

# DT at Valley Road School

## Intent

We want our children to love learning about design and making things of their own with pleasure and pride. We want our curriculum to reflect the respect we have for people who create with their minds and hands and their skill with tools.

Design and Technology is dynamic and multidimensional. It is our intention that our DT curriculum will provide opportunities to solve real and relevant problems, allowing our pupils to develop essential everyday skills and to recognise they could be the designers and innovators of tomorrow. The DT curriculum will encourage children to learn, to think and intervene creatively to solve problems both as an individual and as part of a team.

Design and Technology will allow all Valley Road pupils to put their learning from other areas of the curriculum into practice, and will work to enhance and deepen their understanding of those areas, including maths, computing, science, and art.

We will use assemblies to share with children the lives of famous and influential inventors from diverse cultures and genders.

Valley Road pupils will learn about cooking, food and nutrition, ensuring that they acquire the fundamental life skills in order to be able to feed themselves healthily and independently, whilst learning about where food comes from, therefore making connections with their geographical and scientific knowledge. We want to equip them with not only the minimum statutory requirements of the design technology National Curriculum but to prepare them for the opportunities, responsibilities, and experiences of later life.

## DT Implementation

- At Valley Road, DT is taught in every year group, usually once per term.
- Topics are blocked to allow children to focus on developing their knowledge and skills, studying each topic in depth.
- Each child has a Design Technology book. Children may use this to research products, develop design ideas and initial sketches, and showcase learned skills, technical knowledge and vocabulary, final designs, and evaluations.
- We use a skills-based approach to teaching and learning using objectives taken from the National Curriculum. We teach DT skills discretely, making relevant cross-curricular links, and ensure all children access all areas of the Design Technology Curriculum.
- Children will follow the 6 principles of DT:
  - USER – to have a clear idea of who they are designing/making the product for.
  - PURPOSE – to be able to communicate the purpose of the product they are designing/making
  - FUNCTIONALITY – to design a product that works and functions effectively to fulfil the user's needs

- DESIGN DECISIONS – to make own design opportunities, explore their own decisions and choices
  - INNOVATION – opportunities to be original with their thinking, develop and explore their own ideas incorporating the essential skills involved in the process
  - AUTHENTICITY – to make products that are believable, real, and meaningful to themselves and others, not just replicating ideas.
- Teaching of DT will also follow the cycle of Research, Develop own ideas, Make final idea, and Evaluate
  - Beginning with the purpose of a product for a user, the children are encouraged to use exploration of existing products to gather first-hand experience of existing approaches. We aim to promote creative problem solvers, both as individuals and part of a team and pupils develop their understanding of the ways in which people in the past and present have used design to meet their needs.
  - Children design and make quality products using a range of tools, materials, and components, make connections with their learning across the curriculum including in maths, computing, science, and art and reflect on and evaluate techniques using subject-specific vocabulary.
  - We empower our staff to organise their own year group curriculums under the guidance of our Curriculum Lead and Individual Subject Leaders. Teachers are best placed to make these judgements.
  - Staff develop year group specific long-term curriculum maps which identify when the different subjects and topics will be taught across the academic year, and these are reviewed regularly.
  - Teachers follow a clear progression of skills which ensure all pupils are challenged in-line with their year group expectations and given opportunity to build on their prior knowledge.
  - Effective CPD and standardisation opportunities are available to staff to ensure high levels of confidence and knowledge are maintained.
  - To support teaching, staff access a range of resources and planning

## EYFS

Expressive arts and design is one of the seven areas of the early years foundation stage and is used to develop a child's imagination, creativity and their ability to use media and materials. Children do this in range of ways including singing songs and making music, dancing, playing with colours, textures and design.

## DT Impact

The impact of our Design and Technology curriculum is in the development of our pupils being able to approach problems creatively and in a range of ways, applying their knowledge from across the curriculum areas independently.

We know the curriculum is impacting through pupil conversation, where children talk about their love of learning and through looking at children's books showing they take a pride in what they are learning.

By providing a range of contexts and the necessary skills, we endeavour to support pupils in their future educational journey and in understanding of the ever-developing world around them.

The skills and attributes they develop will benefit them beyond school and into adulthood: the ability to use time efficiently, work with others productively, show initiative, independence, resilience and manage risks effectively will ensure well-rounded citizens who will make a difference in the wider world.

Through the use of a termly assessment tracker and data analysis, we ensure that children who are achieving well, as well as those who are in need of additional support are identified, and additional provision and strategies are planned in and discussed with class teachers. We expect the children to know more, remember more and understand more about design and technology. Most children will achieve age related expectations in this subject.