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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
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| **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
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|  | Across all areas of DTDesign* 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
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| **Focus careers** | Fashion Designer | * Chef
* Caterer
* Nutritionist
* Dietician
 | ElectricianGraphic DesignerSoftware DeveloperArchitect |
| **Cycle A: Key events and individuals**  | Gianni and Donatella Versace Coco Chanel | Gordon RamseyMonica 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 BlumenthalNadiya 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
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