

D&T LTP 2019-2020

At St Patrick's, the Design and Technology curriculum aims to stimulate pupils' interest and understanding of good design and technology and how it impacts on the culture, wealth and well-being of the nation. We seek to foster the children's ingenuity and skills development.

Through outstanding teaching we strive to give children the opportunity to draw on disciplines such as maths, engineering, science, computing and art, develop their imagination and creativity, and give them opportunities to solve real and relevant problems. Ultimately, our curriculum aims to develop ambitious aspirations through excellent teaching and learning.

	Autumn	Spring	Summer
Year 1	Cuddly Toy	Flying Kites <i>Plan trip to test designs</i>	Teddy Bear's Picnic
Year 1 Skills	I can design a purposeful product for someone else based on design criteria. I can model a design using a template and a mock-up. I can use textiles materials.	I can reinforce a structure to make it stronger and stiffer. I can design a functional product for myself based on design criteria. I can use construction materials.	I can use the basic principles of a healthy and varied diet when I prepare a dish. I know where different foods come from. I can design an appealing product for someone else based on design criteria. I can use ingredients.
	I can generate ideas for a design through talking. I can develop a design idea through drawing. I can communicate my design ideas in a blog. I can select from and use a range of tools for cutting - scissors, wire cutters, knives. I can select from and use a range of tools for joining - glue, tape, wire, needle and thread. I can select from and use a range of tools for shaping - scissors, wire cutters, knives. I can select from and use a range of tools for finishing - crayons, paint brushes. I can explore and say what I like and dislike about a range products. I can evaluate ideas for my design based on design criteria. I can evaluate my product based on design criteria.		
Year 2	Moving cards	Perfect Pizza <i>Plan trip to Pizza Express</i>	Puppets
Year 2 skills	I can design a functional product for myself based on design criteria. I can use construction materials.	I can design an appealing product for someone else based on design criteria. I can use ingredients.	I can design a purposeful product for someone else based on design criteria. I can model a design using a template and a mock-up.

		<p>I can use the basic principles of a healthy and varied diet when I prepare a dish.</p> <p>I know where different foods come from.</p>	I can use textiles.
	<p>I can generate ideas for a design through talking.</p> <p>I can develop a design idea through drawing.</p> <p>I can communicate my design ideas in a blog.</p> <p>I can select from and use a range of tools for cutting - scissors, wire cutters, knives, blenders, graters.</p> <p>I can select from and use a range of tools for joining - glue, tape, wire, string.</p> <p>I can select from and use a range of tools for shaping - scissors, wire cutters, knives..</p> <p>I can select from and use a range of tools for finishing - crayons, paintbrushes, blenders, graters.</p> <p>I can explore and say what I like and dislike about a range of products.</p> <p>I can evaluate ideas for my design based on design criteria.</p> <p>I can evaluate my product based on design criteria.</p>		
Year 3	Photo Frames	Houmous	Lampshades
Year 3 skills	<p>I can design an innovative product.</p> <p>I can develop ideas through annotated sketches.</p> <p>I can select and use components.</p> <p>I can reinforce complex structures.</p>	<p>I can design an appealing product.</p> <p>I can select and use ingredients according to their taste.</p> <p>I can understand the principals of a healthy diet.</p> <p>I can apply the principals of a healthy diet.</p> <p>I can prepare a savoury dish using a range of techniques.</p> <p>I can cook a savoury dish using a range of techniques.</p> <p>I understand seasonality and have designed a product based on products available.</p> <p>I have helped to grow some of the ingredients I will use.</p> <p>I understand how some foods have been processed.</p>	<p>I can design a functional product.</p> <p>I can develop ideas through annotated sketches.</p> <p>I can select and use textile materials according to their aesthetic properties.</p>
	<p>I can develop design criteria.</p> <p>I can generate ideas through discussion.</p> <p>I can select from and accurately use a range of tools for cutting - scissors, wire cutters, vegetable knives, craft knives.</p> <p>I can select from and accurately use a range of tools for joining - glue, tape, wire, soldering iron, needle, and thread.</p> <p>I can select from and accurately use a range of tools for shaping - scissors, wire cutters, knives.</p> <p>I can select from and accurately use a range of tools for finishing - crayons, paint brushes, embroidery hoops, embroidery needles.</p> <p>Investigate a range of products.</p>		

	Analyse a range of products. I can evaluate my ideas against my design criteria. I understand how key individuals have helped shaped the world.		
Year 4	American Food Trip to South American Restaurant	Pneumatic toys	Pencil Cases
Year 4 Skills	I can design an appealing product. I can select and use ingredients according to their taste. I can understand the principals of a healthy diet. I can apply the principals of a healthy diet. I can prepare a savoury dish using a range of techniques. I can cook a savoury dish using a range of techniques. I understand seasonality and have designed product based on what is available. I have helped to grow some of the food used in my design. I understand how the some of the foods I have used have been reared and processed.	I can develop my ideas through cross-sectional diagrams. I can design an innovative product. I can select and use construction materials based on their aesthetic properties.	I can communicate my ideas through exploded diagrams. I can design a functional product. I can select and use textile materials according to their aesthetic properties.
	I can develop design criteria. I can select from and accurately use a range of tools for cutting – scissors, wire cutters, vegetable knives, craft knives, hacksaw. I can select from and accurately use a range of tools for joining – glue, tape, wire, soldering iron, needle, and thread. I can select from and accurately use a range of tools for shaping – scissors, wire cutters, knives. I can select from and accurately use a range of tools for finishing – crayons, paint brushes, embroidery hoops, embroidery needles. Investigate a range of products. Analyse a range of products. I can evaluate my product against my design criteria.		
Year 5	Bread Plan trip to Bakery	Toys with Cams	Funky Furnishings Plan trip to Kings Academy to use sewing machines
Year 5 Skills	I can design an appealing product. I can select and use ingredients according to their taste. I can understand the principals of a healthy diet. I can apply the principals of a healthy diet. I can prepare a dish using a range of techniques. I can cook a dish using a range of techniques. I understand seasonality and have designed a product based on what is available.	I can design an innovative product. I can develop my ideas through Computer Aided Design. I can select and use k'nex components. I can select and use construction materials based on their functional properties. Investigate a range of gears, levers and pulleys using k'nex.	I can design a functional product. I can select and use textile materials according to their aesthetic properties. I can stiffen complex structures.

	I understand how some of the ingredients in my product have been processed.	I can understand and use mechanical systems in my product.	
	I can develop design criteria. I can select from and accurately use a range of tools for cutting – scissors, wire cutters, vegetable knives, craft knives, hacksaw. I can select from and accurately use a range of tools for joining – glue, tape, wire, soldering iron, needle, and thread. I can select from and accurately use a range of tools for shaping – scissors, wire cutters, knives. I can select from and accurately use a range of tools for finishing – crayons, paint brushes, embroidery hoops, embroidery needles. Investigate a range of products. Analyse a range of products. I can consider my friends' views to improve my work. I understand how key events in design technology have helped shape the world.		
Year 6	Buggies	Burgers	St Patrick's Memories Textiles Panel Plan trip to Kings Academy to use sewing machines
Year 6 Skills	I can design a functional and innovative product. I can communicate my ideas through prototypes. I can select and use construction materials based on their functional properties. I can select and use components. I understand and can use electrical systems (switches, motors) in my product.	I can design an appealing product. I can select and use ingredients according to their taste. I can understand the principals of a healthy diet. I can apply the principals of a healthy diet. I can prepare a savoury dish using a range of techniques. I can cook a savoury dish using a range of techniques. I understand seasonality and have designed a products based on products available. I have helped to grow some of the vegetables used in my product. I understand how some of the ingredients used in my product have been processed.	I can design an attractive product. I can develop my ideas through pattern pieces. I can select and use different stiches according to their aesthetic properties. I can reinforce and strengthen textile products with webbing and a strong stitch.
	I can develop design criteria. I can use research to develop design criteria for a product aimed at a group of people. I can select from and accurately use a range of tools for cutting – scissors, wire cutters, vegetable knives, craft knives, hacksaw. I can select from and accurately use a range of tools for joining – glue, tape, wire, needle, and thread. I can select from and accurately use a range of tools for shaping – scissors, wire cutters, knives. I can select from and accurately use a range of tools for finishing – crayons, paint brushes, embroidery hoops, embroidery needles. Investigate a range of products Analyse a range of products. I can consider my friends' views to improve my work.		

