

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Autumn** | **Spring** | **Summer** |
| **Curriculum Objective** | **Cooking and Nutrition:**POAP – Healthy and Varied DietDesign, make and evaluate - sandwich | **Structures:** POAP – Shell StructuresDesign, make and evaluate - packaging | **Mechanical Systems:** POAP – Levers and LinkagesDesign, make and evaluate – pop up card |
| **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 dietplanning, design criteria, purpose, preference, selecting, user, annotated sketch, evaluations | shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, corrugating, ribbing, font, lettering, text, graphics, prototypedecision, evaluating, design brief, design criteria, innovative | mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating user, purpose, function,prototype, design criteria, innovative, appealing, design brief |
| **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 (bread, pitta, wraps) 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 and design criteria collaboratively through discussion, focusing on the needs of the user and purpose of the product.
* I can develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas.
* I can order the main stages of making.
* I can explain my choice of materials according to functional properties and aesthetic qualities.
* I can investigate and evaluate a range of existing shell structures including the materials, components and techniques that have been used.

Make* I can select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy.
* I can use finishing techniques suitable for the product I am creating.
* I can develop and use knowledge of how to construct strong, stiff shell structures.
* I can develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.
* I know and use technical vocabulary relevant to the project.

Evaluate* I can test and evaluate my own products against design criteria and the intended user and purpose.
 | Design * I can generate realistic ideas and my own design criteria through discussion, focusing on the needs of the user.
* I can use annotated sketches and prototypes to develop, model and communicate ideas.
* I can order the main stages of making.
* I can select from and use appropriate tools with some accuracy to cut, shape and join paper and card.
* I can select from and use finishing techniques suitable for the product I am creating.
* I can investigate and analyse books and, where available, other products with lever and linkage mechanisms.
* I can evaluate my own products and ideas against criteria and user needs, as I design and make.
* I can distinguish between fixed and loose pivots.

Make* I can evaluate my own products and ideas against criteria and user needs, as I design and make.
* I understand and use lever and linkage mechanisms.
* I know and use technical vocabulary relevant to the project.

Evaluate* I can evaluate my own products and ideas against criteria and user needs, as I design and make.
 |