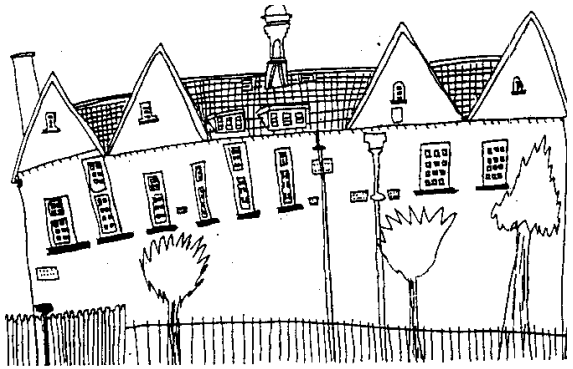
Design and Technology at

Letchmore Infants' and Nursery School



Subject Intent Statement

At our school, we aim to ensure that all pupils:

•Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

•Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.

•Evaluate and test their ideas and products and the work of others.

•Understand and apply the principles of nutrition and learn how to cook.

Provision for vulnerable groups and children with SEND:

Class teachers will make adaptations to the curriculum appropriate to the needs of individual children. Learning activities and outcomes will be differentiated to ensure **all** pupils are able to participate fully and make progress. Resources will be adapted as appropriate to ensure **all** pupils can access **all** aspects of learning. Adaptations may include: use of visual and concrete resources, use of a whiteboard for recording, pre-teaching key vocabulary and concepts, assessment of understanding and progress through discussion and role play rather than through what a child has recorded. This list is not exhaustive and class teachers will work in collaboration with the child, parents / carers, SENCo, LSAs and external professionals to understand and respond to the children's individual needs.

Long Term Plan for Design and Technology in Key Stage One

The long term plan below outlines where each area of learning might link with other curriculum topics being taught within KS1. However, as we move towards greater planning in the moment and enhanced continuous provision the opportunities for D&T learning will be dictated by the children themselves and their interests. The skills progression document offers further guidance on how to develop a child's D&T learning irrespective of the context or topic.

	Autumn	Spring	Summer
Year 1	Circus Moving Picture AREA OF LEARNING: MECHANISM (levers/ sliders)	Trip Around the World Handa's Surprise – fruit salad AREA OF LEARNING: FOOD	On Our Doorstep New Playground Equipment AREA OF LEARNING: STRUCTURES
Year 2	Our Amazing World (Growing up and keeping healthy) Healthy Sandwich AREA OF LEARNING: FOOD	Dragons Dragon Eggs AREA OF LEARNING: TEXTILES	Space Space Travel AREA OF LEARNING: MECHANISM (axles)

Skill Progression within Design and Technology

Design and Technology Early Years - skills progression

	Three and Four Year Olds	Reception
Design/ Planning	- Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them. - Explore how things work. - Explore different materials freely, in order to develop their ideas about how to use them and what to make. - Explore ideas by rearranging materials. - Develop their own ideas and then decide which materials to use to express themselves.	- Begin to use language of designing and making e.g. join, build and shape. - Learning about planning and adapting initial ideas to make them better. - Learn how everyday objects work by dismantling things. - Select materials from a limited range that will meet a simple design criteria e.g. shiny. - Describe simple models or drawings of ideas and intentions. - Explain what they are making and which materials they are using. - Look at simple hinges, wheels and axles. Use technical vocabulary when appropriate.
Make	- Choose the right resources to carry out their own plan. - Use one-handed tools and equipment, for example, making snips in paper with scissors. - Use adhesives to join materials. - Use large muscle movements to paint and make marks. - Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. - Create closed shapes with continuous lines and begin to use these shapes to represent objects.	- To learn to construct with a purpose in mind. To create their design using basic techniques. - Selects and names tools and techniques needed to shape, assemble and join materials. - To learn to use a range of tools including: scissors, hole punch, stapler, woodworking tools, rolling pins, pastry cutters. - Develop their small motor skills so that they can use a range of tools competently, safely and confidently. - Use scissors to create straight and curved edges. - Explore, use and refine a variety of artistic effects to express their ideas and feelings. - Create collaboratively, sharing ideas, resources and skills.
Evaluate	- Discuss their work as it progresses. - Say what they like and do not like about items they have made and attempt to say why.	- Begin to talk about changes made during the making process e.g. making the decision to use a different joining technique. - Return to and build upon their previous learning, refining ideas and developing their ability to represent them. - Share their creations, explaining the processes they have used. - Discuss how closely their finished products meet their design criteria.
Cooking and Nutrition: - To begin to understand some of the tools, techniques and processes involved in cold food preparation. - Children have basic hygiene awareness. - Begin to develop food vocabulary using taste, smell and texture. - Explore familiar food products e.g. fruit and vegetables.		

Design and Technology Key Stage 1 - skills progression

Skill	Year 1	Year 2
Research	❖ Understand what a product is and who it is for. ❖ Understand how a product works and how it is used. ❖ Identify where you might find this product. ❖ When looking at existing products explain what they like and dislike and why.	❖ Understand what a product is and who it is for. ❖ Understand how a product works and how it is used. ❖ Identify where you might find this product. ❖ When looking at existing products explain what they like and dislike and why. ❖ Identify the materials used to make the product. ❖ Express an opinion about the product.
Design Criteria	❖ Draw on own experiences and research conducted to help generate ideas. ❖ Explain what product they will be designing and making. ❖ Explain who their product will be used by. ❖ Describe what their product will be used for.	❖ Use their own experiences and that of existing products to develop ideas. ❖ Explain what product they will be designing and making. ❖ Explain who their product will be used by. ❖ Describe what their products will be used for and how it will work. ❖ Explain why their product is suitable for the intended user.
Planning	❖ Discuss what their steps for making could be. ❖ Represent their ideas through talking and drawing. ❖ Model ideas by exploring materials, components and construction kits.	❖ Discuss what their steps for making could be. ❖ Represent their ideas through talking, drawing and computing. ❖ Choose materials to use based upon suitability of their properties. ❖ Create templates/ patterns/ mock ups and explore materials whilst developing ideas.
Making	❖ Choose suitable tools for making. ❖ Follow safety and food hygiene procedures. ❖ Measure, mark, cut and shape materials and components. ❖ Join, assemble and combine materials and components using a variety of methods. . ❖ Select from a range of materials. ❖ Know about the movement of simple mechanism such as levers and sliders. ❖ Explore making freestanding structures stringer, stiffer and more stable. ❖ To begin to use the correct technical vocabulary for the project they are working on.	❖ Choose suitable tools for making whilst explaining why they should be used. ❖ Follow safety and food hygiene procedures. ❖ Measure, mark, cut and shape materials and components. ❖ Join, assemble and combine materials and components using a variety of methods. ❖ Manipulate fabrics in simple ways, use a basic running stitch. ❖ Select from a range of materials according to characteristics including textiles and wood. ❖ Use finishing techniques to improve appearance of product including simple decorations. ❖ Know about the movement of simple mechanism such as wheels and axles. ❖ To know the correct technical vocabulary for the project they are working on.
Evaluating	❖ Talk about their design ideas and what they have made. ❖ Make simple judgements of how the product met their design ideas.	❖ As they work, start to identify strengths and possible changes they might make to refine their existing design. ❖ Talk about their design ideas and what they have made. ❖ Make simple judgements of how the product met their design ideas. ❖ Suggest how their product could be improved. Identify what they like/ dislike. Describe how and where their products might be used.

Food	Across Key Stage 1
Teaching cooking and nutrition – understanding food and food preparation.	❖ Understand that food comes from plants and animals. ❖ Understand that food has to be farmed, caught or grown
Teaching cooking and nutrition – food preparation, cooking and nutrition	❖ Name and sort foods into the 5 groups using 'The Eat Well Plate'. Use what they know about the food groups to design and prepare dishes. ❖ Combine food ingredients based upon their sensory characteristics. ❖ Identify that people should eat at least 5 portions of fruit and vegetables a day. ❖ Prepare simple dishes hygienically and safely without a heat source. ❖ Using cooking techniques such as: cutting, peeling and grating.

Whole School

Harvest Festival 'Design and Make' Competition

Christmas / Winter Decoration Challenge

Easter Decoration Competition

Key Stage 1 – Food technology via Herts Catering Services.