Lilycroft Primary School

Design and Technology Long Term Plan

DT

Our School Intent. How is the curriculum organised?

Projects we have completed demonstrate what we know – future projects decide what we will learn" Dr. Mohsin Tiwana

Design and Technology is an inspiring, rigorous and practical subject. Our curriculum uses creativity and imagination where our 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.

Implementation

At Lilycroft, we have created a bespoke design technology curriculum, which engages, inspires and challenges pupils, equipping them with the knowledge and skills to experiment, invent and create. As pupils progress through the curriculum, they become able to think critically and develop a more rigorous understanding of design technology. They gain knowledge of how design technology both reflects and shapes our history, and contributes to the culture, creativity and wealth of our locality and nation. The Design Technology curriculum provides opportunities for children to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. It allows them to build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products which appeal to a wide range of users. Our pupils are given the opportunity to critique, evaluate and test their ideas and products and the work of others as well as understand and apply the principles of nutrition and learn how to cook. The knowledge, skills and understanding gained at each stage then enables the evaluation of pupils' knowledge and understanding against these expectations.

Our key knowledge concepts are: technical, design and creativity, make, evaluate and critique.

Our key skills concepts are: design and creativity, make, tools and materials (EYFS), evaluate and critique.

Impact

As designers, children will develop skills and attributes they can use beyond school and into adulthood. In DT, children may well be asked to solve problems and develop their learning independently. Children will know more, remember more and understand more about DT
Throughout the curriculum, children are given the opportunity to consolidate their skills by creating their final product independently. Each lesson builds on the previous and children's skills are improved upon throughout each unit. It is also clear to see the progression of skills throughout the school through the quality of products each year group creates. Subject and school leaders monitor the impact of our curriculum provision through completing regular monitoring, that includes listening to the voice of our children.

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Year Group	Autumn One Block 1	Spring One Block 2	Summer One Block 3
REC	**Design and make:** *Model making* Technical: 2D and 3D models Design: Colours and shapes to make objects Make: Use glue, split pins and stacking blocks Evaluate: Describe product made (bad and good)	**Designing:** *Junk modelling* Technical: How to combine wood, pans and plastic bottles Design: Use colours to represent specific parts Make:Use glue to join and materials of different strengths Evaluate: Use words strong and weak.	Design and make: Models of landmarks using food tools and texture and fruit kebabs Technical: Mould objects into different shapes Design: Shape clay using hands and tools. Use a mixture of fruits when designing a kebab Make Prepare fruits using a chopping board Evaluate: Change designs to improve them
Year 1	**Learning Focus:** Structures To design, made and evaluate an enclosure for an animal for children to play with	**Learning Focus:** Textiles To design, make and evaluate a puppet for younger children for imaginary role-play.	**Learning Focus:** Cooking and Nutrition To design, make and evaluate a fruit kebab for myself for a picnic.
Year 2	**Learning Focus:** Mechanisms To design, make and evaluate a push/pull toy for themselves to play with.	**Learning Focus:** Cooking and Nutrition To design, make and evaluate a fruit salad for children for a school dinner dessert.	**Learning Focus:** Structures To design, make and evaluate a strong chair for Baby Bear.
Year 3	**Learning Focus:** Textiles To design, make and evaluate a cushion for the home. (Manufacturer: Marton Mills)	**Learning Focus:** Structure including CAD To design, make and evaluate a giftbox for a child for a celebration. (Manufacturers: The Walsall Box Company)	**Learning Focus:** Cooking and Nutrition To design, make and evaluate a salad for a member of staff for a healthy lunch Chef: Jamie Oliver
Year 4	**Learning Focus: Cooking and nutrition** To design, make and evaluate a healthy sandwich for yourself for your lunchbox. (Chef: Clare Smyth)	**Learning Focus:** Electrical systems To design, make and evaluate nightlight for a younger child to help them feel safe and secure (Inventor:Thomas Edison)	**Learning Focus:** Mechanical systems To design, make and evaluate a slingshot car to compete in a race (Manufacturer: Bugatti)
Year 5	**Learning Focus:** Mechanical systems To design, make and evaluate an automata toy for a younger child to play with. (Inventor: Leonardo Da Vinci)	**Learning Focus:** Cooking and Nutrition To design, make and evaluate bread for children for a healthy snack. (Manufacturers: Warburtons)	**Learning Focus:** Structures To design, make and evaluate a bridge made for bike users only so they are safe from cars and other vehicles. (Civil Engineer: Isambard Kingdom Brunel)

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Year 6	**Learning Focus:** Electrical systems To design, make and evaluate a steady hand game for the school fair (Inventor: Robert (Bob) Scrimshaw) Link Science-Electricity	**Learning Focus:** Textiles To design, make and evaluate a soft toy for child/adult (Inventor: Richard Steiff)	**Learning Focus:** Cooking and nutrition To design, make and evaluate pizza for children to have for the end of year party. (Chef: Gino D'Acampo)