

NC Purpose of Study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Intent	Implementation	Impact
At Broadway Junior School, Design and Technology inspires pupils to become creative, innovative and reflective problem-solvers. Through a progressive curriculum, children develop the knowledge, skills and confidence to design, make and evaluate purposeful products while considering the needs of others and the wider world. Pupils learn to take risks, think critically and apply technical knowledge across a range of contexts, including structures, mechanisms, textiles, electrical systems, the digital world and cooking and nutrition. We aim to foster resilience, resourcefulness and curiosity, enabling children to understand the impact of design and technology on everyday life and prepare them for future learning and careers.	Design and Technology is taught through the Kapow Primary scheme, which provides a carefully sequenced and progressive curriculum from Year 3 to Year 6. Learning follows the design process of design, make and evaluate, underpinned by the development of technical knowledge. Pupils revisit key areas throughout Key Stage 2, building on prior learning through a spiral curriculum approach. Lessons are taught over three half-terms each academic year and include practical, hands-on experiences, collaborative learning and opportunities for independent thinking. Knowledge organisers support vocabulary and knowledge retention, while differentiated activities ensure all pupils can access and achieve within the curriculum. Teachers are supported through high-quality planning and subject-specific professional development resources.	The impact of our Design and Technology curriculum is evident in pupils who are confident, creative and capable designers. Children develop a secure understanding of materials, tools, processes and healthy nutrition, applying their knowledge to create purposeful and innovative outcomes. They demonstrate increasing independence when designing, making and evaluating products and can reflect thoughtfully on how their work could be improved. Assessment is ongoing through observation, questioning and review of completed projects, enabling teachers to identify and address gaps in learning. By the end of Key Stage 2, pupils have the skills, knowledge and understanding required to meet National Curriculum expectations and succeed in the next stage of their education.

Key Vocabulary

Abattoir adaptation balanced cook cross-contamination cut design enhance equipment evaluate farm grate hygiene ingredients measure nutrition preference recipe safety

Knowledge	Skills
- That beef comes from cows reared on farms. - That recipes can be adapted to suit nutritional needs and dietary requirements. - That nutritional information is found on food packaging. - That coloured chopping boards can prevent cross-contamination. - That food packaging serves many purposes.	- Explaining the farm-to-fork process. - Researching existing recipes. - Suggesting alternative ingredients. - Analysing nutritional content. - Writing an alternative recipe. - Understanding cross-contamination. - Using preparation skills. - Designing a jar label. - Making a developed recipe.

Learning Objectives/End Points

Lesson 1: From farm to fork	Lesson 2: Different choices	Lesson 3: Nutritional value	Lesson 4: Preparing ingredients	Lesson 5: Designing labels	Lesson 6: Making Bolognese
To understand how ingredients are reared and processed.	To make adaptations to design a recipe.	To evaluate nutritional content.	To practise food preparation skills.	To design a product label.	To follow and make an adapted recipe.

Materials	Cautions
- Different Bolognese sauces and their packaging - Small bowls / Teaspoons - Access to a hob - Equipment for preparing foods: 1 vegetable knife; 1 box grater; 1 garlic press; 1 green chopping board; 1 brown chopping board; 1 pair of scissors; 1 measuring jug; - Ingredients: 2 onions; 2 sticks of celery; 1/2 a bulb of garlic; 2 carrots; 2 tbsp olive oil; 2 tins of chopped tomatoes. - Equipment for cooking : 1 saucepan; 1 tablespoon; 1 wooden spoon; 30 cm ruler A 30 cm length of string / Card / - Jars with the label removed	- The children must wash their hands before and after handling food. - If there are known allergies in the class, adjust the lesson. - Supervision required during cooking sessions

Cross-Curricular Links
Mathematics - Statistics - Complete, read and interpret information in tables - Convert between different units of metric measure Computing - Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Careers	
Linking Curriculum Learning to Careers Discuss how the skills developed in this unit are used in a range of careers, including: • Chef • Nutritionist • Dietitian • Farmer • Food Scientist • Food Product Developer • Packaging Designer • Quality Assurance Technician • Butcher • Environmental Health Officer Transferable skills such as Research and investigation, Planning and adapting recipes, Understanding nutrition and healthy choices, Safe food preparation and hygiene, Measuring and following processes accurately, Evaluating and improving products, Designing packaging and labels, Problem-solving and decision-making, Understanding sustainability and food production	Learning from Career and Labour Market Information • Explore how people work together across the food industry to produce safe, nutritious and high-quality food, from farms to supermarkets and restaurants. • Learn that food products are carefully designed to meet the needs of different consumers, including dietary requirements, nutrition and sustainability. • Discuss how professionals ensure food is prepared safely through good hygiene practices and by preventing cross-contamination. Encounters with Employers and Employees • Explore how chefs, farmers, food scientists and product developers work together to produce safe and nutritious food. • Discuss how nutritionists help people make healthy food choices and how food technologists develop new recipes and products. Experiences of Workplaces • Explore how hygiene and safety procedures are followed in kitchens and food manufacturing. • Investigate how food packaging is designed and how labels communicate nutritional information. • Explore how different careers contribute to the journey of food from production to the consumer.