



## DESIGN AND TECHNOLOGY: STICKY KNOWLEDGE

| YEAR<br>GROUP | AUTUMN   | SPRING   | SUMMER   |
|---------------|--|--|--|
|               | SKILLS   | SKILLS   | SKILLS   |
|               | (DISCIPLINARY)   | (DISCIPLINARY)   | (DISCIPLINARY)   |
| Fs            |  |  |  |
| FS            | - Make use of props and materials.   | <ul> <li>Use and explore different materials and techniques.</li> <li>Use a range of small tools.</li> </ul>   | -Share creations and explain the process<br>you have used<br>-Participate in class discussions   |
| FS<br>Vocab   | Hard, soft, bendy.   | Scissors, spade, wood, glass, plastic, metal, paper, carboard.   | Discuss, share, listen.  |
| Y1            | COOKING  | TEXTILES   | MECHANISMS INCLUDING LEVERS AND SLIDERS  |
| Y1            | -Research by investigating foodDesign products through generating ideasMake using utensils to slice and chop safelyEvaluate ideas and finished products. | -Research joining techniquesDesign appealing and purposeful productsMake using tools to cut, using appropriate joining, and finishing techniquesEvaluate their product thinking about strengths and changes they might make. | -Research different mechanismsDesign based on a simple design criterion by developing and modellingMake selecting and using tools, explaining choices, and using finishing techniquesEvaluate products in relation to its effectiveness. |
| Y1<br>Vocab   | Cutting, slicing, knife, citrus fruits, lemon, orange, grapefruit.   | Joining, finishing, fastening, pattern pieces, mark out.   | Slider, lever, slot, push, pull, forwards,<br>backwards.   |
| Y2            | FOOD   | TEXTILES   | FREE-STANDING STRUCTURES -<br>WHEELS AND AXELS.  |
| Y2            | -Research by tasting a range of fruit and vegetables to determine their preferenceDesign products choosing foods according to their characteristics.     | -Research and explore how fastening techniques are used in textilesDesign and explore a range of materials to help make design decisions.  | -Research through talking and using my own experiencesDesign and develop mock ups using new and re-claimed materials.  |

|             | -Make using utensils to peel, slice, squeeze, grate and chop safelyEvaluate finished products against their design criteria.   | -Make your own miniature piece of clothingEvaluate products and how they relate to the target audience.  | -Make using a range of tools and skillsEvaluate products in relation to their effectiveness.   |
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| Y2<br>Vocab | Ingredients, recipe, peel, chop, vegetable names, stir.  | Fabric, tools, template, design, decorate, mark-<br>out.   | Cut, fold, join, strong, weak, axel, wheel.  |
| Y3          | FOOD - HEALTHY AND VARIED DIET   | STRUCTURES - PLASTIC JUNK  MODELLING   | ELECTRICAL SYSTEMS   |
| Y3          | -Research and generate ideas, classifying these through discussion with peers considering appearance, taste, texture, and purposeDesign through annotated sketchesMake using appropriate tools selecting from a range of ingredientsEvaluate using the senses. | -Research collaboratively through discussionsDesign choosing materials according to their functionalityMake using tools to measure, mark out, cut, score, shape and assembleEvaluate and test products against their original criteria e.g how well it meets the intended purpose. | -Research by gathering information about the needs of a specific audienceDesign through discussions, sketches, and diagramsMake in order understanding the final intent for the productEvaluate products based on the design criteria. |
| Y3<br>Vocab | Appearance, taste, texture, fresh, frozen, hygienic.   | Three-dimensional, shape, joining, assembling, stiff, strong.  | Switch, circuit, battery, bulb, wire.  |
| Y4          | MECHANICAL SYSTEMS INCLUDING LEVERS AND LINKAGES   | FOOD - HEALTHY AND VAIRED DIET   | TEXTILES   |
| Y4          | -Research and investigate current products using this to generate a design criterionDesign and produce prototypes, ordering the stages of making using annotated sketches.   | -Research considering the target audienceDesign through annotated drawings using ITMake by preparing and combining ingredients.  | -Research and investigate current products using these to make a design criterionDesign by producing annotated sketches and patterns selecting fabrics and fastenings based on functionality.  |

|             | -Make using appropriate tools with accuracy and choose the best finishing techniqueEvaluate their product carrying out appropriate tests.   | -Evaluate the process and suggest improvements.   | -Make using fabrics and materials to ensure the product fits the purposeEvaluate how well the product meets the design criteria.  |
|-------------|---|---|---|
| Y4<br>Vocab | Mechanism, lever, linkage, pivot, slot, bridge.   | Tinned, processed, preference, sour, savoury, edible, hygienic.   | Fabrics, fastenings, finishing technique, stitch, seam.   |
| Y5          | MECHANICAL SYSTEMS - PULLEYS AND GEARS  | ELECTRICAL SYSTEMS  | COOKING   |
| Y5          | -Research user needs and existing products on the marketDesign, generate and model innovative ideas through sketches, mock-ups, and IT where appropriateMake by measuring, marking out, cutting, and joining accuratelyEvaluate and test products against the success criteria. | -Research the working features of a product; share and clarify these through discussionDesign and test electrical products to work automaticallyMake by assembling materials and connecting electrical components to make reliable productsEvaluate and test the system to demonstrate its effectiveness for the user or purpose. | -Research discussing with peers and adults to develop a design briefDesign exploring a range of initial ideas, making design decisions linked to user and purposeMake using step by step recipes using appropriate utensilsEvaluate the final products with reference to the design criteria. |
| Y5<br>Vocab | Pulley, axel, diagram, gear, rotation, spindle.   | Bulb, switch, battery, buzzer, insulator, conductor, series circuit.  | Utensils, combining, recipe, edible, measuring, appearance.   |
| Y6          | STRUCTURES  | COOKING   | TEXTILES  |
| Y6          | -Research user needs, using surveys and interviewsDesign formulating a clear plan for production, modelling innovative ideas through prototypes and discussions.  | -Research by discussing with peers and adults to develop a design brief understanding and promoting a varied dietDesign using sketches and IT to write a step-by-step recipe.   | -Research user needs and existing products using surveys, interviews, and questionnairesDesign through discussion, mock-ups, sketches, or IT where appropriate.   |

|       | -Make by selecting from tools,                   | -Make using utensils to measure and               | -Make by competently selecting from            |
|-------|--|---|--|
|       | measuring, marking out, cutting,                 | combine ingredients.                              | tools to accurately measure, mark              |
|       | and joining materials to make a                  | - Evaluate using graphs/tables/charts             | out, join and cut.                             |
|       | framework.                                       | considering the views of others.                  | -Evaluate and compare the final                |
|       | -Evaluate critically.                            |   | product to the original design                 |
|       |  |   | specification.                                 |
| Y6    | Frame structure, stiffen, straighten, stability, | Combine, measuring, allergy, nutrition, vitamins, | Seam allowance, template, hem, pattern pieces, |
| Vocab | join, reinforcement.                             | protein, carbohydrate.                            | fastenings.                                    |