Dippy divers
- KO topic 1: Cooking equipment

#### Week 3-4

- KO 1 quiz
- Teacher demo: Croque monsieur
- Student practical: croque monsieur
- KO topic 2: Nutrition & healthy eating

#### Week 5-6

- KO 2 quiz
- Teacher demo: Tropical granola bars
- Student practical: Tropical granola bars
- KO topic 3: Selecting ingredients

#### Week 7-8

- KO 3 quiz
- Teacher demo: Fruity muffins
- Student practical: Fruity muffins
- KO topic 4: Properties of ingredients

# Week 9-10

- KO 4 quiz
- Teacher demo: Bread rolls
- Student practical: Bread rolls
- KO topic 5: Sourcing ingredients

#### Week 11-12

- KO 5 quiz
- Teacher demo: Student vote
- Student practical: Student vote
- KO topic 6: Keywords/terms & definitions

Key vocabulary (Tier 2 and 3)	Reading/Writing/Numeracy development
Balloon whisk	
Spatula	Technical vocabulary word bank, weighing,
Palette knife	measuring quantities, class discussions using tier 2
Ladle	and 3 words, self-written progress checklists and
Measuring	written evaluations based on practical lessons
Electrical equipment	
Nutrients	
Proteins	
Fats	
Carbohydrates	
Vitamins	
Minerals	
Macronutrients	
Micronutrients	
Properties	
Coagulate	
Emulsifier	
Digestion	
Obese	
High blood pressure	
High cholesterol	
Diabetes	
Shelf life	
Aesthetic properties	
Raising agent	
Seasonal	
Harvest	
Fossil fuels	
Environment	
Pollution	
'Top and tail'	
Divide	
Knead	
Bridge hold	
Claw grip	

# Teaching strategies

# **Quality First Teaching strategies (QFT)**

- Annotated seating plans, access to pupil passports and SEN requirements to inform of QFT strategies
- Task organisers given for 1:1 direct instruction also tasks on PowerPoint or the board.
- green and red cards
- Mini whiteboards
- 1:1 guidance and support via TEAMS
- Directed TA support if allocated to a student/class.
- Visual guides/resources, step by step plans

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# Stretch and Challenge

- Higher level technique tasks set to pitch up the expectations and challenges.
- No opt out questioning

# Assessment

KO quiz, self/peer assessment using checklists and success criteria. Teacher assessment of practical outcomes including feedback for improvements.

# Formative assessments:

- Self and peer assessments
- Teacher whole class verbal feedback
- Teacher written feedback

# Summative assessments:

- Formal assessments in student assessment book with opportunity for improvements
- Summative assessment 1 (Spring term)
- Summative assessment 2 (Summer term)

# Homework

- Fortnightly knowledge organiser topics to compliment class theory and preparation for fortnightly class quizzes.
- Independent home learning tasks to compliment classwork.

Cultural/Social/Economic Development	Subject specific information (eg scientific enquiry/historical enquiry/key practical's)
Discussions linking to current food and baking programmes on television and conversations about the different foods we cook in our own homes.	Evaluations of both the method and outcomes of some practical lessons, identifying strengths, areas for development, modifications, and user feedback.