Design and Technology

Design and technology enables children, through a variety of creative and practical activities, to be taught knowledge, understanding and skills needed to engage in an iterative process of designing and making.

Design

	Reception	Years 1 and 2	
EYFS (Reception)/National Curriculum Objectives (Years 1 and 2)	Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	 Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. 	
Cecil Gowing's curriculum coverage	 Explore a wide range of construction materials choosing particular materials for a purpose. Explore a variety of joining materials, selecting the one they believe will be the best. Talk about and evaluate their own models, saying how they might improve them. Say what they like and dislike about a product. 	 With support generate ideas for products based on their own and others experiences, including looking at existing products. With support, begin to develop simple design criteria and use it to help them to develop their products. Begin to develop and communicate ideas by talking and drawing. Be able to say who and what their product is for. With support, model ideas by exploring materials and components, and by beginning to make simple mock ups and templates. Generate ideas for products based on their own and others experiences, including looking a existing products Develop and communicate ideas by talking and drawing. Be able to say who and what their product is for, and how it will work. Use ICT within the design process, where appropriate. 	

Make

	Reception	Years 1 and 2	
EYFS (Reception)/National Curriculum Objectives (Years 1 and 2)	Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	 Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics 	
Cecil Gowing's curriculum coverage	 Use a variety of tools in their play. Explore materials, textiles and ingredients through their play and adult directed activities, beginning to talk about their characteristics. Select a resource for a purpose in their play and explain why. 	 Year 1 Begin to understand what some tools and equipment can be used for. Select from a limited range of tools and equipment and begin to explain their choice with support. Begin to recognise the characteristics of some materials, textiles and ingredients Select specific materials, textiles or ingredients for a purpose, with support. 	

Evaluate

	Reception	Years 1 and 2	
EYFS (Reception)/National Curriculum Objectives (Years 1 and 2)	Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	 Explore and evaluate a range of existing products. Evaluate their ideas and products against a design criteria. 	
Cecil Gowing's curriculum coverage	Reception Talk about their likes and dislikes, beginning to give reasons. Change, adapt and develop their creations, beginning to talk about why. Explore a range of natural and manmade materials, beginning to name them and talk about their properties.	 Year 1 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. Begin to say what they like or dislike about a product. Begin to judge their products and ideas against simple design criteria. With support talk about how they might improve their design/product. 	 Year 2 Explore a wide range of products, say what they are and who/what they are for. Look at how they work and what they could be used for. (e.g. disassembling sandwiches) 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 criteria. Talk in detail about how they would improve their product/design.

Technical Knowledge

	Reception	Years 1 and 2	
EYFS (Reception)/National Curriculum Objectives (Years 1 and 2)	Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	 Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms in their products. 	
Cecil Gowing's curriculum coverage	Reception Build simple structures using a variety of materials, beginning to explore their strength and stability. Explore simple mechanisms in their play beginning to think about how they are working.	 Year 1 Understand the vocabulary stiffer, stronger and stable. Build simple structures from a variety of materials and begin, with support, to think about how they can be made stiffer, stronger and more stable. Begin to learn the names of simple mechanisms and how they work. With support, begin to use these mechanisms in their products. 	 Year 2 Build structures from a variety of materials, independently explore how they can be made stiffer, stronger and more stable. Understand how simple mechanisms work and name them (e.g. split pins). Use these mechanisms in their products. (e.g. split pins).

Cooking and Nutrition

	Reception	Years 1 and 2	
EYFS (Reception)/National Curriculum Objectives (Years 1 and 2)	 Children know about the importance of good health for exercise, and a healthy diet, and ways to keep healthy and safe. They manage their own basic hygiene and personal needs successfully, including dressing and going to the toilet independently. Children show good control and coordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools effectively, including pencils for writing. 	Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	
	 Reception Talk about where food comes from through stories and real life experiences. In outdoor learning, with guidance from adults, take part in harvesting and growing their own fruit, vegetables and plants. Have the opportunity to explore a variety of foods using all their senses. Name healthy foods and talk about what makes a healthy diet. Remember to wash their hands after visiting the toilet and before snack and going to lunch. Use a variety of tools and malleable materials in their play with increasing competence, including salt dough, corn flour, rolling pins, sieves, etc. With adult support, begin to explore 	 Year 1 Know that all food comes from plants or animals. Name the basic food groups and know that a healthy diet should include 5 pieces of fruit or vegetables each day. Know that they must wash their hands before preparing or eating food. Use a variety of techniques to prepare healthy dishes. With close supervision peel, grate and cut. With some supervision weigh, mix, measure, roll, etc. With minimal supervision assemble cold ingredients. Observe adults using equipment including a hob, oven, toaster or microwave. 	 Year 2 Know that all food comes from plants and animals, and be able to link some foods to their source. Discuss what is required as part of a healthy diet. Know that nutritional information is available on food labels and begin to read them. Know that they must wash their hands and ensure the surfaces are clean, before preparing food. Use a variety of techniques to prepare healthy dishes. Independently assemble cold ingredients. Observe adults using equipment including a hob, oven, toaster or microwave and talk about safety measures.

	techniques while preparing food including rolling, mixing and using cutters.			
Outdoor Learning Opportunities	Activities such as			
	Emergency services bike role play, climbing wall, habitats/maps, woodwork, treasure hunt, camp fire/cooking, gardening/maintenance, archery, woodland crowns, games in the woods, weather, art using natural materials, bug hunt identification, mud kitchen potion making, bird feeders/watching, litter picking, pond dipping and den building.			