



# Skerton St Luke's CE Primary School

## Subject Leader Overview for Design and Technology



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 1</b>		<p><b>Mechanisms - pop ups and simple card levers</b></p> <ul style="list-style-type: none"> <li>☒Join appropriately for different materials and situations e.g. glue, tape.</li> <li>☒Try out different axle fixings and their strengths and weaknesses.</li> <li>☒Make vehicles with construction kits which contain free running wheels.</li> <li>☒Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels.</li> <li>☒Roll paper to create tubes.</li> </ul>	<p><b>Food - preparing and combining foods</b></p> <ul style="list-style-type: none"> <li>☒Develop a food vocabulary using taste, smell, texture and feel.</li> <li>☒Group familiar food products e.g. fruit and vegetables</li> <li>☒Cut, peel, grate, chop a range of ingredients</li> <li>☒Work safely and hygienically.</li> <li>☒Measure and weigh food items, non-statutory measures e.g. spoons, cups.</li> </ul>		<p><b>Structures - stability and strength</b></p> <ul style="list-style-type: none"> <li>☒Explore how to make structures stronger.</li> <li>☒Investigate different techniques for stiffening a variety of materials.</li> <li>☒Test different methods of enabling structures to remain stable.</li> <li>☒Join appropriately for different materials and situations e.g. glue, tape.</li> <li>☒Mark out materials to be cut using a template.</li> <li>☒Use a glue gun with close supervision.</li> </ul>	
<b>Year 2</b>			<p><b>Mechanisms - wheels and axles</b></p> <ul style="list-style-type: none"> <li>☒Cut dowel using hacksaw and bench hook.</li> <li>☒Attach wheels to a chassis using an axle.</li> <li>☒Mark out materials to be cut using a template.</li> <li>☒Fold, tear and cut paper and card.</li> <li>☒Cut along lines, straight and curved.</li> <li>☒Use a hole punch.</li> <li>☒Insert paper fasteners for card.</li> <li>☒Experiment with levers and sliders to find different ways of making things move in a 2D plane.</li> </ul>	<p><b>Food - the eatwell plate, where food comes from, principles of a healthy diet</b></p> <ul style="list-style-type: none"> <li>Develop a food vocabulary using taste, smell, texture and feel.</li> <li>☒Group familiar food products e.g. fruit and vegetables.</li> <li>☒Explain where food comes from.</li> <li>☒Cut, peel, grate, chop a range of ingredients</li> <li>☒Work safely and hygienically.</li> <li>☒Understand the need for a variety of foods in a diet.</li> <li>☒Measure and weigh food items, non-statutory measures e.g. spoons, cups.</li> </ul>	<p><b>Textiles - using a template, simple joining, choice of stitches, choice of materials</b></p> <ul style="list-style-type: none"> <li>☒Cut out shapes which have been created by drawing round a template onto the fabric.</li> <li>☒Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape.</li> <li>☒Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons.</li> <li>☒Colour fabrics using a range of techniques e.g. fabric paints, printing, painting.</li> </ul>	
<b>Year 3</b>		<p><b>Food - simple dish - the eatwell plate</b></p>		<p><b>Mechanical systems - levers and linkages</b></p>		<p><b>Structures - shell/frame structures and strengthening</b></p>

		<p>Make healthy eating choices – use the <i>Eatwell plate</i>.</p> <p>Join and combine a range of ingredients.</p> <p>Explore seasonality of vegetables and fruit.</p> <p>Find out which fruit and vegetables are grown in countries/continents studied in Geography.</p> <p>Develop understanding of how meat/fish are reared/caught.</p>		<p>Develop a technical vocabulary appropriate to the project.</p> <p>Use mechanical systems such as cams, pulleys and gears.</p> <p>Use electrical systems such as motors.</p> <p>Program, monitor and control using ICT.</p>		<p>☑Develop vocabulary related to the project.</p> <p>☑Create shell or frame structures.</p> <p>☑Strengthen frames with diagonal struts.</p> <p>☑Make structures more stable by giving them a wide base.</p> <p>☑Measure and mark square section, strip and dowel accurately to 1cm.</p>
<b>Year 4</b>	<p><b>ICT and electrical systems - control and electrical components</b></p> <p>Develop a technical vocabulary appropriate to the project.</p> <p>Use mechanical systems such as cams, pulleys and gears.</p> <p>Use electrical systems such as motors.</p> <p>Program, monitor and control using ICT.</p>			<p><b>Textiles - seams, stiffening and strengthening, materials and fastenings</b></p> <p>Use the correct vocabulary appropriate to the project.</p> <p>Create 3D products using patterns pieces and seam allowance.</p> <p>Understand pattern layout.</p> <p>Decorate textiles appropriately (often before joining components).</p> <p>Pin and tack fabric pieces together.</p> <p>Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision).</p> <p>Combine fabrics to create more useful properties.</p> <p>Make quality products.</p>		<p><b>Food - simple savoury food and cooking techniques</b></p> <p>Develop sensory vocabulary/knowledge using, smell, taste, texture and feel.</p> <p>Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury).</p> <p>Follow instructions/recipes.</p> <p>Make healthy eating choices – use the <i>Eatwell plate</i>.</p> <p>Join and combine a range of ingredients.</p>
<b>Year 5</b>		<p><b>Food - food from another culture, variety of cooking techniques</b></p> <p>properties of ingredients and sensory characteristics.</p>		<p><b>Mechanical systems - cams, pulleys and gears</b></p> <p>Develop a technical vocabulary appropriate to the project.</p>	<p><b>3D Textiles - using gussets, using patterns, joining with seam allowance, combining fabrics</b></p>	

		<p>Weigh and measure using scales.</p> <p>Select and prepare foods for a particular purpose.</p> <p>Work safely and hygienically.</p> <p>Show awareness of a healthy diet (using the eatwell plate).</p> <p>Use a range of cooking techniques.</p> <p>Know where and how ingredients are grown and processed.</p> <p>Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc.</p>		<p>Use mechanical systems such as cams, pulleys and gears.</p> <p>Use electrical systems such as motors.</p> <p>Program, monitor and control using ICT.</p>	<p>Use the correct vocabulary appropriate to the project.</p> <p>Create 3D products using patterns pieces and seam allowance.</p> <p>Understand pattern layout.</p> <p>Decorate textiles appropriately (often before joining components).</p> <p>Pin and tack fabric pieces together.</p> <p>Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision).</p> <p>Combine fabrics to create more useful properties.</p> <p>Make quality products.</p>	
<b>Year 6</b>			<p><b>Food - chefs, food heroes, designing a healthy menu/eatwell plate</b></p> <p>properties of ingredients and sensory characteristics.</p> <p>Select and prepare foods for a particular purpose.</p> <p>Work safely and hygienically.</p> <p>Show awareness of a healthy diet (using the eatwell plate).</p> <p>Know where and how ingredients are grown and processed.</p>		<p><b>Combining learning from across design and technology skills bases - structures, mechanical systems, electrical systems, ICT programming and control</b></p> <p>Develop a technical vocabulary appropriate to the project.</p> <p>Use mechanical systems such as cams, pulleys and gears.</p> <p>Use electrical systems such as motors.</p> <p>Program, monitor and control using ICT.</p>	