



Stretton Handley CE (VC) Primary School – Progression in Design and Technology

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	<ul style="list-style-type: none">▪ 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.▪ Select pictures to help develop ideas.▪ 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.	<ul style="list-style-type: none">▪ Develop more than one design or adaptation of an initial design.▪ Plan a sequence of actions to make a product.▪ Record the plan by drawing using annotated sketches.▪ 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.			<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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.▪ Name the tools they are using.▪ Describe what they need to do next.	<ul style="list-style-type: none">▪ 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.▪ Plan the stages of the making process.▪ Use appropriate finishing techniques.			<ul style="list-style-type: none">▪ Make prototypes.▪ Develop one idea in depth.▪ Use researched information to inform decisions.▪ Produce detailed lists of ingredients / components / materials and tools.▪ Use a computer to model ideas.▪ 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.	
Evaluate	<ul style="list-style-type: none">▪ 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.	<ul style="list-style-type: none">▪ 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.▪ Consider and explain how the finished product could be improved.▪ Discuss how well the finished product meets the design criteria of the user.▪ Investigate key events and individuals in Design and Technology.			<ul style="list-style-type: none">▪ Research and evaluate existing products (including book and web based research).▪ 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	<ul style="list-style-type: none">▪ 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.	<ul style="list-style-type: none">▪ Develop sensory vocabulary/knowledge using, smell, taste, texture and feel.▪ Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury).▪ Follow instructions/recipes.▪ Make healthy eating choices – use the <i>Eatwell plate</i>.▪ Join and combine a range of ingredients.▪ Explore seasonality of vegetables and fruit.▪ Find out which fruit and vegetables are grown in countries/continents studied in Geography.▪ Develop understanding of how meat/fish are reared/ caught.			<ul style="list-style-type: none">▪ Prepare food products taking into account the properties of ingredients and sensory characteristics.▪ Weigh and measure using scales.▪ Select and prepare foods for a particular purpose.▪ Work safely and hygienically.▪ Show awareness of a healthy diet (<i>using the Eatwell plate</i>).▪ Use a range of cooking techniques.▪ Know where and how ingredients are grown and processed.▪ Consider influence of chefs e.g. Jamie Oliver and school meals etc	

Textiles	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ Develop vocabulary for tools materials and their properties. ▪ Understand seam allowance. ▪ Join fabrics using running stitch, over sewing, blanket stitch. ▪ Prototype a product using J cloths. ▪ Use prototype to make pattern. ▪ Explore strengthening and stiffening of fabrics. ▪ Explore fastenings (eg inventors) and recreate some. ▪ Sew on buttons and make loops. ▪ Use appropriate decoration techniques. 	<ul style="list-style-type: none"> ▪ Use the correct vocabulary appropriate to the project. ▪ Create 3D products using patterns pieces and seam allowance. ▪ Understand pattern layout. ▪ Decorate textiles appropriately (often before joining components). ▪ Pin and tack fabric pieces together. ▪ Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision). ▪ Combine fabrics to create more useful properties. ▪ Make quality products.
Structures	<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ Develop vocabulary related to the project. ▪ Create shell or frame structures. ▪ Strengthen frames with diagonal struts. ▪ Make structures more stable by giving them a wide base. ▪ Measure and mark square section, strip and dowel accurately to 1cm. 	<ul style="list-style-type: none"> ▪ Use the correct terminology for tools materials and processes. ▪ Use bradawl to mark hole positions. ▪ Use hand drill to drill tight and loose fit holes. ▪ Cut strip wood, dowel, square section wood accurately to 1mm. ▪ Join materials using appropriate methods. ▪ Build frameworks to support mechanisms. ▪ Stiffen and reinforce complex structures.
Mechanisms Mechanical and electrical systems and ICT	<ul style="list-style-type: none"> ▪ 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. ▪ Attach wheels to a chassis using an axle. ▪ Mark out materials to be cut using a template. ▪ Fold, tear and cut paper and card. ▪ Cut along lines, straight and curved. ▪ Use a hole punch. ▪ Insert paper fasteners for card. ▪ Experiment with levers and sliders to find different ways of making things move in a 2D plane. 	<ul style="list-style-type: none"> ▪ Develop vocabulary related to the project. ▪ Use mechanical systems such as gears, pulleys, levers and linkages. ▪ Incorporate a circuit into a model. ▪ Use electrical systems such as switches bulbs and buzzers. ▪ Use ICT to control products. ▪ Use lolly sticks/card to make levers and linkages. ▪ Use linkages to make movement larger or more varied. 	<ul style="list-style-type: none"> ▪ Develop a technical vocabulary appropriate to the project. ▪ Use mechanical systems such as cams, pulleys and gears. ▪ Use electrical systems such as motors. ▪ Program, monitor and control using ICT.