Subject: Food Technology

Golden Concept: Source, Seasonality and Characteristics of Ingredients.

Purpose of Source, Seasonality and Characteristics of Ingredients:

The National Curriculum for Food Technology in England integrates these elements with a focus on hands-on learning. It encourages students to experiment with different ingredients and think critically about food choices, such as using local vs. imported ingredients or seasonal vs. year-round availability. Additionally, lessons often incorporate cross-curricular links with subjects like geography (for food origins) and science (for understanding processes like fermentation and chemical changes during cooking).

Cross curriculum:

Science - through Biology and Plant Growth – Understanding where ingredients come from and the links to plants and their ecosystems.
Geography – Global food sources and sustainability, discussing where ingredients are sourced globally and how climates influence food production.
Mathematics - Measurement and Proportion: Cooking inherently involves mathematics when students measure ingredients, calculate proportions, and convert units for recipes. This helps reinforce skills like working with weights, volumes, and ratios.
Design Technology - Practical Application of Design Principles: Food Technology is part of the broader Design and Technology curriculum. It involves designing recipes, planning meals that meet dietary needs, and thinking about the sensory experience of food—factors that relate to user needs in product design
PE - Link to Healthy Eating and Lifestyle: Food Technology supports the aims of PE by promoting a healthy diet as part of overall physical well-being. Students learn about the role of various nutrients in energy levels, muscle growth, and general health, making connections between what they eat and how they feel physically.
Balanced Diet Education: Through cooking lessons, students can better understand how different food groups contribute to a balanced diet, aligning with PE's emphasis on healthy lifestyle choices.

Assessment:

Practical Activities: Students are assessed through hands-on activities, such as identifying different types of fruits and vegetables or simple cooking tasks.
Verbal and Visual Work: At this stage, assessment often involves talking about where food comes from, understanding basic concepts of food sources, and creating simple visual aids like posters or drawings.
Feedback-Based Assessment: Teachers provide formative feedback, guiding students to improve their understanding of food origins and encouraging curiosity about different types of foods and ingredients.
Practical Cooking Assessments: Students are often assessed based on their ability to prepare simple dishes using a variety of ingredients. They might be asked to select seasonal ingredients for a dish, and their choices and understanding of seasonality are evaluated.
Written Reflections and Research: Assessment may include short written reflections or research projects where students describe the journey of a food item from farm to table. They could be tasked with researching the seasonality of a particular ingredient or discussing how a food product is sourced.

Key Stage or stage breakdown:

Source of Ingredients:
Key Stage 1 (Stages 1 and 2): The focus is on understanding where food comes from, including knowledge of different food groups (fruits, vegetables, grains, etc.). Students learn basic concepts of how foods are grown, caught, and reared. Key Stage 2 (Stages 3-6): Students delve deeper into the understanding of the origins of ingredients, including how different foods are produced and the processes they go through before consumption. They might explore local and global food systems.
Key Stage 3 (Stages 7-9): The curriculum expands to consider more complex supply chains and food production methods, emphasizing the ethical and environmental aspects of sourcing. This includes discussions on sustainability, food miles, and the impact of farming practices.
2. Seasonality:
Key Stage 1: Introduction to the idea that some foods are seasonal and understanding the basic concept of seasons in relation to the availability of certain fruits and vegetables. Key Stage 2: Greater emphasis is placed on recognizing which foods are in season at different times of the year. Students might explore how eating seasonal produce can reduce the environmental impact of food production and transport. Key Stage 3: This concept is tied to sustainability, encouraging students to understand the benefits of seasonal eating for local economies and the environment. They might explore how to adapt recipes to use seasonal ingredients and consider the effects of imported out-of-season foods.
3. Characteristics of Ingredients:
Key Stage 1: The focus is on basic sensory properties (taste, smell, texture) and simple techniques like chopping, peeling, and grating. Students begin to understand that different ingredients have different uses based on these characteristics. Key Stage 2: The curriculum explores the functional and chemical properties of ingredients (e.g., how flour helps dough rise or how fats contribute to texture in baking). They learn how to combine ingredients to achieve specific textures, flavours, and nutritional benefits. Key Stage 3: The understanding becomes more scientific, with students studying how ingredients interact under different cooking methods (e.g., the Maillard reaction in browning meat). They may also consider how the quality and freshness of ingredients can affect the outcome of dishes, and how different food processing methods change ingredient properties.