

Design and Technology on a page

Intent: Our aim at LFADM is to provide a rich and exciting Design and Technology curriculum, which challenges, inspires and motivates all children to be knowledgeable, curious and critical about the impact DT has on daily life and the wider world.

We aim to give all children the tools they need to build and apply a repertoire of knowledge, an in-depth understanding and a range of skills in order to design and make a range of high-quality prototypes and products. They will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and successfully in an ever growing technological world. Through designing and making a range of products, children will learn how to problem solve and work well within a team in a variety of contexts. Wider opportunities including visits, visitors and STEM experiences will create and wonder, igniting their enthusiasm and belief that they can become the designers, engineers and chefs of tomorrow. Links to our Mathematics, Science, Computing and Art topics will ensure the children know more and remember more.

The curriculum in design and technology: A more detailed overview of each project is highlighted in our subject narrative section whereby various links and building upon prior knowledge are built upon. We use Cornerstones Maestro to support us in sequencing key concepts and knowledge.

Our two year mixed age overview highlights what geographical projects and content are taught when. This has been mapped out alongside curriculum experts at Cornerstones to ensure there is correct coverage of design and technology across all year groups. For a more in depth study of what is taught, please refer to our two year mixed age overview.

We aim to encompass key aspects of substantive knowledge throughout our design and technology curriculum, such as: nutritional knowledge, technological knowledge and design knowledge. Alongside this, through our Innovate sequence of learning, children have opportunities to explore design and technology disciplinary knowledge and think like a chef, an engineer or a designer.

Focus actions for 2021/2022:

1. Ensure there is correct coverage across all year groups of design and technology being taught by using Cornerstone Maestro guidance as support.
2. Ensure curriculum planning is fit for purpose and has all the necessary active ingredients to cater for needs of all learners.
3. To implement a fit for purpose QA cycle to monitor the quality of LFADM's design and technology curriculum.

Implementation: Design and Technology will be taught every term for approximately one lesson per week. We begin our design and technology projects with an 'Engage' section to introduce the knowledge children need. After this, children explore materials that they will use to design and build their final project through our 'Develop' section. This could involve comparing and critiquing two or more different models, carrying out tests on various different products in order to see which materials or design works best or testing different ingredients. The children will eventually work towards a final project, which they will use the skills they have previously learnt to create. Lastly, the children will evaluate their own and the peers work against their design criteria within our 'Express' section.

- We provide a range of materials and resources for children to explore and create their prototypes.
- Children will have the opportunity to explore and evaluate products both past and present allowing them to become knowledgeable in how technology has evolved over time.
- Children will learn to widen their use of vocabulary, which will be used when evaluating and critiquing theirs and their peers work.
- Learning environment reflects the lesson sequence with high quality examples of children's learning shared.
- Extra enrichment opportunities are available for our children through extra-curricular clubs provided by teach staff.

What does our planning include?

- Do Now and retrieval.
- Progression of knowledge and skills.
- Learning objective.

What approaches to T&L do we use?

- Quizzes.
- Modelling.
- Using other designers and chefs as inspiration.
- Partner/group talk during whole class teaching.
- Outdoor opportunities e.g. fieldwork/use of allotments/forest school as part of our curriculum offer.

How do we provide feedback for children?

- Peer feedback
- Verbal feedback
- Evaluation to reflect on journey of learning.

Key resources in school:

NC documents, Cornerstones Maestro platform, progression of skills outline, resources linked to projects being taught.

Adapted approaches to learning: Teachers will have a range of scaffolded strategies to use for individual children. For example: specific resources, scaffolded templates, adapted prototypes.

How do we evaluate the impact of T&L? Learning analysis to help us understand the quality of learning within the classroom and an opportunity to provide feedback throughout our Walkthrus CPD curriculum for staff.

- Monitoring planning to help us understand when progression of skills and knowledge is being taught.
- Book look to see if planning matches outcomes.
- Pupil voice to help us understand pupils' knowledge in design and technology and their thoughts and opinions.
- Evaluate content being covered for the next time this is taught.