



Design and Technology

Long Row Primary School

EYFS

We believe that the Early Years Foundation Stage is crucial in securing solid foundations that children are going to continue to build upon. We then work together to develop and carry out our flexible EYFS Curriculum, taking account of the Prime and Specific Areas of Learning. This enables children to follow their learning journey from a point that is suitable to their unique needs and stage of development, supporting them to develop into independent learners with a thirst for knowledge and a desire to learn.

In Design and Technology, EYFS skills are developed through the "Expressive Arts and Design" Area of Learning. In EYFS, children have access to a workshop area, throughout all terms, as part of their continuous provision. They will experiment to create different textures and manipulate materials to achieve a planned effect. Children will construct with a purpose in mind, using a variety of resources and simple tools and techniques competently and appropriately.

Year 1 / 2 2022/23	Year 1 / 2 2023/24	Year 3 / 4 2022/23	Year 3 / 4 2023/24	Year 5 / 6 2022/23	Year 5 / 6 2023/24
Structures <i>Design and make a chair for Goldilocks</i>	Mechanisms <i>Wheels and axles - making a wind powered car</i>	Mechanical Systems <i>Levers and linkages to make an extendable grabber</i>	Structures <i>Frame structures to make a bridge</i>	Mechanical Systems <i>Gear and pulley systems to make a cable car</i>	Electrical Systems <i>Using more complex systems and circuits to make an electrical powered car.</i>
Food <i>Creating portable snacks</i>	Food <i>Creating food from other countries</i>	Food <i>Making nutritious vegetable soup</i>	Food <i>Making dips</i>	Food <i>Making bread suitable for a summer BBQ or picnic</i>	Food <i>Creating a mince dish of choice</i>
	Mechanisms <i>Sliders and levers- designing a Christmas card</i>		Electrical Systems <i>Using simple electrical systems to create a Christmas card that lights up.</i>		Computing <i>Programming using Raspberry Pi, developing apps</i>

Design

Year 1 / 2 2022/23	Year 1 / 2 2023/24	Year 3 / 4 2022/23	Year 3 / 4 2023/24	Year 5 / 6 2022/23	Year 5 / 6 2023/24
Design purposeful, functional, appealing products for themselves and other users based on design criteria.	Generate, develop, model and communicate their ideas through talking, templates, mock-ups and where appropriate, IT	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and user.	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and user.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, diagrams, prototypes and pattern pieces.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, diagrams, prototypes and pattern pieces.

Make

Year 1 / 2 2022/23	Year 1 / 2 2023/24	Year 3 / 4 2022/23	Year 3 / 4 2023/24	Year 5 / 6 2022/23	Year 5 / 6 2023/24
Select from and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing	Select from and use a wide range of materials and components including construction materials and ingredients according to their characteristics.	Select from and use a wider range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing accurately.	Select from and use a wider range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing accurately.	Select from and use a wider range of materials and components including construction materials and ingredients according to their functional and aesthetic qualities.	Select from and use a wider range of materials and components including construction materials and ingredients according to their functional and aesthetic qualities.

Evaluate

Year 1 / 2 2022/23	Year 1 / 2 2023/24	Year 3 / 4 2022/23	Year 3 / 4 2023/24	Year 5 / 6 2022/23	Year 5 / 6 2023/24
Explore and evaluate a range of existing products.	Evaluate their ideas and products against design criteria.	Investigate and analyse a range of existing products. Adapt designs as they work and evaluate the effectiveness of their products.	Investigate and analyse a range of existing products. Adapt designs as they work and evaluate the effectiveness of their products against their own design criteria.	Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Test design and evaluate finished products.	Test, design and evaluate finished products. Understand how key events and individuals in design and technology have helped to shape the world.

Technical Knowledge

Year 1 / 2 2022/23	Year 1 / 2 2023/24	Year 3 / 4 2022/23	Year 3 / 4 2023/24	Year 5 / 6 2022/23	Year 5 / 6 2023/24
Build structures, exploring how they can be made stronger, stiffer and more stable.	Explore and use mechanisms (levers, sliders, wheels and axles) in their products.	Understand and use mechanical systems in their products - levers and linkages	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use simple circuits in their work.	Understand and use more complex mechanical systems - gears and pulleys.	Understand and use electrical systems in their products - switches, bulbs, motors. Apply their understanding of computing to program, monitor and control.

Food Technology

Year 1 / 2 2022/23	Year 1 / 2 2023/24	Year 3 / 4 2022/23	Year 3 / 4 2023/24	Year 5 / 6 2022/23	Year 5 / 6 2023/24
Begin to use some simple food preparation techniques with support. Begin to understand some basic food preparation rules.	Begin to use a wider range of food preparation techniques. Know plants and animals are sources of food. Know that some foods need to be stored safely.	Know some simple techniques for food preparation. Know that some foods are seasonal and consider this when planning their food.	Understand healthy eating choices. Know the origins of where their food comes from. Apply their knowledge of cooking techniques, deciding which are appropriate to use.	Combine a range of ingredients appropriately. Know some foods that are associated with cultural events. Evaluate food in terms of a balanced diet.	Know how ingredients are grown, reared, caught and processed. Weigh and measure ingredients accurately and combine them effectively. Apply effectively a range of food preparation techniques.