



Becontree Primary School

Design Technology Curriculum Overview

	EYFS
Birth to Three Years	• Pass things from one hand to the other. Let go of things and hand them to another person or drop them. • Develop manipulation and control. • Build independently, with a range of resources. • Explore materials with different properties. • Explore natural materials, indoors and outdoors. • Explore different materials and tools. • Explore different materials, using all their senses to investigate them. • Manipulate and play with different materials. • Use their imagination as they consider what they can do with different materials. • Make simple models to express their ideas.
Three and Four Year Olds	• Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel. • Collaborate with others to manage large items, such as moving a plank safely or carrying large, hollow blocks. • Use one-handed tools and equipment, for example, making snips in paper with scissors. • Use all their senses in a hands-on exploration of natural materials. • Explore collections of materials with similar or different properties. • Explore how things work. • Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. • Explore different materials freely, in order to develop their ideas about how to use them and what to make. • Develop their own ideas and then decide which materials to use to express them. • Join different materials and explore different textures. • Use a comfortable grip with good control when holding pens and pencils • Create closed shapes with continuous lines and begin to use these shapes to represent objects
Reception	• Develop their fine motor skills so they may use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. • Explore the natural world around them. • Create collaboratively sharing ideas, resources and skills.

	1B	2A	2A	2B
Year 1	Topic: Making sandwiches (food technology) - To understand the importance of food hygiene and safety when handling food - To design a healthy sandwich - To make a healthy sandwich by selecting a type of bread and choosing their fillings as per their design - To evaluate their sandwich against their design criteria - To understand that our food choices should be healthy and balanced - To understand where food comes from - To cut food safely using a knife - To spread butter and other sandwich fillings	Topic: Making sock puppets (textiles) - To investigate puppets by observing the materials and components used, shapes and sizes of them - To explore how the puppets work - To design a sock puppet - To list the materials and components they will need - To make changes to their sock puppet and/or materials if required to improve their design - To cut, using scissors correctly and with control - Scissors pointing forwards – move the material - Cut at the hilt - To join materials using glue safely	Topic: Making fruit kebabs (food technology) - To understand the importance of food hygiene and safety when handling food - To design a fruit kebab - To evaluate their kebab against their design criteria - To select and prepare fruit for a fruit kebab - To understand that our food choices should be healthy and balanced - To understand where food comes from - To cut food safely using a knife	Topic: 3D Construction with sliders / Painting – making a 3D island (mechanisms) - To design a 3D map of an island, including a slider mechanism - To construct a 3D map of an Island including a slider mechanism based on own design - To paint a 3D model to represent a map of an island - To use a create and use a slider in their design - To cut, using scissors correctly and with control - Scissors pointing forwards – move the material - Cut at the hilt To join a variety of materials using glue safely

	3A	3B
Year 2	Topic: Puppets (textiles) Possible trip: Bethnal Green Museum of Childhood - To understand that there are different types of puppets - To understand that puppets are made up of different parts - To identify simple design criteria - To mark out, cut and join fabric pieces to make the main part of their puppet - To use appropriate finishing techniques - To evaluate against design criteria - To learn and use a basic sewing stitch	Topic : Moon Buggies (mechanisms) - To create a design brief - To design a Moon Buggy which includes a lever, axel and wheels - To create a Moon Buggy which includes a lever, axel and wheels - To test and improve Moon Buggies - To evaluate moon buggies against the design brief - To include a lever in their model - To learn some techniques for strengthening and stiffening structures - To incorporate wheels and axels into their vehicle

	1A	3B
Year 3	Topic: Fabulous flowers (textiles and mechanisms) - To identify ideas to use in our own work - To design an appealing artificial plant - To select and use tools accurately and materials for their aesthetic qualities - To evaluate existing products - To design an appealing pollinator - To select materials for their aesthetic qualities and functionality - Use ICT to complete poster - To evaluate your own product identifying any strengths and any areas for development against the original specifications - To identify any changes you would make if you repeated the task - Understand and use mechanical systems in their products - To use linkages or pneumatic systems - To join paper and card using tabs and split pins	Topic: Pizza (food technology) Possible trips: Pizza Express or Barleylands or Ilford MM food market - To know that products are designed for different purposes and users - To evaluate products and identify ideas to use in our own work - To design a product using ingredients for a specific purpose and audience - To appreciate taste, texture and the aesthetic qualities when designing - To make a plan of how to make the product - To select and use the appropriate tools - To understand how to handle foods safely and hygienically - To prepare and cook a vegetable pizza for a party - To understand the principles of a healthy and varied diet - To evaluate your own product identifying any strengths and any areas for development against the original specifications - To identify any changes you would make if you repeated the task - To investigate commercial packaging - To design packaging which is suitable for its purpose - To use sharp knives safely - To peel and grate vegetables safely

	1A	2B
Year 4	Topic: Making a marble run (paper engineering) - To apply their understanding of free-standing structures to help build them - To use a wider range of tools and equipment to perform practical tasks accurately - To use appropriate cutting and shaping techniques that include cuts within the perimeter of the material such as slots - To select appropriate joining techniques - To design and build a marble run or maze which incorporates some varied bends - To consider the aesthetics when building a marble run or maze - To consider the views of others to improve their work - To join paper and card by using slots and tabs and slots - To join tubes to flat surfaces using flanges - To reinforce 3D structures (using braces and gussets)	Topic: Weaving - To understand what weaving is used for - To practise weaving with various materials and patterns - To use a loom to create a weave (wall hanging)

Topic: Fairground rides (mechanisms)

- To make decisions with regard to the type of ride they will make
- To design a fairground ride
- To create the basic structure for a fairground ride
- To create supports for the base
- To attach wood using hot glue
- To create the wheel and support axels
- To make the wheel to turn
- To decorate fairground rides
- To explore using pulleys and/or gears
- To use a computer (Crumble) to control fairground rides
- To understand and draw cross section and exploded diagrams
- To saw wood safely
- To explore how to reinforce 3D structures
- To use hot glue guns safely

Topic: making bread and soup

Possible trips: Warburtons

- To investigate and evaluate bread products according to their characteristics
- To learn how bread products are an important part of a balanced diet and can be eaten in different ways
- To find out which different ingredients are needed to make bread and how ingredients can be altered and mixed to create different effects
- To be able to design a new bread product for a particular person or event
- To be able to make bread based on a plan and design
- To be able to evaluate a finished product
- To understand the term 'seasonal foods'
- To understand that seasonality affects the quality and environmental impact of foods
- To consider seasonality when choosing ingredients for a soup
- To learn the technique of kneading
- To use baking techniques and understand how to use yeast
- To measure ingredients accurately
- To use sharp knives safely
- To peel and grate vegetables safely