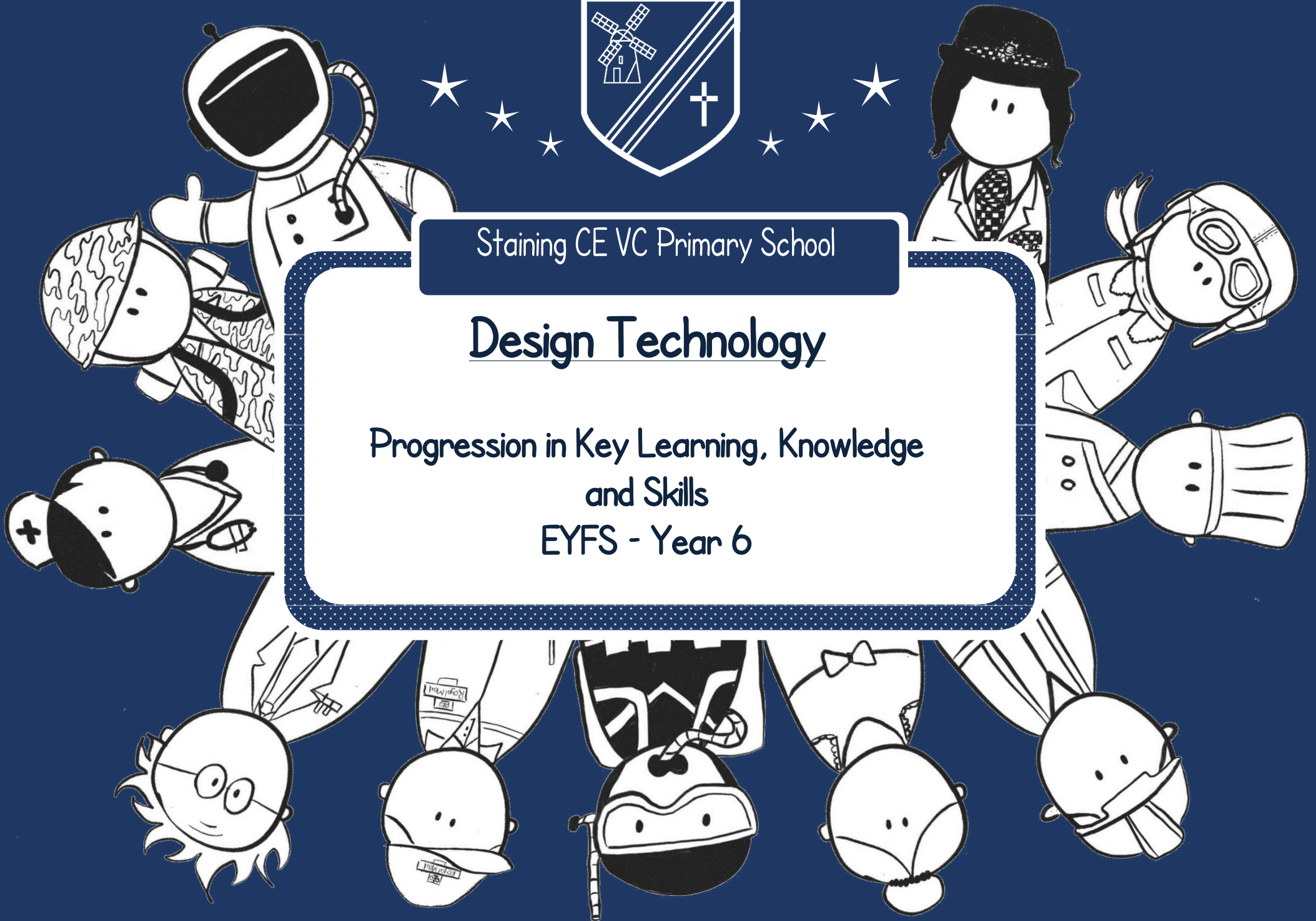


Staining CE VC Primary School

Design Technology

Progression in Key Learning, Knowledge
and Skills
EYFS - Year 6



	Design	Make	Evaluate
EYFS	3 and 4 year olds UTW: Explore how things work EAD: 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, 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. Reception UTW: Explore the natural world around them. Describe what they see, hear and feel whilst outside EAD: Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills ELG: UTW: • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class EAD: 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.		
1	Use words to convey what they want to design/make. Model ideas with kits, reclaimed materials. Select appropriate technique explaining: First... Next... Last... Select pictures to help develop ideas. Use drawings to record ideas as they are developed. Describe their models and drawings of ideas and intentions.	Discuss their work as it progresses. Explain what they are making. Name the tools they are using. Describe what they need to do next.	Explore existing products Decide how existing products do/do not achieve their purpose. Talk about their design as they develop Say what they like and do not like about items they have made
2	Use pictures and words to convey what they want to design/make. Propose more than one idea for their product. Use kits/reclaimed materials to develop more than one idea. Model ideas with kits, reclaimed materials. Select appropriate technique explaining: First... Next... Last... Explore ideas by rearranging materials. Use drawings to record ideas as they are developed. Add notes to drawings to help explanations. Describe their models and drawings of ideas and intentions.	Discuss their work as it progresses. Select materials from a limited range that will meet the design criteria. Select and name the tools needed to work the materials. Explain what they are making. Explain which materials they are using and why. Describe what they need to do next.	Explore existing products and investigate how they have been made. Decide how existing products do/do not achieve their purpose. Talk about their design as they develop and identify good and bad points. Note changes made during the making process as annotation to plans/drawings. Say what they like and do not like about items they have made and attempt to say why. Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.
3	Develop more than one design Plan a sequence of actions to make a product. Record the plan by drawing using annotated sketches. Think ahead about the order of their work and decide upon tools and materials. Propose realistic suggestions as to how they can achieve their design ideas. Consider aesthetic qualities of materials chosen.	Prepare pattern pieces as templates for their design. Cut slots. Select from a range of tools for cutting shaping joining and finishing. Select from materials according to their functional properties. Plan the stages of the making process. Use appropriate finishing techniques.	Draw/sketch products to help analyse and understand how products are made. Research needs of user. Identify the strengths and weaknesses of their design ideas in relation to purpose/user. Consider and explain how the finished product could be improved. Investigate key events and individuals in Design and Technology.
4	Develop more than one design or adaptation of an initial design. Begin to use cross-sectional and exploded diagrams. Use prototypes to develop and share ideas. Think ahead about the order of their work and decide upon tools and materials. Propose realistic suggestions as to how they can achieve their design ideas. Consider aesthetic qualities of materials chosen. Use CAD where appropriate	Prepare pattern pieces as templates for their design. Cut slots. Cut internal shapes. Select from a range of tools for cutting shaping joining and finishing. Use tools with accuracy. Select from techniques for different parts of the process. Select from materials according to their functional properties.. Use appropriate finishing techniques.	Investigate similar products to the one to be made to give starting points for a design. Draw/sketch products to help analyse and understand how products are made. Research needs of user. Identify the strengths and weaknesses of their design ideas in relation to purpose/user. Decide which design idea to develop. Discuss how well the finished product meets the design criteria of the user. Investigate key events and individuals in Design and Technology.
5	List tools needed before starting the activity. Plan the sequence of work e.g. using a storyboard. Use models, kits and drawings to help formulate design ideas. Use exploded diagrams and cross-sectional diagrams to communicate ideas. Decide which design idea to develop.	Use researched information to inform decisions. Produce detailed lists of ingredients / components / materials and tools. Select from and use a wide range of tools. Cut accurately and safely to a marked line. Select from and use a wide range of materials. Use appropriate finishing techniques for the project.	Research and evaluate existing products Consider user and purpose. Give a report using correct technical vocabulary. Consider and explain how the finished product could be improved related to design criteria. Discuss how well the finished product meets the design criteria of the user. Understand how key people have influenced design.
6	List tools needed before starting the activity. Plan the sequence of work e.g. using a storyboard. Record ideas using annotated diagrams. Use models, kits and drawings to help formulate design ideas. Combine modelling and drawing to refine ideas. Devise step by step plans which can be read / followed by someone else. Use exploded diagrams and cross-sectional diagrams to communicate ideas. Sketch and model alternative ideas. Decide which design idea to develop.	Make prototypes. Develop one idea in depth. Use researched information to inform decisions. Produce detailed lists of ingredients / components / materials and tools. Select from and use a wide range of tools. Cut accurately and safely to a marked line. Select from and use a wide range of materials. Use appropriate finishing techniques for the project. Refine their product - review and rework/improve.	Research and evaluate existing products Consider user and purpose. Identify the strengths and weaknesses of their design ideas. Give a report using correct technical vocabulary. Consider and explain how the finished product could be improved related to design criteria. Discuss how well the finished product meets the design criteria of the user. Test on the user! Understand how key people have influenced design.

	Food	Textiles	Structures	Mechanical and Electrical Systems and ICT
EYFS	<p>3 and 4 year olds UTW: Explore how things work EAD: 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, 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. • Join different materials and explore different textures.</p> <p>Reception UTW: Explore the natural world around them, Describe what they see, hear and feel whilst outside EAD: Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills</p> <p>ELG: UTW: • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class EAD: 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.</p>			
Year 1 and 2	Develop a food vocabulary using taste, smell, texture and feel. Group familiar food products e.g. fruit and vegetables. Explain where food comes from. Cut, peel, grate, chop a range of ingredients Work safely and hygienically. Understand the need for a variety of foods in a diet. Measure and weigh food items, non-statutory measures e.g. spoons, cups.	Cut out shapes which have been created by drawing round a template onto the fabric. Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape. Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons. Colour fabrics using a range of techniques e.g. fabric paints, printing, painting.	Explore how to make structures stronger. Investigate different techniques for stiffening a variety of materials. Test different methods of enabling structures to remain stable. Join appropriately for different materials and situations e.g. glue, tape. Mark out materials to be cut using a template. Use a glue gun with close supervision.	Join appropriately for different materials and situations e.g. glue, tape. Try out different axle fixings and their strengths and weaknesses. Make vehicles with construction kits which contain free running wheels. Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. Roll paper to create tubes. Cut dowel using hacksaw and bench hook. Fold, tear and cut paper and card. Cut along lines, straight and curved. Experiment with levers and sliders to find different ways of making things move in a 2D plane
1	Begin to develop a food vocabulary using taste, smell, texture and feel. Group familiar food products e.g. fruit and vegetables. Cut, peel, grate, chop a range of ingredients Work safely and hygienically.	Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons.	Explore how to make structures stronger. Test different methods of enabling structures to remain stable. Join appropriately for different materials and situations e.g. glue, tape.	Join appropriately for different materials and situations e.g. glue, tape. Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. Attach wheels to a chassis using an axle. Fold, tear and cut paper and card. Cut along lines, straight and curved. Insert paper fasteners for card. Experiment with levers and sliders to find different ways of making things move in a 2D plane
2	Develop a food vocabulary using taste, smell, texture and feel. Group familiar food products e.g. fruit and vegetables. Explain where food comes from. Cut, peel, grate, chop a range of ingredients Work safely and hygienically. Understand the need for a variety of foods in a diet. Measure and weigh food items, non-statutory measures e.g. spoons, cups.	Cut out shapes which have been created by drawing round a template onto the fabric. Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape. Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons. Colour fabrics using a range of techniques e.g. fabric paints, printing, painting.	Explore how to make structures stronger. Investigate different techniques for stiffening a variety of materials. Test different methods of enabling structures to remain stable. Join appropriately for different materials and situations e.g. glue, tape. Mark out materials to be cut using a template. Use a glue gun with close supervision.	Join appropriately for different materials and situations e.g. glue, tape. Try out different axle fixings and their strengths and weaknesses. Make vehicles with construction kits which contain free running wheels. Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. Roll paper to create tubes. Cut dowel using hacksaw and bench hook. Fold, tear and cut paper and card. Cut along lines, straight and curved. Experiment with levers and sliders to find different ways of making things move in a 2D plane

	Food	Textiles	Structures	Mechanical and Electrical Systems and ICT
3 and 4	<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 Eatwell plate.</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 vocabulary for tools materials and their properties.</p> <p>Use different stitches - running stitch, over sewing, blanket stitch.</p> <p>Explore strengthening and stiffening of fabrics.</p> <p>Sew on buttons</p> <p>Use appropriate decoration techniques.</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 materials accurately to 1cm.</p>	<p>Develop vocabulary related to the project.</p> <p>Use mechanical systems such as gears, pulleys, levers and linkages.</p> <p>Incorporate a circuit into a model.</p> <p>Use electrical systems such as switches bulbs and buzzers.</p> <p>Use lolly sticks/card to make levers and linkages.</p> <p>Use linkages to make movement larger or more varied.</p>
3	<p>Follow instructions/recipes.</p> <p>Make healthy eating choices - use the Eatwell plate.</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 vocabulary for tools materials and their properties.</p> <p>Explore strengthening and stiffening of fabrics.</p> <p>Use appropriate decoration techniques.</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 materials accurately to 1cm.</p>	<p>Incorporate a circuit into a model.</p> <p>Use electrical systems such as switches bulbs and buzzers.</p> <p>Use lolly sticks/card to make levers and linkages.</p> <p>Use linkages to make movement larger or more varied.</p>
4	<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 Eatwell plate.</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 vocabulary for tools materials and their properties.</p> <p>Use different stitches - running stitch, over sewing, blanket stitch.</p> <p>Explore strengthening and stiffening of fabrics.</p> <p>Explore fastenings (inventors?) and recreate some.</p> <p>Sew on buttons</p> <p>Use appropriate decoration techniques.</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 materials accurately to 1cm.</p>	<p>Develop vocabulary related to the project.</p> <p>Use mechanical systems such as gears, pulleys, levers and linkages.</p> <p>Use lolly sticks/card to make levers and linkages.</p> <p>Use linkages to make movement larger or more varied.</p>
5 and 6	<p>Prepare food products taking into account the properties of ingredients and sensory characteristics.</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>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</p> <p>Pin and tack fabric pieces together.</p> <p>Use stitches such as over sewing, back stitch, blanket stitch or machine stitching (closer supervision).</p> <p>Make quality products.</p>	<p>Use the correct terminology for tools materials and processes.</p> <p>Use bradawl to mark hole positions.</p> <p>Use hand drill to drill tight and loose fit holes.</p> <p>Cut materials accurately to 1mm.</p> <p>Join materials using appropriate methods.</p> <p>Build frameworks to support mechanisms.</p> <p>Stiffen and reinforce complex structures.</p>	<p>Develop a technical vocabulary appropriate to the project.</p> <p>Use mechanical systems such as cams, pulleys and gears.</p> <p>Program, monitor and control using ICT.</p> <p>Use electrical systems such as motors.</p>
5	<p>Prepare food products taking into account the properties of ingredients and sensory characteristics.</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>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</p> <p>Pin and tack fabric pieces together.</p> <p>Use stitches such as over sewing, back stitch, blanket stitch or machine stitching (closer supervision).</p> <p>Make quality products.</p>	<p>Use the correct terminology for tools materials and processes.</p> <p>Use bradawl to mark hole positions.</p> <p>Use hand drill to drill tight and loose fit holes.</p> <p>Cut materials accurately to 1mm.</p> <p>Join materials using appropriate methods.</p> <p>Build frameworks to support mechanisms.</p> <p>Stiffen and reinforce complex structures.</p>	
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