



Design and Technology Curriculum Overview

Nursery

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Fine Motor	<ul style="list-style-type: none"> Be able to make marks in sand, play dough and on paper. Use equipment that involves squeezing their fingers and hands such as tongs, tweezers and squeeze scissors. 	<ul style="list-style-type: none"> Use squeeze scissors to make snips in paper. Choose which resources they need for a task (e.g. a spade to dig a bigger hole, a rake to spread the sand) 	<ul style="list-style-type: none"> Use child scissors with hand over hand adult support. <p>Hold a pencil effectively to make marks on their paper.</p>	<ul style="list-style-type: none"> Put their fingers in the scissor holes to make snips in paper. 		<ul style="list-style-type: none"> Hold a pair of scissors correctly and cut a short, straight line in paper. Start to develop a tripod grip to hold pens and pencils.
Understanding the World						
		<ul style="list-style-type: none"> Know how different lights work (batteries, plugs etc) and know how to turn things on/off. 				<ul style="list-style-type: none"> Explore whether items move by pushing or pulling and sort them into sets.
EXPRESSIVE ARTS AND DESIGN						
Creating with Materials	<ul style="list-style-type: none"> Be able to make marks in the dough using tools and natural resources. Know how to stick two materials together using glue. 	<ul style="list-style-type: none"> Use box modelling resources to make their own representations of fireworks. Use construction resources to build towers and enclosures. 	<ul style="list-style-type: none"> Use box modelling resources to make an emergency vehicle. Learn how to join resources using tape and glue. 	<ul style="list-style-type: none"> Learn how to use split pins to make a simple moving snake. Use construction resources or box modelling resources purposefully and be able to tell an adult what they have made. 	<ul style="list-style-type: none"> Make their own resources to use for imaginative play (e.g. play dough buns, a collage mask) Start to choose their own resources to join materials together effectively. 	<ul style="list-style-type: none"> Use construction resources or box modelling resources to work purposefully to make something of their own choice. Be able to talk about what their model is and what it does. Make their own small world play settings using blocks and construction kits.

Reception

Fine Motor	<ul style="list-style-type: none"> Develop fine motor skills to manipulate small world toys and small construction e.g. Lego. Begin to develop appropriate grip and pencil control using a range of mark making tools To thread a range of objects of varying sizes successfully. 	<ul style="list-style-type: none"> To hold scissors correctly and cut along a straight and zigzagged lines To use a tripod grip when using mark making tools To accurately draw lines, circles and shapes to draw pictures Use a knife and fork with increasing independence in the dinner hall. 	<ul style="list-style-type: none"> To continue to develop hand strength to manipulate tweezers, pegs and other tools successfully. To use a tripod grip when using mark making tools To hold scissors correctly and cut along a curved line with assistance if needed. 	<ul style="list-style-type: none"> To hold scissors correctly and cut out large shapes To use the correct grip and manipulate tools appropriately. 	<ul style="list-style-type: none"> To mark make successfully using a wide range of tools and objects appropriate to the task undertaken. To use tools to create more detailed patterns or marks. To be able to cut successfully using standard scissors for a range of purposes e.g. string, paper of different thicknesses. 	<ul style="list-style-type: none"> To use a range of tools, activities and cutlery independently, to achieve the results required. To draw a picture with detail and clarity to depict a self-chosen image.
People, Culture and Communities					<ul style="list-style-type: none"> Talk about the foods people in different countries and communities grow and eat and why. Talk about where different things grown and why. 	
EXPRESSIVE ARTS AND DESIGN						
Creating with Materials	<ul style="list-style-type: none"> Explore playdough and plasticine to explore different shapes and ways to mould and form. Use tools to mark make on the material. Explore a range of tools to create and shape materials e.g. hole punch, scissors, stapler 	<ul style="list-style-type: none"> Use knowledge of playdough and plasticine to explore clay to create a Diwali lamp To experiment with a range of joining techniques when modelled by an adult. 	<ul style="list-style-type: none"> Fold paper to make dragons inspired by Chinese New Year To select joining techniques when constructing with junk materials. 	<ul style="list-style-type: none"> Make a house, linked to those they have learned about in other parts of the world, using the skills taught in previous terms. Create cityscapes using 3d box modelling in the style of Hunderwasser. 	<ul style="list-style-type: none"> Refine their ideas and talk about how they would improve on them. Use tools and techniques confidently when designing and making. 	<ul style="list-style-type: none"> Describe their work and the decisions that they made.

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y1	<u>Textiles</u> Fabric Faces Textiles: Templates and joining techniques.		<u>Food</u> Fruit salad for Handa. Food: Preparing fruits and vegetables.		<u>Materials & Tools</u> Fire Engines Mechanisms: Wheels and axels.	
Y2	<u>Materials & Tools</u> Kites Mock up Prototype- test different materials and choose own materials for final design		<u>Textiles</u> Templates and joining techniques. Textiles - Puppets		<u>Materials & Tools</u> Moving pictures: levers and sliders. Explore a range of existing products.	
Y3	<u>Materials & Tools</u> Photograph frames Structures: Free standing structures. Mock up Prototype	<u>Textiles</u> Textiles- Christmas decorations. 2D shape to 3D product.	<u>Materials & Tools</u> Control mechanisms: Pneumatics Materials and Tools Moving Monsters Mock up Prototype		<u>Food Technology</u> Sandwich Snacks Food: A healthy and varied diet. Study designer: Food designer/chef to be studied	
Y4	<u>Materials & Tools</u> Mechanical systems: Levers, linkages, sliders Pop up mechanisms/books Mock up- practise different features Prototype		<u>Materials & Tools</u> Electrical systems: Simple programming and control. Simple Circuits and switches. Mock up- practise a circuit with switch Prototype Torches Study designer/engineer: Invention of the light bulb. (Thomas Edison) Invention of torch (David Misell)		<u>Textiles</u> Textiles: 2d shapes to make a 3 d product. Making a phone case/pencil case. Use different stitches. Applique. Attach a press stud or button.	
Y5	<u>Materials & Tools</u> Mechanical systems: Cams- toys Prototype mockup		<u>Materials & Tools</u> Frame Structures: bridges Mock up Prototype-test different bridge structures/ways to strengthen/ materials and make choices Study famous structural deisgners: Eg- Gustave Eiffell Joseph Strauss Isambard Brunel Make a wooden bridge.		<u>Food Technology</u> Bread One pot dishes	
Y6	<u>Textiles</u> Using computer aided design in textiles. Textiles –bags Mock up- trial the stiches and make a paper pattern/mockup Prototype Study famous fashion designers: Chanel (quilted) Mulberry Gucci Louis Vuitton		<u>Materials & Tools</u> Mechanical systems: Pulleys Knex, Lego modelling with pulleys Making own pulley model Mock up prototype- trial different types of pulley systems,choose own way to make final design		<u>Materials & Tools</u> Structures Bird boxes Pin/nail joins Triangular reinforcements <u>Food Technology</u> Year 6 staff diner	<u>Materials & Tools</u> Electrical systems: Monitoring and control. More complex switches and circuits.

