



Design and Technology

Skills Progression– June'19

'Skill Themes' developed from the **Design & Technology Association (DTA)**

| | Skill Theme 1 Designing | Skill Theme 2 Making | Skill Theme 3 Evaluating | Skill Theme 4 Technical knowledge |
|--|---|---|---|---|
| End of Key Stage 1 (Year 2) | 1.1 Describe who their products are for, how they will work and who they are for 1.2 Use simple design criteria to help develop their ideas 1.3 Generate ideas by drawing on their own experiences and knowledge of existing products 1.4 Develop and communicate ideas by talking and drawing 1.5 Model ideas by exploring materials, components and construction kits and by making templates and mockups | 2.1 Plan by suggesting what to do next and select from a range of tools and equipment, explaining their choices 2.2 Select from a range of materials and components according to their characteristics 2.3 Measure, mark out, cut and shape materials and components 2.4 Assemble, join and combine materials and components | 3.1 Make simple judgements about their products and ideas against design criteria - 3.2 Suggest how their products could be improved 3.3 Say what they like and dislike about a range of products | 4.1 Know about the simple working characteristics of materials and components 4.2 Know about the movement of simple mechanisms such as levers, sliders, wheels and axles 4.3 Know how freestanding structures can be made stronger, stiffer and more stable |
| End of Lower key Stage 2 (Year 4) | 1.6 Gather information about the needs and wants of particular individuals and groups 1.7 Indicate the design features of their products that will appeal to intended users 1.8 Develop their own design criteria and use these to inform their ideas | 2.5 Order the main stages of making 2.6 Explain their choice of tools and equipment in relation to the skills and techniques they will be using 2.7 Explain their choice of materials and components according to functional properties and aesthetic qualities | 3.4 Identify the strengths and areas for development in their ideas and products 3.5 Consider the views of others, including intended users, to improve their work 3.6 Use their design criteria to evaluate their completed products | 4.4 Know that materials have both functional properties and aesthetic qualities 4.5 Know how mechanical systems such as levers and linkages or pneumatic systems create movement 4.6 Know how to make strong, stiff shell structures |
| When we leave the school. Year 6 | 1.9 Indicate the design features of their products that will appeal to intended users 1.10 Carry out research, using surveys, interviews, questionnaires and web-based resources 1.11 Develop a detailed design specification to guide their thinking | 2.8 Select materials and components suitable for the task 2.9 Explain their choice of materials and components according to functional properties and aesthetic qualities 2.10 Formulate step-by-step plans as a guide to making | 3.7 Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make using their design criteria 3.8 Know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products | 4.7 Know how to use some learning from science and maths to help design and make products that work 4.8 Know how mechanical systems such as cams or pulleys or gears create movement 4.9 Know how more complex electrical circuits and components can be used to create functional products 4.10 Know how to reinforce and strengthen a 3D framework |

Key subject specific vocabulary (Tier 3 vocab) to be embedded and revisited during study of DT at Little Melton:

function, template, develop, textile, evaluate, model, structure, mechanism, tool, product, recipe, ingredient, practical, theoretical, mock-up, finish, aesthetic, construct, design, join, manufacture, consumer, prototype, innovate

We believe these skills are important for life because:

- We want children to have a combination of practical skills and understanding so that they are able to design, make and evaluate products and perhaps be future innovators
- We want children to have an awareness of social and environmental issues about sustainability of products in the future and become informed consumers
- We want children to be able to apply the principles of nutrition with the skills to cook a balanced meal and carry these ideas and skills through into adulthood