LONGTON LANE PRIMARY SCHOOL DESIGN TECHNOLOGY YEAR 5

 *‘Believe and Achieve’*

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| 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**
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| **Accessory Making** | **Cooking and Nutrition** **Pasta** | **Monster****Electrical parts – light up / buzzer noise / motor** |
| Generate a range of ideas after they have collected informationTake a user’s view into account when designingProduce a detailed step-by-step planSuggest some alternative plans and say what the good points and drawbacks are about eachExplain why their finished product is going to be of good qualityExplain how their product will appeal to the audience Use a range of tools and equipment expertlyPersevere through different stages of the making processCheck whether anything could be improvedEvaluate appearance and function against the original criteriaThink what the user would want when choosing textilesMake up a prototype firstUse a range of joining techniques including sewing and stitchingMeasure accurately to ensure that everything is precise | Generate a range of ideas after they have collected informationProduce a detailed step-by-step planExplain why their finished product is going to be of good qualityExplain how their product will appeal to the audience Use a range of tools and equipment expertlyPersevere through different stages of the making processCheck whether anything could be improvedEvaluate appearance and function against the original criteriaDescribe what they do to be both hygienic and safePresent their product well with the user in mind | Generate a range of ideas after they have collected informationTake a user’s view into account when designingProduce a detailed step-by-step planSuggest some alternative plans and say what the good points and drawbacks are about eachExplain why their finished product is going to be of good qualityExplain how their product will appeal to the audience Use a range of tools and equipment expertlyPersevere through different stages of the making processCheck whether anything could be improvedEvaluate appearance and function against the original criteriaIncorporate a switch in their productRefine their product after testing itUse a circuit in their productThink of ways in which adding a circuit would improve their productMeasure accurately to ensure that everything is preciseEnsure that their product is strong and fit for purpose |

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| **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** |