



Design and Technology at St Luke's RC Primary School



Nursery	Children in Nursery will: <ul style="list-style-type: none">• Use large-muscle movements to wave flags and streamers, paint and make marks.• Choose the right resources to carry out their own plan.• Use one-handed tools and equipment, for example, making snips in paper with scissors.• 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.• Create closed shapes with continuous lines, and begin to use these shapes to represent objects.					
Reception	Children in Reception will: <ul style="list-style-type: none">• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.• Explore, use and refine a variety of artistic effects to express their ideas and feelings.• Return to and build on their previous learning, refining ideas and developing their ability to represent them.• Create collaboratively, sharing ideas, resources and skills.• Use a range of small tools, including scissors, paintbrushes and cutlery.• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.• Share their creations, explaining the process they have used.					
	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Textiles	Theme: Hand puppets Knowledge: To know how to describe the texture of different materials. Know how to: <ul style="list-style-type: none">• Sew and join fabrics using a running stitch and over sewing.	Theme: Felt Christmas decorations Knowledge: Know some different methods for joining textiles together. Know that different scissors are needed to cut different materials. Know how to: <ul style="list-style-type: none">• Sew and join fabrics using a running stitch and over sewing.	Theme: Christmas Knowledge: Know that some properties of materials make an aesthetically pleasing product. Know how to: <ul style="list-style-type: none">• Sew using cross stitch, running stitch and over stitch.• Join fabrics using a range of stitches with increasing independence.	Theme: Christmas stockings Knowledge: Know what a template/pattern is and why they are used. Know what a prototype is. Know how to: <ul style="list-style-type: none">• Sew using back stitch, cross stitch, running stitch and over stitch.• Ensure their sewing skills become more accurate.	Theme: Sustainable bags Knowledge: Know why it is important to consider what the consumer will want. Know how to: <ul style="list-style-type: none">• Sew using blanket stitch, back stitch, cross stitch, running stitch and over stitch.• Create products using pattern pieces and demonstrate an	Theme: Keepsake blanket Knowledge: Know how fabrics and fashions have changed over time. Know how to: <ul style="list-style-type: none">• Learn how to pin and tack fabric together.• Be able to join fabrics by blanket stitch, over stitch,

		<ul style="list-style-type: none"> • Cut out shapes which have been created by drawing round a template onto the fabric. • Use glue and tape to join fabrics. • Decorate the textiles using resources such as: sequins and colour. 	<ul style="list-style-type: none"> • Add decoration to their work (buttons, beads and sequins etc.). 	<ul style="list-style-type: none"> • Use a pattern and make a prototype of a product. 	awareness of seam allowance.	<p>back stitch running and cross stitch.</p> <ul style="list-style-type: none"> • Be able to make a product with increasing accuracy and independence. To be able to use a craft knife, safety mat and precision ruler if needed.
Mechanisms	<p>Theme: Moving pictures</p> <p>Knowledge: Know what sliders and levers are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Create levers and sliders. 	<p>Theme: Moving vehicles</p> <p>Knowledge: Know what wheels, axles and chassis' are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Create and use wheels, axles and chassis'. 	<p>Theme: Moving toys</p> <p>Knowledge: Know what pneumatics are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Create and use pneumatics. 	<p>Theme: Catapult</p> <p>Knowledge: Know what levers are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Create and use levers. <p>Theme: Mechanical Systems - Alarms</p> <p>Knowledge: Know what electrical systems are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Incorporate the most appropriate 	<p>Theme: Children's game</p> <p>Knowledge: Know what cams are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Create and use cams in their products. 	<p>Theme: Steady hand game</p> <p>Knowledge: Know what electrical motor systems are and how they are used in products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Incorporate the most appropriate electrical systems within their products. • To be able to use appropriate tools and equipment and more complex tools with accuracy.

				<p>electrical systems within their products.</p> <ul style="list-style-type: none"> To be able to use appropriate tools and equipment safely. 		
Structures	<p>Theme: Castles</p> <p>Knowledge: Know how to strengthen a model so that it is more stable. Know the names of materials to make strong products.</p> <p>Know how to:</p> <ul style="list-style-type: none"> Make a structure that stands alone. 	<p>Theme: Buildings</p> <p>Knowledge: Know how to make a structure more stable, stiffer and stronger.</p> <p>Know how to:</p> <ul style="list-style-type: none"> Build a simple structure and improve them by making them stiffer, stronger and more stable. To be able to use tools safely for cutting and joining materials. 	<p>Theme: Shell structures</p> <p>Knowledge: Know how to fold and roll different materials to support structures.</p> <p>Know how to:</p> <ul style="list-style-type: none"> To be able to make a shell structure by hand and by using computer aided design. 	<p>Theme: European landmarks</p> <p>Knowledge: Know a range of joining and strengthening techniques.</p> <p>Know how to:</p> <ul style="list-style-type: none"> To be able to use a range of joining and strengthening techniques in their structures. To use a glue gun with close supervision. 	<p>Theme: Shelters</p> <p>Knowledge: Know a range of methods for making a product strong (folding, rolling or joining materials). Understand how key events and individuals in design and technology have helped shape the world.</p> <p>Know how to:</p> <ul style="list-style-type: none"> Be able to build a framework using a range of materials to support structures. To use a glue gun with close supervision. To be able to cut materials accurately using a range of tools specific for the job. 	<p>Theme: Bridges</p> <p>Knowledge: Know what joints are and know why and how to hide them.</p> <p>Know how to:</p> <ul style="list-style-type: none"> To be able to use appropriate tools and equipment and more complex tools with accuracy.

Cooking and Nutrition	Theme: Fruit salad/kebabs Knowledge: To know and identify the main food groups, including fruit and vegetables. To identify the common source of foods.	Theme: Soup Knowledge: To know that you need a variety of foods in a diet and to know and be able to explain where the food they eat comes from.	Theme: Seasonal produce Knowledge: To know what a balanced diet is. To know and understand 'seasonality' and be able to explain what particular foods are available when.	Theme: Savoury dishes Knowledge: To know how to make healthy eating choices and to be able to explain their choices. To know the processes that some foods go through to preserve them/make them more appealing.	Theme: Pizza Knowledge: To know what food contribute towards a balanced diet and be able to evaluate meal choices. To know and be able to identify which food comes from the UK and which food comes from other countries in the world.	Theme: Food origins Knowledge: To know how ingredients are grown, reared, caught and processed. To know how to plan a health and affordable balanced diet.
	Know how to: <ul style="list-style-type: none"> Measure and weigh food items using non-standard measures. 	Know how to: <ul style="list-style-type: none"> Cut, peel, grate and chop a range of ingredients. 	Know how to: <ul style="list-style-type: none"> Combine a variety of ingredients using a variety of cooking techniques. 	Know how to: <ul style="list-style-type: none"> Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes. 	Know how to: <ul style="list-style-type: none"> Knead, rub, mix in to combine food ingredients appropriately. 	Know how to: <ul style="list-style-type: none"> Use appropriate tools, equipment, measuring scales.