













Rishton Methodist Primary School

Design Technology Curriculum

During their time in early years, children will have used and explored a variety of materials, tools and techniques which allow them to experiment with design, texture, form function. They will have engaged with designing, making and evaluating in a way that develops their cutting and joining techniques, as well as their ability to modify and adapt their work. These skills, knowledge and experiences underpin the learning that takes place in Year 1 and across the KS1 and KS2 curriculum.

	Autumn 2	Summer 1		Autumn 2	Summer 1
Year One	<p>Focus: Textiles</p> <p>Vocabulary – Evaluate, design, purpose, function, fabric, needle and stitch.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Practise cutting squares, rectangles, circles and triangles out of fabric felt. Zoom in to sewing, developing their knowledge on running and over stitches. Explore attaching sequins, buttons and beads to fabric using glue. <p>Design: Children use pictures and words to convey what they want to design, verbally explaining how it achieves the purpose of holding seeds. Children are to label key materials used.</p> <p>Make: Eco Club keep on loosing their seeds. Can you make something to help them? (Children could create the below example – encourage differences in the outcome while still focusing on skill knowledge framework).</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Seed Purse</p>	<p>Focus: Structures</p> <p>Vocabulary – Design criteria, 2D, 3D, cut, fold, join and stiffen.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Children are to draw simple templates such as circles and buttons and cut them from a template. Explore how structures need to be bottom heavy using stiffing techniques for the feet and legs. Investigate how best to join small and large items using glue sticks and glue guns. Children are to be closely supervised when using glue guns. <p>Design: Children are to select picture of different pencil pot examples to design and develop their ideas. Children are to create two design ideas and pick one to make.</p> <p>Make: In Year One, our pencil pots are looking old and worn. We need new ways to store them. What could we make? (Children could create the below example – encourage differences in the outcome while still focusing on skill knowledge framework).</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Pencil Pot</p>	Year Two	<p>Focus: Mechanisms</p> <p>Vocabulary – Lever, pivot, cut, fold, wheel, axle, chassis, assemble.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Mark out materials to be cut using a template. Cut along lines, straight and curved. Fold, cut and tear paper and card. <p>Design: Children are to use pictures with a festive theme to plan and make a Nativity scene with moving parts.</p> <p>Make: The Christmas Fayre is approaching and Year 2 have been asked to make a Christmas themed scene to sell at the Fayre.</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Nativity Scene</p>	<p>Focus: Food</p> <p>Vocabulary – Basin, chopping board, saucepan, grater, scales, sieve, ingredients.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Discuss how to work safely and hygienically, and why this is important. Zoom in to cutting – creating cubes and halves of fruit. Explore measuring and weighing food items. Group familiar food products. <p>Design: Children to design a healthy snack selecting pictures to help design ideas.</p> <p>Make: Some children complain that it is too hot on sports day and they need something healthy and nutritious to give them energy and cool them down. What could we provide for them?</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Fresh Fruit pot</p>

	Autumn 2	Summer 1		Autumn 2	Summer 1
Year Three	<p>Focus: Structures</p> <p>Vocabulary – structure, shell, adhesive, score, cut, support, accuracy.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Develop vocabulary related to the project. Explore shell structures and replicate them. Explore framework structures and replicate them. Investigate stability by making structures more stable by giving them a wide base. <p>Design: Children are to plan, design and make a secure and stable package for a light bulb. Children</p> <p>Make: The caretaker of the school has a problem with light bulbs being broken before they can be used. Its frustrating and he needs help to find a solution.</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Light Bulb Packaging</p>	<p>Focus: Food</p> <p>Vocabulary – Grams/Kilograms, Celsius, temperature, hygiene, Utensils.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Develop sensory vocabulary for smell, taste, texture and feel. Spicy, pungent, aftertaste Etc. Follow instructions/recipes to make a curry using vegetables and spices. Chop and combine a range of ingredients. <p>Design: Children are to select ingredients, chopping and combining different vegetables into a Vegetarian curry.</p> <p>Make: The Kitchen has requested that we come up with a new, healthy option for serving to children at dinner time. It has to be cheap, healthy and nutritious and appeal to vegetarians as well as everybody else.</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Veggie Curry</p>	Year Four	<p>Focus: Textiles</p> <p>Vocabulary – Technique, stiffening, seam allowance, back stitch, running stitch, tacking.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Develop vocabulary for tools, materials and their properties. Understand seam allowance and join fabric using running stitch. Explore over sewing. Explore blanket stitching. <p>Design: Children look at various Teddy Bear T-Shirt designs and select one that they would like to create for their own Teddy Bear.</p> <p>Make: Our Headteacher has asked for some design ideas for a Teddy Bear she has bought to use during Children-In-Need. It needs to be colourful and well made so it can be included in school pictures for the website.</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Teddy t-shirt</p>	<p>Focus: Mechanical and Electrical Systems and ICT</p> <p>Vocabulary – Mechanical system, input, output, linear, rotary, gears, pulleys.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Develop vocabulary related to the project. Explore how gears are used. Investigate pulleys and levers. Explore how gears and pulleys can work in the same structure. <p>Design: Children will study different mechanical and electrical systems and then show how these can be applied to building a crane to aid loading and unloading.</p> <p>Make: Children will use the knowledge they have gained studying levers and pulleys to make a crane strong and stable enough to carry a weight.</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Crane</p>

	Autumn 2	Summer 1		Autumn 2	Summer 1
Year Five	<p>Focus: Structures</p> <p>Vocabulary – Reinforce, triangulation, stability specification, structure.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Use the correct terminology for tools, materials, and processes. Build frameworks to support mechanisms – Use a series of rectangles cut from wood? Join materials using appropriate methods – join the parts of the box and lid together using glue and panel pins with hinges for the lid. <p>Design: Children will study a variety of stable structures including boxes to keep things safe and secure. Are they suitable for what they are designed for? Children to design and build their own secure box with a lid.</p> <p>Make: The class teacher needs a secure and stable box in class for keeping valuables or medicines in. Can the children make something suitable for use in class?</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Valuables box</p>	<p>Focus: Textiles</p> <p>Vocabulary – Reinforce, hem, fasteners, poppers, Velcro, zip.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Understand pattern layout. Pin and tack fabric pieces together. Join fabrics using blanket stitch. Join fabrics using back stitch. <p>Design: Children will research a variety of cushion covers and think of a design for their own. What fabrics have they seen? What about designs and colours? Are they easy to recreate? Children</p> <p>Make: The school needs some cushion covers to cover cushions for some of the fidgety children in KS1 to sit on and learn to stay still and sit upright.</p> <p>Evaluate: Evaluate their finished product against their design.</p> <p>Example</p>  <p>Cushion cover (or similar design)</p>	Year Six	<p>Focus: Mechanical and Electrical Systems and ICT</p> <p>Vocabulary – drive belt, gear, rotation, follower cam.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Develop technical vocabulary for the project. Explore cams and how they work. Investigate how egg shaped cams will move a follower up and down and how a stepped cam will drop a follower quickly and suddenly. <p>Design: Children will research Automata and how they work. What will they need to incorporate into their design? What materials will they need? What design will they use for their automata's face?</p> <p>Make: The school office needs some small toys for the visitors children to play with while they are waiting in Reception. Can the children make some simple moving toys that will do the job?</p> <p>Evaluate: Evaluate their finished product against their design</p> <p>Example</p>  <p>Automata toy (or similar design)</p>	<p>Focus: Food</p> <p>Vocabulary – Yeast, Dough, Bran, Gluten, Intolerance, Allergy, Source.</p> <p>Knowledge Development:</p> <ul style="list-style-type: none"> Use a range of cooking techniques. Show awareness of a healthy diet. Consider influence of celebrity chefs. <p>Design: Children will study how different types of bread are made and what ingredients are possible. They will pay particular attention to guests tastes, intolerances, hygiene and budget restraints. What will they need? How much will it cost? Etc.</p> <p>Make: The school want to put on a leavers meal for the year 6 leavers and their parents. The children will need to plan the event in total, focusing on how many are coming, what they will need to make and how to ensure the night is a success.</p> <p>Evaluate: Evaluate their finished product against their design</p> <p>Example</p>  <p>Selection of fresh bread.</p>