**Year 6 DT Curriculum (MTP)**

**Science LTP**

**Holy Trinity C of E Primary School**

**Science LTP**



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| **Designing and Evaluating** | **Structures – Frame structures** | **Food Awareness - Food Celebrating culture and seasonality** | **Materials - Using computer-aided design (CAD) in textiles** |
| D: Can produce a detailed step by step plan  D/E: Can investigate and analyse a range of existing products, discussing their features, construction, purpose and intended users  D: Can use market research to inform plans  D: Have thought about how their product could be sold  D: Can follow and refine their plan if necessary.  D: Can convincingly justify their plan to someone else  D: Can consider culture and society in their design, including those from history  D: Can use their research to develop some of their own design criteria  D: Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes including using computer-aided design.  D: Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.  E: Can explain in detail about what they like about their product and what they could change to improve it  E: Can test and evaluate their final product  E: Their product meets all design criteria  E: Compare the final product to the original design specification.  E: Test products with intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.  E: Consider the views of others to improve their work. | D: Can follow and refine their plan if necessary.  D: Can convincingly justify their plan to someone else  D: Can consider culture and society in their design, including those from history  M/S: Can use a range of tools and equipment expertly  M: Can measure accurately to ensure that everything is precise  E: Can test and evaluate their final product  E: Their product meets all design criteria  S: To know why certain engineers use complex structures for a certain purpose  S: Can strengthen, stiffen and reinforce a range of 3D frameworks | D: Can use market research to inform plans  D: Have thought about how their product could be sold  D: Can consider culture and society in their design, including those from history  M: Can work within a budget  M: Can use a range of tools and equipment expertly  M: Measure ingredients to the nearest gram and millilitre and calculate ratios of ingredients to scale up or down from a recipe.  FA: Know that different food and drink contain different substances and nutrients, water and fibre and that are needed for health  FA: Follow a simple recipe with several elements  FA: Create and refine recipes, including ingredients, methods, cooking times and temperatures. | D: Generate innovative ideas through research including surveys, interviews and questionnaires.  D: Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes including using computer-aided design.  D: Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.  M: Formulate step-by-step plans and, if appropriate, allocate tasks within a team.  M: Select from and use a range of tools and equipment, including CAD, to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.  E: Compare the final product to the original design specification.  E: Test products with intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.  E: Consider the views of others to improve their work.  M: Know that a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.  M: Can strengthen, stiffen and reinforce fabrics where appropriate. |

**NB**

**Designing and Evaluation runs through all of the strands taught. Within lessons, consider including work on designers, chefs and inventors/inventions (e.g. George Stephenson, Nigella Lawson)**