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| **Substantive knowledge**  Our curriculum enables pupils to:   * Understand concepts, themes and genres * Acquire and apply knowledge and skill * Develop vocabulary | | | **Disciplinary knowledge**  Our curriculum supports pupils to:   * Evaluate past and present design and technology * Develop a critical understanding of its impact on daily life and the wider world * Use skills relevant to the design brief * Evaluate the effectiveness of their own and other’s work | |
| **KS2 Tier 3 -  *all children will access KS2 Tier 3 at least once; skills will be developed through different focused tasks in Cycle A and Cycle B. Different focused individuals and events will be taught in Cycles A and B.*** | | | | |
| **Key themes**  **Key vocabulary** | **Textiles** | **Food** | | **Computer-Aided Design** |
| **Tier 3** | Accessing Prior Learning:  **Can you describe why seam allowance is a necessity in textiles?** | Accessing Prior Learning:  **Can you assemble or cook ingredients controlling the temperature of the oven or hob, if cooking?** | | Accessing Prior Learning:  **Can you write code to control a sprite?** |
| Acquiring & Attempting Subject Knowledge:  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 textiles, according to their functional properties and aesthetic qualities * Create objects (such as a cushion) that employ a seam allowance * Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration) * Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion) | Acquiring & Attempting Subject Knowledge:   * Understand and apply the principles of a healthy and varied diet * Select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities * 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 processed * Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms) * Measure accurately and calculate ratios of ingredients to scale up or down from a recipe * Demonstrate a range of baking and cooking techniques * Create and refine recipes, including ingredients, methods, cooking times and temperatures | | Acquiring & Attempting Subject Knowledge:   * Apply their understanding of computing to program, monitor and control their products * Control and monitor models using software designed for this purpose * Write code to control and monitor models or products |
|  | Across all areas of DT  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   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 improve their work | | | |
| **Focus careers** | Fashion Designer | * Chef * Caterer * Nutritionist * Dietician | | Electrician  Graphic Designer  Software Developer  Architect |
| **Cycle A: Key events and individuals** | Gianni and Donatella Versace  Coco Chanel | Gordon Ramsey  Monica Galetti | | Steve Jobs (Apple)  Martin Cooper (Mobile phone)  Uemura Masayuki (Nintendo console) |
| **Cycle B: Key events and individuals** | Dame Vivienne Westwood  Christian Dior and Yves Saint Laurent | Heston Blumenthal  Nadiya Hussain | | Tim Berners-Lee (Internet)  Ken Kutaragi (Playstation Console)  Charles Babbage (Computer) |
|  | Applying Essential Knowledge:  **Can you design, make and evaluate a pencil case/bag/cushion using appropriate tools and understanding the need for seam allowance?**  **Can you change fabrics by sewing, ironing, cutting, tearing, creasing and/or knotting?** | Applying Essential Knowledge:  **Can you adapt, create and refine a recipe for a savoury dish using a range of baking and cooking techniques?** | | Applying Essential Knowledge:  **Can you design, make and evaluate a model or product that you can control by writing code, using software designed for this purpose?** |
| Additional Vocabulary | balance, colour, contrast, dots, elements of design, emphasis, form, garment, harmony, image, line, movement, outline, proportion, repetition, rhythm, shape, silhouette, space, texture, typography, value | accompaniment, adapt, bitter, carbohydrate, climate, cross-contamination, ethical issues, exported, fair trade, fats, flavour enhancer, fusion, imported, nutrients, protein, prototype, receptor cell, salty, seasonal, sensation, sensory, sour, substitute, sweet, taste, umami, vegan, vegetarian | | annotation, assembly, array, axis, collinear, concentric, component, cross-section, exploded drawing, exploded view, plane, properties, prototype, script, section line, tangent |
| Impact evidence:   * Pupil knowledge * Sketch books * Class floor books * Displays * Finished pieces | | | | |