



Topic name	Rotation	Skills developed (Research, Design, Make, Evaluate)	Link to NC subject content	Prior learning	Next link in curriculum
Pizza Company project	Core DT	Research - User and market research through surveys/interviews - Analysis of existing products, packaging materials, and branding strategies - Understanding of sustainability and ethical sourcing Design - Logo and branding creation using graphic design principles (typography, colour, balance) - CAD and hand-drawn packaging nets and visualisations - Writing a design brief and product specification - Applying ergonomic and aesthetic principles - Perspective Drawing: One-point and two-point perspective drawing skills enable students to create drawings that accurately represent three-dimensional objects. - Isometric and Oblique Drawing: Isometric and oblique drawings provide students with alternative methods to represent three-dimensional objects with precision and consistency. Make - Construction of packaging prototype - Safe food preparation of a pizza recipe using appropriate hygiene practices Evaluate - Sensory testing and nutrition analysis of the pizza - Feedback-based evaluation of logos, packaging, and final product - Consideration of user needs, sustainability, function, and cost - Self-reflection on what worked well and what could be improved	Design - Use research and exploration to identify and understand user needs. - Identify and solve their own design problems. - Develop and communicate design ideas using annotated sketches, detailed plans, 2D & 3D CAD. Make - 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. - Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. Technical Knowledge - Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions. Technical Drawing Skills: Learning techniques like one-point and two-point perspective drawing, isometric drawing, and oblique drawing.	Links from KS2: Design: Generate ideas through talking, drawing, and planning. Make: Select from a wider range of tools and materials. Evaluate: Explore existing products and reflect on own outcomes. Cooking & Nutrition: Understand where food comes from and prepare simple dishes. Links from previous Y9 rotation: Textiles Reinforces knowledge of fibres, sustainability, and product identity. Product Design Packaging design aligns closely with structural product design principles. Students consider material properties (rigidity, insulation, foldability) and human factors (ease of opening, stackability). Develops iterative prototyping skills. Food Recipe development, hygiene, nutrition, and food preparation are central. Links to food safety via packaging and labelling (allergens, expiry dates).	Links to GCSE DT: Iterative Design: Continuous improvement based on feedback. Material Knowledge: Properties of packaging materials like card, coatings, and their sustainability. User-Centred Design: Through research and ergonomic packaging solutions. Communication: Through sketching, CAD, annotation, and presentations. CAD and Prototyping: Students explore packaging development digitally and physically. Sustainability: Consider environmental impact of materials. Ergonomics & Aesthetics: Design packaging that is user-friendly and visually appealing.