LONGTON LANE PRIMARY SCHOOL DESIGN TECHNOLOGY YEAR 5

*‘Believe and Achieve’*

|  |
| --- |
| National Curriculum Subject ContentDesign  * 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 **11** * generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **12**  Make  * select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately **13** * select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **14**  Evaluate  * investigate and analyse a range of existing products **15** * evaluate their ideas and products against their own design criteria and consider the views of others to improve their work **16** * understand how key events and individuals in design and technology have helped shape the world **17**  Technical knowledge  * apply their understanding of how to strengthen, stiffen and reinforce more complex structures **18** * understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] **20**  Cooking and Nutrition  * understand and apply the principles of a healthy and varied diet * 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. **22** |

|  |  |  |
| --- | --- | --- |
| **Accessory Making** | **Cooking and Nutrition**  **Pasta** | **Monster**  **Electrical parts – light up / buzzer noise / motor** |
| Generate a range of ideas after they have collected information  Take a user’s view into account when designing  Produce a detailed step-by-step plan  Suggest some alternative plans and say what the good points and drawbacks are about each  Explain why their finished product is going to be of good quality  Explain how their product will appeal to the audience  Use a range of tools and equipment expertly  Persevere through different stages of the making process  Check whether anything could be improved  Evaluate appearance and function against the original criteria  Think what the user would want when choosing textiles  Make up a prototype first  Use a range of joining techniques including sewing and stitching  Measure accurately to ensure that everything is precise | Generate a range of ideas after they have collected information  Produce a detailed step-by-step plan  Explain why their finished product is going to be of good quality  Explain how their product will appeal to the audience  Use a range of tools and equipment expertly  Persevere through different stages of the making process  Check whether anything could be improved  Evaluate appearance and function against the original criteria  Describe what they do to be both hygienic and safe  Present their product well with the user in mind | Generate a range of ideas after they have collected information  Take a user’s view into account when designing  Produce a detailed step-by-step plan  Suggest some alternative plans and say what the good points and drawbacks are about each  Explain why their finished product is going to be of good quality  Explain how their product will appeal to the audience  Use a range of tools and equipment expertly  Persevere through different stages of the making process  Check whether anything could be improved  Evaluate appearance and function against the original criteria  Incorporate a switch in their product  Refine their product after testing it  Use a circuit in their product  Think of ways in which adding a circuit would improve their product  Measure accurately to ensure that everything is precise  Ensure that their product is strong and fit for purpose |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Developing, planning and communicating ideas** | **Working with tools, equipment, materials and components to make quality products** | **Evaluating processes and products** | **Cooking and nutrition** | **Textiles** | **Electrical and mechanical components** | **Stiff and flexible sheet materials** |