|  |  |
| --- | --- |
| **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 2 -  *all children will access KS2 Tier 2 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**  | **Food** | **Electrical Systems** | **Textiles** |
| **Tier 2** | Accessing Prior Learning: **Can you name ingredients that are grown, reared, caught and processed?****Can you identify the different seasons in which British fruits and vegetables are grown?** | Accessing Prior Learning: **Can you create a simple electrical circuit?** | Accessing Prior Learning: **Can you describe different ways to cut, shape, join and finish materials?** |
| 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
* Prepare ingredients hygienically using appropriate utensils
* Measure ingredients to the nearest gram accurately
* Follow a recipe
* Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking)
 | 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 construction materials, according to their functional properties and aesthetic qualities
* Create series and parallel circuits
* Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)

Technical knowledge* Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors
 | 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
* Understand the need for a seam allowance
* Join textiles with appropriate stitching
* Select the most appropriate techniques to decorate textiles.
 |
|  | 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
 |
| **Focus careers** | * Chef
* Caterer
* Nutritionist
* Dietician
 | * Electrician
* Quantity Surveyor
* Mechanic
* Bricklayer
* Graphic Designer
* Software Developer
* Builder
* Architect
* Civil Engineer
 | Fashion Designer |
| **Cycle A: Key events and individuals**  | Delia SmithAlan Yau | Nikola TeslaAlexander Graham Bell | Alexander McQueenStella McCartney |
| **Cycle B: Key events and individuals** | Ching He Huang Jamie Oliver | Thomas EddisonHedy Lamarr | Paul SmithRalph Lauren |
|  | Applying Essential Knowledge:**Can you design, make and evaluate a savoury dish using a range of cooking techniques?** | Applying Essential Knowledge:**Can you design, make and evaluate a steady-hand game/light-up picture/doorbell, using appropriate tools?** | Applying Essential Knowledge:**Can you design, make and evaluate an Anglo-Saxon/Viking banner, shield or flag, using appropriate tools and understanding the need for seam allowance?** |
| Additional Vocabulary | adapt, balance, bitter, carbohydrate, climate, collaboration, cross-contamination, exported, fats, flavour, imported, nutrients, protein, prototype, quantity, salty, seasonal, sensory, sour, sweet, unit of measurement, umami, vegan, vegetarian | AC (alternating current), DC (direct current), amperage, capacitor, circuit board, circuit diagram, electric charge, electrical engineer, electricity supply system, flow of charge, futurist, integrated circuit, inventor, receive, spread-spectrum communications, transmit, wireless communications | balance, colour, contrast, dots, elements of design, emphasis, garment, form, harmony, image, line, movement, outline, proportion, repetition, rhythm, shape, silhouette, space typography, texture, value, |
| Impact evidence: * Pupil knowledge
* Sketch books
* Class floor books
* Displays
* Finished pieces
 |