

**KS2 Cycle B Design and Technology Medium Term Plan**

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|  | **Autumn** | **Spring** | **Summer** |
| **Curriculum Objective** | **Cooking and Nutrition:**  POAP – Healthy and Varied Diet  Design, make and evaluate - pizza | **Textiles:**  POAP - 2D shapes to 3D project  Design, make and evaluate - purse | **Electrical Systems:**  POAP - Simple Circuits and Switches  Design, make and evaluate – night light |
| **Vocabulary to support Substantive and Disciplinary Knowledge** | knife, grater, cutting, spreading, grating, texture, taste, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested, healthy/varied diet  planning, design criteria, purpose, preference, selecting, user, annotated sketch, evaluations | fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, label, drawing, aesthetics, function, pattern pieces  user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative | series circuit, fault, connection, toggle  switch, push-to-make, switch, push-to-break, switch, battery, battery  holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip  control, program, system, input device,  output device  user, purpose, function,  prototype, design criteria, innovative, appealing, design brief |

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| **I will know….** | Design   * I can carry out sensory evaluations of a variety of ingredients and products and record the evaluations using e.g. tables and simple graphs. * I can generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose. * I can use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. * I can plan the main stages of a recipe, listing ingredients, utensils and equipment. * I can select from a range of ingredients (toppings which use the focus skills) to make appropriate food products, thinking about sensory characteristics.   Make   * I can select and use appropriate utensils and equipment to prepare and combine ingredients. * I know how to use appropriate equipment and utensils to prepare and combine food. * I know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. * I know and use relevant technical and sensory vocabulary appropriately.   Evaluate   * I can evaluate my ongoing work and the final product with reference to the design criteria and the views of others. | Design   * I can generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. * I can produce annotated sketches, prototypes, final product sketches and pattern pieces. * I can plan the main stages of making. * I can investigate a range of 3-D textile products relevant to the project. * I can take into account others’ views.   Make   * I can select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. * I can select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern. * I understand how a key event/individual has influenced the development of the chosen product and/or fabric. * I know how to strengthen, stiffen and reinforce existing fabrics. * I understand how to securely join two pieces of fabric together. * I understand the need for patterns and seam allowances. * I know and use technical vocabulary relevant to the project.   Evaluate   * I can test my product against the original design criteria and with the intended user. | Design   * I can gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. * I can generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams. * I can order the main stages of making. * I can investigate and analyse a range of existing battery-powered products.   Make   * I can select from and use tools and equipment to cut, shape, join and finish with some accuracy. * I can select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities. * I understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers. * I can apply my understanding of computing to program and control their products. * I know and use technical vocabulary relevant to the project.   Evaluate   * I can evaluate my ideas and products against my own design criteria identifying strengths and areas for improvement. |