

Our Design and Technology Curriculum

Intent

At West Earlham Infant and Nursery School we see Design and Technology as a creative and practical subject.

Design and Technology at West Earlham Infant Nursery School will:

- Enable children to embrace their creativity while developing essential skills.
- Enable children to design and make products that solve real problems in a variety of contexts.
- Develop children's ability to work cooperatively.
- Develop children's skills, attitudes and attributes that can support learning in other areas.

Implementation

- The teaching and implementation of the design and technology curriculum at West Earlham Infant and Nursery School follows the National Curriculum in KS1 and the Early Years Foundation Stage Statutory Framework in the EYFS.
- In KS1 teachers plan and teach design and technology linked to topics, "big questions" and literacy using a variety of approaches that are matched to the abilities of the children. Children are given "problems" to develop their problem solving skills.
- In the EYFS teachers set up an enabling environment where children explore their creativity both inside and outside with access to multiple media and materials. Our 'in the moment' planning approach in the EYFS enables teachers to demonstrate and teach skills and techniques associated with the things that children are doing and are interested in doing.
- In both key stages opportunities for cooking are planned and delivered throughout the year linked to learning themes.

Our children will experience:	Nursery	Reception	Year 1	Year 2
Story Cafes with craft activities.	Learning themes:	Learning themes:	Problems to solve:	Problems to solve:
Cross curricular opportunities:	Inspired by the children's	Settling in & Signs of	How can we stop the Hat Seller from	How can the meerkat take his home
Links to history and geography when	interests, our natural	Autumn	losing his hats?	with him?
learning about specific physical	environment, the stories	Celebrations	How can we stop the houses from	How can we explore the world from
environments and historical events	we are reading and	My Healthy Body	burning?	our classroom?
like the Great Fire of London.		Chinese New Year	How can we trap a star?	



Literacy - using both fiction and non fiction texts to support learning. Computing - using ICT in the design process. Art - encouraging creativity and using tools and techniques competently. Science - discuss, evaluate and experiment with designs. Understand about healthy eating.	relevant festivals/celebrations. Continuous provision is developed to support children's learning in expressive arts and design throughout the school day across multiple indoor and outdoor areas. See EYFS continuous provision plans. Regular opportunities for cooking and tasting new foods are planned throughout the year.	People Who Help Us Signs of Spring Life Cycles, Looking After the Environment, Life in Other Countries Planting & Growing Traditional Tales Continuous provision is developed to support children's learning in expressive arts and design throughout the school day across multiple indoor and outdoor areas. See EYFS continuous provision plans. Regular opportunities for cooking and tasting new foods are planned throughout the year.	How do I know where to go in Norwich? How can Handa get to the village without losing all of her fruit? How can we cross the North Pole?	How can we help plop see in the dark? How can we clean our oceans? How can we fly? How can we add mechanisms to our transition booklets?
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Design and Technology					
	Nursery Reception Year One Year Two				
Design					



Pro gres sion	Explore different materials to develop ideas about how to use them and what to make.	 Return to and build on previous learning, refining ideas. Expressive arts and design Early Learning Goals. 	 With support generate ideas for products based on their own experiences, including looking at existing products. With support begin to develop simple design criteria and to use it to help them develop their product. Begin to develop ideas by talking and drawing. Say who and what their product is for. With support model ideas by exploring materials and components, and by beginning to make simple mockups and templates. Begin to use ICT within the design process, where appropriate, with adult support. 	 Generate ideas for products based on their own and others experiences, including looking at existing products. Develop their own design criteria and use it regularly throughout the design process. Develop and communicate ideas by talking and drawing. Say who and what their product is for and how it will work. Model ideas by exploring materials and components, and by making simple mockups and templates. Use ICT within the design process where appropriate.
Pro gres sion	Realise tools can be used for a purpose.	Use a variety of simple tools and techniques competently and appropriately.	Begin to understand the purpose of certain tools and equipment.	Understand what some tools and equipment can be used for.



	Join different materials and explore different textures.	Expressive arts and design Early Learning Goals.	 Select from a limited range of tools and equipment and, with support, begin to explain their choice. Begin to recognise the characteristics of some materials, textiles and ingredients. With support select specific materials, textiles or ingredients for a purpose. 	 Select from a range of tools and equipment and explain their choice. Recognise the characteristics of some materials, textiles and ingredients. Select specific materials, textiles or ingredients for a purpose.
		E	valuate	
Pro gres sion	Share their creations and be able to say something about how they have made it.	 Share their creations and explain how they have made them. Expressive arts and design Early Learning Goals. 	 Begin to explore what products are and say who/what they are for. Begin to look at how they work and what they could be used for. From a given choice say what they think a product is made from. Begin to say what they like or dislike about a product. Begin to judge their products and ideas against simple design criteria. 	 Explore a wide range of products, say what products are and who/what they are for. Look at how they work and what they could be used for. Say what they think a product is made from. Say what they like or dislike about a product and why. Independently judge their products and ideas against simple design



Pro gres sion	 Beginning to be interested in and describe the texture of things. Experiment to create different textures. 	• Experiment to create different textures and forms. Expressive arts and design Early Learning Goals.	 With support talk about how they might improve their product or design. al Knowledge Build simple structures from a variety of materials, with support, explore how they can be made stronger. Begin to learn the names of simple mechanisms and how they work. With support begin to use these mechanisms in their products. 	 criteria. Talk about how they would improve their product/design. Build structures from a variety of materials and independently explore how they can be made stronger. Understand how simple mechanisms work and name them. Use these mechanisms in their products.
Pro gres sion	 Beginning to understand healthy and not healthy foods Begin to explore new foods and be willing to try new things with adult support. With adult reminders know that they need to wash hands before eating and after going to the toilet. 	 Cooking Show understanding that good practices with regards to eating can contribute to good health. Be able to talk about where food comes from. Name some healthy and unhealthy foods and talk about different food groups. Remember to wash their hands before eating and after going to the toilet. 	 And Nutrition Know that food comes from plants or animals. Name basic food groups and know that a healthy diet includes fruit, vegetables and water. know that food labels provide nutritional information. 	 Know that food comes from plants or animals and be able to link some foods to their source. Discuss what is required for a healthy diet and be able to assemble a "healthy plate." Know that food labels provide nutritional information and begin to read them.



	 Explore a variety of tools and malleable materials. With adult support use basic techniques for cooking like mixing, rolling and shaping. 	 Use a variety of tools and malleable materials in their play with increasing competence. With adult support explore more techniques for cooking like mashing and cutting. Managing self and Physical Development early learning goals. 	 Know the importance of washing their hands before preparing and eating food. Use a variety of cooking techniques. With some supervision: weigh, measure, sift, mix, roll, use cutters, spread. With very close supervision: mash, peel, grate, cut. Assemble cold ingredients with some support. Observe adults using equipment like the hob, oven, toaster or microwave. 	 Know the importance of washing their hands and cleaning surfaces before preparing and eating food. Use a variety of cooking techniques. With minimal supervision: weigh, measure, sift, mix, roll, use cutters, spread. With some supervision: mash, peel, grate, cut. Assemble cold ingredients. Observe adults using equipment like the hob, oven, toaster or microwave and talk about safety measures.
Key Voc abul ary	Names of basic tools e.g. scissors, knife. Names of basic materials e.g. glue, stick, tape, string, paper, card, blocks, bricks. Basic texture vocabulary e.g. hard, soft, rough, smooth. Healthy, unhealthy, "good for you."	Additional tools e.g. masher, peeler, grater. Additional materials e.g. tissue paper, cotton wool, straws. Ingredients, recipe.	Product, design, tools, structure, wheel, lever, equipment. Diet, hygiene.	Evaluate, mechanism, axle. Nutrition, hygienic, unhygienic.