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| **Design an organic meal for the King** |
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| Designing a meal for the King that uses only organic ingredients |
| **Subject(s):** Design and Technology, Cooking, Food Preparation and Nutrition**Approx time:** 40-70 minutes |  | **Key words / Topics:** * design brief and criteria
* genetically modified foods
* ingredients
* king’s coronation
* organic foods
* starters, main courses, desserts
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| **Stay safe** Whether you are a scientist researching a new medicine or an engineer solving climate change, safety always comes first. An adult must always be around and supervising when doing this activity. You are responsible for: • ensuring that any equipment used for this activity is in good working condition• behaving sensibly and following any safety instructions so as not to hurt or injure yourself or others  Please note that in the absence of any negligence or other breach of duty by us, this activity is carried out at your own risk. It is important to take extra care at the stages marked with this symbol: ⚠ |
| **Suggested Learning Outcomes**  |  |  |
| * To understand the difference between organic and GM foods
* To understand the benefits and limitations of organic foods
* To be able to design a meal for King Charles III made entirely from organic ingredients
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| **Introduction** |  |  |
| This is one of a series of resources that are designed to allow learners to use the theme of King Charles III’s coronation to develop their knowledge and skills in Design & Technology and Engineering. This resource focusses on designing a meal for the King that is produced using only organic ingredients. |
| **Purpose of this activity**In this activity learners will make use of the theme of the King’s coronation to design a meal for the new King using only organic ingredients. They will consider the design brief and criteria for the meal before sketching and annotating an idea to meet the given requirements.This activity could be used as a main lesson activity to teach about the differences between organic and genetically modified foods and their benefits and limitations. It could also be used as part of a wider scheme of learning focusing on design skills within Cooking and Food Preparation and Nutrition. |
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| **Activity** |  | **Teacher notes** |
| **Introduction (10-20 minutes)**Teacher to explain the task to learners and introduce the theme of the King’s coronation using slide 3 of the presentation.Teacher to use slide 4 of the presentation to explain what is meant by organic ingredients and how they are different to genetically modified (GM) foods. |  | **Introduction to task and theme**Discuss the coronation with learners, what this involves and its importance in the United Kingdom.**Design brief and criteria**Discuss the design criteria with learners and how they might meet them with their designs. The optional criteria that could be used to introduce some maths-based work. |
| **Design brief and criteria (10-20 minutes)**Teacher to introduce the design brief and criteria on slides 5 and 6 of the presentation and discuss with learners. Explain that the meal must:* Be made from only organic ingredients.
* Serve two people.
* Be either a starter and a main, or a main and a dessert.
* Be colourful and use varied textures.
* Cost less than £5 per person (optional)

**Designing the meal (20-30 minutes)**Learners to produce a sketch of an idea to meet the requirements of the design brief and criteria. Learners to annotate their idea to show how the requirements have been met.Teacher to show the example on slide 8 of the presentation to assist learners with producing their own designs. |  | **Producing the designs**Learners may need some time to research organic options and food products on the internet.They could use either the handout (slide 7 of the presentation) or blank paper to present their design idea and annotations.**Learner example**Welsh lamb with buttery mashed potato, honey glazed carrots and roasted baby leeks, served with a fresh mint sauce, citrus layered desert.Ask learners to consider textures and how they go together. What colours complement each other?As an optional extension, learners could produce their meals. |
| **Differentiation** |  |  |
| **Basic** |  | **Extension** |
| * Provide a partially completed design idea.
* Provide a list of organic ingredients that the learners could choose from
 |  | * Prepare the meal.
* Cost the meal per portion for the organic ingredients compared to non-organic ingredients.
* Design a starter or dessert to compliment the meal.
* Create a menu card to be put on to the King’s table.
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| **Resources** |  | **Required files** icon-docicon-pdficon-ppt |
| * Pens, pencils and coloured pencils
* A4 or A3 paper
* Optional – internet to research examples of organic foods/ingredients
 |  |  Presentation – Organic mealicon-pdf Handout – Organic meal worksheet |
| **Additional websites** |  |  |
| * **The official royal website for the coronation:** https://www.royal.uk/coronation
* **Royal Family - King’s Coronation:** Information about the plans for the coronation from the official Royal Family website. <https://www.royal.uk/coronation-weekend-plans-announced>
* **BBC News – King’s Coronation:** Information about the King’s coronation and the stages that make up the ceremony. <https://www.bbc.co.uk/news/uk-63543019>
* **YouTube – What makes food organic:**  <https://www.youtube.com/watch?v=7Dxu97R077w>
* **Further information about organic food:** <https://www.gov.uk/guidance/organic-food-labelling-rules>, <https://www.britannica.com/topic/organic-farming>, <https://education.nationalgeographic.org/resource/genetically-modified-organisms/> , <https://www.bbcgoodfood.com/howto/guide/organic> , <https://www.bbc.co.uk/bitesize/guides/zgfj6sg/revision/4>
* **How the King built an organic food brand:** https://edition.cnn.com/2022/09/16/business-food/king-charles-duchy-originals-waitrose/index.html
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| **Related activities (to build a full lesson)** |  |  |
| **Starters** (Options) * Watch the video on what makes food organic <https://www.youtube.com/watch?v=7Dxu97R077w>
* Analyze the benefits and limitations of organic and GM foods
 | **Plenary*** Evaluate the designs produced.
* Self/peer assess the completed designs.
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| **The Engineering Context**  |
| * Engineers have a moral responsibility to ensure that their designs are sustainable, ethical and do not negatively impact on the environment. In the case of food scientists this involves considering their use of organic and genetically modified ingredients, and when each is or isn’t appropriate.
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| **Curriculum links** |
| **England: National Curriculum**Cooking and Nutrition * KS3 3a, 3d

**GCSE Food Preparation and Nutrition**AQA Food Preparation and Nutrition* 3.2.3.1, 3.5.1.1, 3.5.1.2, 3.5.2

Edexcel Food Preparation and Nutrition* Topic 4.5 – moral issues (GM and organic)
* Topic 4.8 – labelling (organic)

Eduqas Food Preparation and Nutrition* 3 Plan balanced diets
* 5 Food provenance

OCR Food Preparation and Nutrition* 2b Section B – Food provenance and food choice
 | **Northern Ireland Curriculum**Technology & Design* KS3 Communication – use of free-hand sketching and formal drawing techniques and ICT tools (including 3D modelling)
* Objective 3 - Pursue design solutions using environmental friendly materials.

Home Economics* KS3 Healthy eating - Develop practical skills in the safe, hygienic, healthy and creative use of foods to plan, prepare, cook and serve a range of meals, explore ways to achieve a healthy diet.
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| **Scotland: Curriculum for Excellence**Food and Textile Technology* TCH 4-04a
 | **Wales: National Curriculum** Design and Technology* KS3 Skills: Designing 1, 2, 3, 4, 5, 6
* KS3 Food: 8, 9
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| **Assessment opportunities** |
| * Formal teacher assessment of finished design ideas.
* Self/peer assessment of designs produced.
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