



Subject Story

Design & Technology

Morden Primary School places significant importance on Design and Technology (D&T) as an integral part of education. D&T equips students with vital skills to navigate an ever-evolving world, fostering independence, creativity, problem-solving abilities, and teamwork. It encourages students to identify needs and respond with innovative product development. The curriculum encompasses practical skills, aesthetic considerations, and awareness of social, environmental, and industrial factors. Cross-curricular projects, including food technology, are actively promoted. D&T aligns with the school's values, instilling these qualities in students. It is a subject that draws from various disciplines and promotes risk-taking, innovation, and reflection. The curriculum is designed with a progressive sequence of units that build thinking and practical skills over the school years. Assessment is ongoing, informing teaching and learning adjustments, with summative evaluations conducted termly. Subject leadership monitors progress and impact through book assessments and pupil interviews, ensuring the delivery of a high-quality D&T curriculum.

The National Curriculum states:

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

If you were to walk into DT lessons at Morden, you would see:

- **PlanBee guidance** will be used to teach a range of Design and Technology lessons that meet the National Curriculum skills necessary to learn, achieve and enjoy a range of skills.
- **Reference back to the unit title page** – at the start of each lesson, focussing attention on the skills to be developed in the proceeding learning activities.
- **Retrieval practice** – giving learners the chance to consolidate previous skills and knowledge.
- **Careful examination of products**, for example food and design products, as children evaluate them and design their own improved version, tailored for a specific audience.
- **Range of relevant resources** provided for children that fulfil their design criteria and will be given time and opportunities to evaluate and re-design features if necessary.
- **Display and evaluation** of children's final designs against a criteria for that product, explaining what went well, what could improve and comparing it against existing and peer's products too.
- **Enjoyment** of learning in Design and Technology.
- **Inclusivity** – learning that is accessible to all.

Pupil Voice

Y1: Building houses was fun. They were big and I could choose where things went then moved them around if I wanted. You had to pull the move the long thing at the side to make the moving picture move.

Y2: I made a unicorn puppet to tell stories about my religion with. I could move it with my hand and I attached features. I enjoyed building my pizza and sprinkling the cheese.

Y3: Our moving Santa's moved using a syringe and a tube. I loved creating photo frames so much I made more at home afterwards.

Y4: Seasonal food is food that is only available in certain times of the year. When we made money containers we used sewing. I want to do it again and sew in straighter lines.

Y5: Making bread was interesting as I hadn't made food from basic ingredients before.

Sewing was challenging and you need to keep calm and safe. DT is good for children who can do well in something else, when they find literacy and maths hard.

Y6: We studied fairgrounds and tried to look at how each ride worked to make it move. We tried to copy the same movements in our work. We made vegetarian burger patties which was fun. I can think of ways that I would have improved it, to make my final burger less soft in the mouth.

An example of skills and knowledge progression within our DT curriculum

DISCIPLINARY KNOWLEDGE						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	<p>Find out information about focus item (materials, features, purpose).</p> <p>Draw on their own experience to help generate ideas.</p> <p>Suggest ideas and explain what they are going to do.</p> <p>Identify a target group for what they intend to design and make.</p> <p>Model their ideas in card and paper.</p> <p>Develop their design ideas applying findings from earlier research (including class surveys).</p>	<p>Discuss items (focus item for unit of work) in terms of features, materials and purpose.</p> <p>Generate ideas by drawing on their own and other people's experiences.</p> <p>Develop their design ideas through discussion, observation, drawing and modelling.</p> <p>Identify a purpose for what they intend to design and make.</p> <p>Identify simple design criteria.</p> <p>Make simple drawings and label parts.</p>	<p>Identify features of an item (focus item for unit of work).</p> <p>Learn how focus items work.</p> <p>Generate ideas for an item, considering its purpose and the user/s.</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of work before starting.</p> <p>Explore, develop and communicate design proposals by modelling and ideas (and collecting data).</p> <p>Make drawings with labels when designing.</p>	<p>Investigate local food production techniques.</p> <p>Generate ideas, considering the purposes for which they are designing.</p> <p>Make labelled drawings from different views showing specific features.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Evaluate products and identify criteria that can be used for their own designs.</p>	<p>Research current examples of the outcome for the unit.</p> <p>Generate ideas through brainstorming and surveys and identify a purpose for their product.</p> <p>Draw up a specification for their design.</p> <p>Develop a clear idea of what has to be done, planning and practising how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail.</p> <p>Use results of investigations, information sources, including ICT when developing design ideas.</p>	<p>Research current examples of the outcome for the unit.</p> <p>Communicate their ideas through detailed labelled drawings.</p> <p>Develop a design specification that meets a design brief.</p> <p>Explore, develop, analyse and communicate aspects and technical features of their design proposals by modelling their ideas in a variety of ways.</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques.</p>

Examples of children's learning:



Making Photo frames



Money containers



Seasonal food



Making bread



Diversity through fashion design



Bridges



Light decorations



Moving pictures

Successes for 2023/24

- Progression documents for each year group reviewed.
- A bank of resources to support coverage, inc. diversity, will be sourced.
- Learning objectives on display in every lesson and always make skills clear.
- Photo evidence saved from many year groups for DT units of work on the school system for subject monitoring.
- DT work from SUM 2 projects shared during celebration assemblies.
- Reference back to the unit title page at the start of each lesson, reviewing learning so far and learning for the current lesson.
- Children will produce high quality end products at the end of each unit of work.
- DT used as a theme for project work throughout the school.

Priorities for 2024/25

- Photo evidence saved from all year groups for DT units of work on the school system for subject monitoring for many units.
- Sourcing a full class set of food tech equipment.
- Key vocabulary on display for every lesson and referred to through teaching, instructions, discussion and final evaluation.
- A bank of resources to support coverage, inc. diversity, will be sourced for next units.
- Final model/food displayed and to be used for discussion at the start of the DT unit.

- Class model of DT focus will build week on week for modelling and demonstration (including evaluation).
 - Children will be able to clearly identify skills they have developed.
 - Topic posters to feature simple explanations of key vocabulary.
 - Topic posters to feature vocabulary on sewing techniques outlined.
 - To look at the progression map and outline skills in each topic of DT.
- **Ambitions for DT at Morden Primary School**
 - DT photo evidence consistently saved on the school system for subject monitoring from all year groups and all units.
 - Sharing of DT work consistently in celebration assemblies.
 - School trips with a DT focus (example: food, fashion, toys, mechanical themed.)
 - Healthy eating and its effects on our behaviour promoted in all classes through PSHE, Science and in assemblies.

Some websites you might find particularly interesting

Useful Design Technology Links:

www.nhs.uk/change4life/food-facts

www.bbcgoodfood.com

<https://www.bbc.co.uk/bitesize/subjects/zykw2hv>

www.teachingideas.co.uk/subjects/dt

<https://www.activityvillage.co.uk/>