



St Oswald's C E Primary School Planning Overview: Design and technology

Project title: Design, make and evaluate a healthy pizza for a family member.

Year 4 Term: Autumn 6 lessons	Topic: A healthy and varied diet Key Learning: A child working at expected should be able to: Designing • Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose. • Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. Making • Plan the main stages of a recipe, listing ingredients, utensils and equipment. • Select and use appropriate utensils and equipment to prepare and combine ingredients. • Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics. Evaluating • Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs. • Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. Technical knowledge and understanding • Know how to use appropriate equipment and utensils to prepare and combine food. • Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. • Know and use relevant technical and sensory vocabulary appropriately.
NC Objectives:	Key Knowledge and Vocabulary

Design 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 Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Evaluate Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to	Lesson 1: LO: To investigate different pizza ingredients and pizzas and analyse their contents. Children investigate a range of pizzas and ingredients e.g. a selection of foods provided for them. Link to the principles of a varied and healthy diet using The Eatwell plate e.g. What ingredients have been used? Which food groups do they belong to? What substances are used in the products e.g. nutrients, water and fibre? Link with Active Sefton Healthy eating workshops. Lesson 2: LO: To evaluate existing products and ingredients. Carry out sensory evaluations on the contents of the food from e.g. a variety of bought pizzas. Record results, for example using a table. Use appropriate words to describe the taste/smell/texture/appearance e.g. How do the sensory characteristics affect your liking for the food? Gather information about existing products available relating to your product. Visit a local supermarket and/or use the internet. Homework activity: LO: To research how different food products are grown, harvested or produced. Find out how a variety of ingredients used in products are grown and harvested, reared, caught and processed e.g. Where and when are the ingredients grown? Where do different meats/fish/cheese/eggs come from? How and why are they processed? Lesson 3: LO: To learn different food preparation techniques. Learn to select and use a range of utensils and use a range of techniques as appropriate to prepare ingredients hygienically including the bridge and claw technique, grating, peeling, chopping, slicing, mixing, spreading, kneading and baking. Food preparation and cooking techniques could be practised by making a food product using an existing recipe. Discuss basic food hygiene practices when handling food including the importance of following instructions to control risk e.g. What should we do before we work with food? Why is following instructions important? Lesson 4: LO: To design a healthy and appealing pizza. Discuss the purpose of the products that the children will be designing, making and evaluating and who the products will be for. (ie) customers at the Christmas fair. Develop and agree on design criteria with the children within a context that is authentic and meaningful. This can include criteria relating to healthy eating and a varied diet e.g. What do you need to consider to make it part of a balanced diet? How do we select the ingredients? How could we make it appealing to eat? Ask children to generate a range of ideas encouraging realistic responses. Using discussion, annotated sketches and information and communication technology if appropriate, ask the children to develop and communicate their ideas. Lesson 5: LO: To make my final product. Ask children to consider the main stages in making the food product, before preparing/cooking the product including the ingredients and utensils they will need. Lesson 6: LO: To evaluate my final product and gather feedback. Evaluate as the assignment proceeds and the final product against the intended purpose and user, reflecting on the design criteria
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improve their work Understand how key events and individuals in design and technology have helped shape the world Technical knowledge Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] 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 Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and	previously agreed. Consider what others think of the product when considering how the work might be improved. Carry out a survey for feedback. Key vocabulary: Name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations	
	Previous learning: Know some ways to prepare ingredients safely and hygienically. Have some basic knowledge and understanding about healthy eating and The1 Have used some equipment and utensils and prepared and combined ingredients to make a product.	Next steps: Designing Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas. Making Write a step-by-step recipe, including a list of ingredients, equipment and utensils Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. Make, decorate and present the food product appropriately for the intended user and purpose. Evaluating Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams. Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. Understand how key chefs have influenced eating habits to promote varied and healthy diets. Technical knowledge and understanding Know how to use utensils and equipment including heat sources to

processed.		prepare and cook food. Understand about seasonality in relation to food products and the source of different food products. Know and use relevant technical and sensory vocabulary.
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