# Design and Technology

## Year 6 – Cooking and Nutrition – Come Dine With Me

| Prior Learning | Year 6 | Future Learning |
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| **In Year 5, children will:** | **In Year 6, children will:** | **In Year KS3, children will:** |
| **Design**<br>- Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.<br>- Writing an amended method for a recipe to incorporate the relevant changes to ingredients.<br>- Designing appealing packaging to reflect a recipe.<br>- Researching existing recipes to inform ingredient choices.<br>**Make**<br>- Cutting and preparing vegetables safely.<br>- Using equipment safely, including knives, hot pans and hobs.<br>- Knowing how to avoid cross-contamination.<br>- Following a step by step method carefully to make a recipe.<br>**Evaluate** | **Design**<br>- Writing a recipe, explaining the key steps, method and ingredients.<br>- Including facts and drawings from research undertaken.<br>**Make**<br>- Following a recipe, including using the correct quantities of each ingredient.<br>- Adapting a recipe based on research.<br>- Working to a given timescale.<br>- Working safely and hygienically with independence.<br>**Evaluate**<br>- Evaluating a recipe, considering: taste, smell, texture and origin of the food group.<br>- Taste testing and scoring final products.<br>- Suggesting and writing up points of improvements when scoring others' dishes, and when evaluating their own throughout the planning, preparation and cooking process. | **Design**<br>- Use research and exploration, such as the study of different cultures, to identify and understand user needs.<br>- Identify and solve their own design problems and understand how to reformulate problems given to them.<br>- Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations.<br>- Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses.<br>- Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools.<br>**Make** |

- Identifying the nutritional differences between different products and recipes.
- Identifying and describing healthy benefits of food groups.

**Technical Knowledge**

- To understand where meat comes from - learning that beef is from cattle and
- how beef is reared and processed.
- To know that recipes can be adapted to suit nutritional needs and dietary requirements.
- To know that I can use a nutritional calculator to see how healthy a food option is.
- To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.
- To know that coloured chopping boards can prevent cross-contamination.
- To know that nutritional information is found on food packaging.
- To know that food packaging serves many purposes.

- Evaluating health and safety in production to minimise cross contamination.

**Technical Knowledge**

- To know that 'flavour' is how a food or drink tastes.
- To know that many countries have 'national dishes' which are recipes associated with that country.
- To know that 'processed food' means food that has been put through multiple changes in a factory.
- To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides.
- To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).

**Vocab**

Balance, bitter, bridge method, complement, cookbook, cross-contamination, enhance, equipment, farm to fork, flavours, ingredients, method, pairing, preparation, recipe, research, salty, sour, storyboard, sweet, umami

- Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture.
- Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties.

**Evaluate**

- Analyse the work of past and present professionals and others to develop and broaden their understanding.
- Investigate new and emerging technologies.
- Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups.
- Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.

**Technical Knowledge**

- Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.
- Understand how more advanced mechanical systems used in their products enable changes in movement and force.

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| | | - Understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs].<br>- Apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers]. |

| Pupils who are secure will be able to: |
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| - Find a suitable recipe for their course.<br>- Record the relevant ingredients and equipment needed.<br>- Follow a recipe, including using the correct quantities of each ingredient.<br>- Write a recipe, explaining the process taken.<br>- Explain where certain key foods come from before they appear on the supermarket shelf. |

| National Curriculum Subject Content | | | |
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| Design | Make | Evaluate | Technical Knowledge |
| - Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups<br>- Generate, develop, model and communicate their ideas through discussion, | - Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.<br>- Select from and use a wider range of materials and components, including construction | - Investigate and analyse a range of existing products.<br>- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br>- Understand how key events and individuals in design and technology | - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.<br>- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. |

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| annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. | materials, textiles and ingredients, according to their functional properties and aesthetic qualities. | have helped shape the world. | - Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].<br>- Apply their understanding of computing to program, monitor and control their products. |
| Cooking and Nutrition | | | |
| - Understand and apply the principles of a healthy and varied diet.<br>- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.<br>- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. | | | |