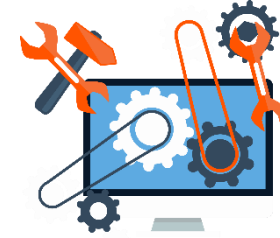




Barford St. Peter's C.E. (V.A.) Primary School

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Design Technology Knowledge and Skills Progression



National Curriculum Aims	
EYFS	<p>ELG: Creating with Materials</p> <p>Children at the expected level of development will:</p> <ul style="list-style-type: none">• 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;• Make use of props and materials when role playing characters in narratives and stories.
KS1&2	<p>The national curriculum for design and technology aims to ensure that all pupils:</p> <ul style="list-style-type: none">• Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.• Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users• Critique, evaluate and test their ideas and products and the work of others• Understand and apply the principles of nutrition and learn how to cook.



Barford St. Peter's C.E. (V.A.) Primary School

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Textiles

	Reception	Year 1	Year 2	Year 3	Year 4	Year 6	
NC Content	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; 	<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including textiles, according to their characteristics explore and evaluate a range of existing products evaluate their ideas and products against design criteria 			<ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches and pattern pieces. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including textiles according to their functional properties and aesthetic qualities Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 		
Study Units Autumn Spring Summer	Rainbow Fish Seaside blankets	African Animal Puppets	Christmas Decorations	Mother's Day Bookmarks (cross stitch)	Christmas Decorations	Cushions	
Vocabulary	Weave Under Over In between Thread Fabric	Fabric Template Design Embellish Cut Measure	Back stitch Blanket stitch	Cross Stitch Binka Pattern	Embellish Blanket stitch Running stitch Sequins Aesthetics Purpose User	Embellish Blanket stitch Running stitch Sequins Aesthetics Purpose User Target audience	



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Textiles

	Reception	Year 1	Year 2	Year 3	Year 4	Year 6
Technical knowledge	Children know how to move a piece of fabric under then over on a fixed frame.	To know: That a template can be used to draw around and cut out a fabric shape. To understand ways of joining features such as eyes.	To know: That two pieces of fabric can be joined leaving a hole for stuffing. That stuffing can be added and the hole joined together. That embellishments can create different effects for the end user.	To know: About the qualities of different textiles and how to fasten these together How colours and thickness of thread can create different effects on a finished product.	To know: That templates can be used to create increasingly complex fabric shapes. That a seam should be incorporated into the design and included in the measurements. That a range of stitches can create different effects. That a range of embellishments can be used to make the product more effective.	To know: That there are range of different fabrics which can be joined together. That different stitches can create different effects. That different stitches may be stronger than others. That seams should be incorporated into a design.
Practical knowledge	Weave with a range of different fabrics. Children use a frame to weave in and out.	Use a basic stitch to join together two shapes in a piece of felt. Thread a needle Tie a knot Draw around a template Cut out a shape from felt	As for year 1 and: Add simple embellishments by sewing or gluing such as goggly eyes, sequins or beads, and a ribbon for hanging. Use stuffing to create a 3D decoration.	Design a pattern using binka Thread a needle independently Tie a knot independently Use cross stitch patterns Use a range of colours of thread to create effects. Use running stitch.	Measure accurately a template. Include a seam Use running stitch, blanket stitch, and back stitch with increasing confidence. Sew with increasing accuracy. Use stuffing Confidently add embellishments by sewing. Pin and tack pieces of fabric together.	Accurately measure using a template Accurately mark out seam allowance. Confidently use a range of stitches to join fabric pieces together. Pin and tack fabric pieces together. With support, use a sewing machine to join pieces of fabric together. Make quality products with increasing accuracy and independence.
Exploring		To explore existing products to inform their own. Explore a range of toy animal puppets Investigate the inside of toy puppets, commenting on stitching and attachments.	To comment on the features and properties of existing products and how they fulfil their intention	Children explore a range of pre-made cross stitch pictures and patterns.	Deconstruct a range of Christmas decorations Explore joining techniques Comment on stitches used Discuss aesthetic values of products.	Explore a range of products and comment on the type of stitching used. Explore and measure hem size on existing products. Understand and comment on joining techniques. Explore a range of stitch types on a sewing machine, commenting on which may be more useful for different purposes.



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Textiles

	Reception	Year 1	Year 2	Year 3	Year 4	Year 6
Designing		Draw a basic outline of an animal. Add colour detail to the design Add facial features such as eyes and whiskers, considering how these will be attached.	Design a simple shape for a decoration, using a compass to aid drawing circles. Design simple additions to make the product more appealing, for example beads, sequins or buttons.	Design a pattern on paper Transfer a design onto binka using fabric pens Use colours to mark patterns Consider the overall effect of the product on the end user.	Design using specific measurements. Choose a stitch which is most appropriate for the product for both strength and aesthetic value Design aesthetically pleasing embellishments which suit the end purpose.	Design a pattern using specific measurements. Choose specific types of fabric for purpose. Choose appropriate stitch types for the purpose of the product. Outline joining techniques for product, including specific measurements.
Making		Use a template to draw around the outline shape onto fabric Cut out the fabric shapes Use basic running stitch to join 2 pieces of fabric together. Use glue to add on facial features such as eyes and whiskers. Cut out and add additional pieces of fabric using glue.	Use a cardboard template to draw onto fabric. Cut fabric pieces Join fabric pieces together using a simple running stitch. Add embellishments using glue.	Measure and cut binka to specific size as outlined in design Use cross stitch in a range of colour to add effect Tie knots on the back side of the product. Use back stitch to create a border and other patterns according to design. Measure card to mount fabric onto, leaving a border.	Use templates to accurately measure fabric pieces. Accurately cut fabric. Join two pieces of fabric together using pins. Use blanket stitch, back stitch or running stitch to join fabric together. Add embellishments according to design either through gluing or sewing. Add ribbon to hang decoration.	Use templates to aid accurate and specific measurements on fabric. Include a hem Use a chosen stitch type with accuracy and control to join fabric together, including on a sewing machine. Add embellishments using neat and accurate sewing techniques.
Evaluating	To describe what they have made and its purpose	To discuss how successful their own project has been and say what they might change if they were to make it again.	Compare their finished product to their design and comment on how it is the same or differs. To evaluate the success of their project against success criteria	Comment on the effectiveness of their finished product. Compare their finished product to their design, commenting on what is different and why. Comment on what they would change if they repeated the project.	To evaluate own product and suggest where changes could be made. Ask another user to evaluate their product against success criteria	Evaluate critically and adapt as necessary, including comparing measurements to the initial design. Evaluate in detail the product against the design brief. Seek feedback from peers in relation to the purpose of the product.



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Mechanisms

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
NC Content	<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] <ul style="list-style-type: none"> Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 			<ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes and computer-aided design Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Apply their understanding of computing to program, monitor and control their products. 		
Study Units Autumn Spring Summer	Levers & Sliders Moving Toy Pictures	Wheels & Axels - Cars	Levers & Linkages Christmas Cards	Pneumatics – Creature in a box	Pulleys & Gears - Vehicles	Cams – Moving Toys
Vocabulary	Mechanism Lever paper fasteners pivot slider slot guide/bridge control movement	Vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism	Mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating user, purpose, function • prototype, design criteria, innovative, appealing, design brief	Compressed Input Output Pivot Lever Pneumatic Hydraulic Pressure Inflate Deflate Syringe System	Pulley Gear Drive belt Driver Follower Mesh Motor spindle	cam, snail cam, off-centre cam, peg cam, pear shaped cam, follower, axle, shaft, crank, handle, housing, framework, rotation, rotary motion, oscillating motion, reciprocating motion, annotated sketches, exploded diagrams, mechanical system, input movement, process, output movement, design decisions, functionality, innovation, authentic.



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Mechanisms

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technical knowledge	<p>To know that toys some toys move as a result of winding.</p> <p>To know that cars have wheels and axels.</p>	<p>To know that levers and sliders can be used to make something move.</p> <p>To know that pop up books use levers and sliders.</p> <p>Understand that different mechanisms produce different types of movement.</p> <p>Know and use technical vocabulary relevant to the project.</p>	<p>To know that axels are important for vehicles with wheels.</p> <p>To understand how wheels attach to axels.</p> <p>To understand on a basic level rotatory motion.</p> <p>Explore and use wheels, axles and axle holders.</p> <p>Distinguish between fixed and freely moving axles.</p> <p>Know and use technical vocabulary relevant to the project.</p>	<p>To know that levers can create movement.</p> <p>To know that pieces can be joined to create sliding motion.</p> <p>Understand and use lever and linkage mechanisms.</p> <p>Distinguish between fixed and loose pivots.</p> <p>Know and use technical vocabulary relevant to the project.</p>	<p>To understand and use pneumatic mechanisms.</p> <p>To know how to assemble syringes, tubing, balloons and plastic bottles.</p>	<p>To understand that mechanical and electrical systems have an input, process and an output. To understand how gears and pulleys can be used to speed up, slow down or change the direction of movement.</p> <p>To know and use technical vocabulary relevant to the project</p>	<p>To know how CAMs can work in toys and for other purposes.</p> <p>To know which components are needed to create movement with a CAM.</p>
Practical knowledge	<p>Begin to use tools for a purpose, for example scissors.</p> <p>To be able to fold and fix paper or cardboard.</p>	<p>To make a simple moving mechanism.</p> <p>Select and use tools, explaining their choices, to cut, shape and join paper and card.</p> <p>Use simple finishing techniques suitable for the product they are creating.</p>	<p>To be able to measure accurately a chassis.</p> <p>To be able to join wheels to an axel.</p> <p>Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.</p> <p>Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics.</p>	<p>To accurately measure</p> <p>To join pieces together using split pins</p> <p>To accurately use scissors.</p> <p>To use folding techniques to create desired effect.</p>	<p>Demonstrate the correct and accurate use of measuring, marking out, cutting, joining and finishing skills and techniques.</p>	<p>To use search technologies for research purposes and be discerning when evaluating digital content.</p> <p>To use and apply drawing skills.</p> <p>To use techniques with colour, pattern, texture, line and shape.</p> <p>To apply knowledge and understanding of circuits, switches, conductors and insulators in the design of the final product.</p> <p>To understand ratios</p> <p>To apply understanding and skill to carry out accurate measuring using standard units i.e. cm/mm</p>	<p>Know how to accurately mark and saw wood to build a frame.</p> <p>Use a file to create circular shapes and tidy wooden edges.</p> <p>Use a hand drill to create holes</p> <p>Attach pieces together using PVA glue.</p>



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<p>Exploring</p>		<p>Investigate a range of pop up books and toys with levers and sliders. Children explore ways to create movement with simple levers. Children explore and evaluate a collection of books and everyday products that have moving parts, including those with levers and sliders. e.g. What is it? Who is it for? What is it for? Use questions to develop children's understanding e.g. What do you think will move? How will you make it move? What part of the product moved and how did it move? How do you think the mechanism works? What else could move in the product? How well does it work?.</p>	<p>To explore a range of toy cars, looking carefully at the movement of the axel. To investigate with a range of equipment, ways of making wheels and axles. Through questioning, direct children's observations e.g. the number, size, position and methods of fixing wheels and axles. How do you think the wheels move? How do you think the wheels are fixed on? Why do you think the product has this number of wheels? Why do you think the wheels are round? Draw an example of a wheeled product, stating the user and purpose, and labelling the main parts e.g. body, chassis, wheels, axles and axle holders. Walk around the school building and grounds, recording how wheels and axles are used in daily life.</p>	<p>To explore a range of moving pictures and understand how movement is created. To understand how to make different types of levers. To investigate different folding techniques. Children investigate, analyse and evaluate books and, where available, other products which have a range of lever and linkage mechanisms. Use questions to develop children's understanding e.g. Who might it be for? What is its purpose? What do you think will move? How will you make it move? What part moved and how did it move? How do you think the mechanism works? What materials have been used? How effective do you think it is and why? What else could move?</p>	<p>To explore familiar objects that use air to make them work e.g. bicycle pump, balloon. To explore how air can be used to make things move. Explore a range of pneumatic mechanisms including two syringes joined by plastic tubing; three syringes connected using a T-connector and using different sized syringes.</p>	<p>To investigate, analyse and evaluate existing everyday products and existing or pre-made toys that incorporate gear or pulley systems. To use videos and photographs of products that cannot be explored through first-hand experience. To use observational drawings and questions to develop understanding of each product in the collection.</p>	<p>Explore a range of wooden pop up toys and understand the mechanisms used to create movement. Analyse how pieces on toys are joined together. Discuss with the children different types of movement: rotary, oscillating and reciprocating. Make simple models of different types of cams or have toys in which the cam mechanisms can be seen. Use videos, photographs and computer animations of products that cannot be explored through first-hand experience. Use observational drawings and questions to develop understanding of the products in the handling collection and those that children have researched e.g. How innovative is the product? What design decisions have been made? What type of movement can be seen? What types of mechanical components are used and where are they positioned? What are the</p>
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							input movement, process and output movement of the system? How well does the product work? Why have the materials and components been chosen? How well has it been designed? How well has it been made?
Designing		To design products that appeal to themselves To discuss their thought-out plans and draw them before making. Generate ideas based on simple design criteria and their own experiences, explaining what they could make. Develop, model and communicate their ideas through drawings and mock-ups with card and paper.	To design products with a user in mind To design according to agreed criteria To annotate diagrams of proposed designs. To select appropriate materials for the purpose of the product. To begin to use exploded diagrams.	To generate realistic designs to fit a purpose. To include specific measurements in designs. To generate their own simple design criteria To draw a cross section diagram of their design	To generate realistic and appropriate ideas and their own design criteria through discussion, focusing on the needs of the user. To use annotated sketches and prototypes to develop, model and communicate ideas	To generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources. To develop a simple design specification to guide their thinking. To develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.	To generate detailed designs and explain their choices Carefully select appropriate materials and explain choices based on the product specifications and criteria. Carefully consider finishing touches to ensure the product is appealing to the target audience.
Making	To change and effect materials using simple tools. To use scissors safely. To use different materials for different purposes	To use simple tools to effectively cut and shape materials needed for their products To choose materials and components they need from those provided. To join pieces of card together using split pins.	To use saws to cut wooden components, taking into account safe and proper use. To effectively join wheels to an axel, ensuring the wheels can move.	To cut, join and incorporate materials safely. To safely use a cutting knife on a cutting board, with close supervision. To use joining techniques including split pins.	To select from and use appropriate tools with some accuracy To cut and join materials and components such as tubing, syringes and balloons. To select from and use finishing techniques suitable	To produce detailed lists of tools, equipment and materials. To formulate step-by-step plans and, if appropriate, allocate tasks within a team. To select from and use a range of tools and equipment to make products that that are accurately assembled and well finished.	To make a working prototype to solve problems first To make well finished attractive products



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					for the product they are creating.	To work within the constraints of time, resources and cost	
Evaluating	To describe what they have made and its purpose.	To discuss how successful their own project has been and say what they might change if they were to make it again.	Compare their finished product to their design and comment on how it is the same or differs. To evaluate the success of their project against success criteria.	Comment on the effectiveness of their finished product. Compare their finished product to their design, commenting on what is different and why. Comment on what they would change if they repeated the project.	Evaluate their own products and ideas against criteria and user needs, as they design and make.	To compare the final product to the original design specification. To test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. To consider the views of others to improve their work. To investigate famous manufacturing and engineering companies relevant to the project	Evaluate critically and adapt as necessary, including comparing measurements to the initial design.



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Structures & Electrical Systems

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
NC Content	<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, according to their characteristics Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria Build structures, exploring how they can be made stronger, stiffer and more stable 			<ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products. 		
Study Units Autumn Spring Summer	Playground Equipment	Hot Air Balloons	Thrones	Electrical Touch Toys	Lighthouses (with controllable lights)	Frame Structures – Air Raid Shelters
Key Vocabulary	cut, fold, join, fix, structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved		marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong.	series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip · control, program, system, input device, output device		frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent



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Structures & Electrical Systems

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technical knowledge	To know that different materials might be needed for different tasks	To build simple structures and discuss how they can be made better (more stable)	To know which materials to use to make a stable structure.	To understand how to measure the materials for their design. To understand how to strengthen their design	To know which materials are flexible and can be manipulated. How an electrical circuit can be incorporated into a working design.	To understand ways structures can be reinforced to ensure stability How to use a program to make a light go on/off eg Flowol To use coding to create a programme to incorporate into design	To know about different joints and ways to strengthen joints Understand how to strengthen, stiffen and reinforce 3D frameworks. Know and use technical vocabulary.
Practical knowledge		To begin to understand how materials can be joined together to create a stable structure using glue, blu tac, Sellotape and string.	To be able to use scissors safely. To know a range of simple joining techniques, including PVA glue, string, Sellotape and split pins.	To be able to accurately measure to follow their design. To use a saw safely and under supervision. To use triangles and PVA to join together two pieces. To use a glue gun safely and under close supervision. To use a file to smooth edges.	To use pliers safely to bend thin metal wire. To use a soldering iron safely under 1:1 supervision. To join together pieces of an electrical circuit.	To use a range of tools with increasing independence and safely. To know a range of ways materials can be joined together.	Demonstrate the accurate use of tools and equipment including hacksaws, G-clamps, bench hooks, square section wood, card triangles and hand drills to construct wooden frames, as appropriate. Demonstrate skills and techniques for accurately joining framework materials together e.g. paper straws, square sectioned wood.
Exploring		Explore the shapes and structures of different pieces of real play ground equipment, as well as those in toys such as lego.	To explore ways to make their structure stiffer, stronger and more stable. To see features and properties of existing products and how they fulfil their intention	Review the pieces required to create a small wooden toy chair and compare the dimensions and measurements of seats and legs.	To explore how to create a touch electrical circuit. To explore touch toys such as 'operation' and 'buzz' steady hand games, including the internal circuit board.	Explore a range of materials to consider which would be suitable for purpose. Explore how to create a programmable circuit for a bulb.	Children investigate and make annotated drawings of a range of portable and permanent frame structures, e.g. tents, bus shelters, umbrellas. Use



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			To use those observations in their designs				photographs and web-based research to extend the range e.g. How well does the frame structure meet users' needs and purposes? Why were materials chosen? What methods of construction have been used? How has the framework been strengthened, reinforced and stiffened? How does the shape of the framework affect its strength? How innovative is the design? When was it made? Who made it? Where was it made?
Designing	To represent their ideas verbally or as pictures	To design products that appeal to themselves To discuss their thought-out plans and draw them before making. To consider the simple structure and pieces required to make their design Begin to add simple labels to their design. With support, think and verbalise how to join pieces together.	To design according to agreed criteria To annotate diagrams of proposed designs. Begin to use measurements to aid designs. To choose materials which are fit for purpose. To consider how pieces will be securely joined together.	To generate realistic designs. To use exploded diagrams. To generate their own simple design criteria To draw a cross section diagram of their design To consider the aesthetic value of their final product.	To design a useable product. To draw an expanded labelled diagram with measurements To consider the end user when designing the product.	To design a product that takes into account another user's design criteria To consider the staged process to incorporate working electrical internal elements.	Select appropriate materials and explain choices Carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources. Develop a detailed design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.
Making	To change and effect materials using simple tools.	To use simple tools to effectively cut and shape materials needed for their products	To select the appropriate material To begin to measure accurately.	To cut, join and incorporate materials safely	To make a mock-up of design To bend wire using plyers.	Create a programmable circuit with a light. Combine an electrical circuit into a structure.	To make a working prototype to solve problems first



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	<p>To use scissors safely. To use different materials for different purposes</p>	<p>To choose materials and components they need from those provided.</p>	<p>To use a range of joining materials such as glue, elastic bands, split pins and Sellotape. To attach a simple winding mechanism.</p>	<p>To use saws to cut wooden components, taking into account safe and proper use. To join pieces of wood together using glue and cardboard triangles. To measure with increasing accuracy. To use a glue gun safely. Use a file to smooth cut edges.</p>	<p>To join together electrical components with a break in the circuit. To make a working circuit with a buzzer. To use insulation tape. To use a soldering iron with 1:1 supervision.</p>	<p>To gather, assemble and join structures safely and securely using a range of techniques and materials. Use measurements accurately.</p>	<p>To make well finished attractive products</p>
Evaluating	<p>To describe what they have made and its purpose</p>	<p>To discuss how successful their own project has been and compare it to their design, saying how it is the same or different. To explain what was challenging about the making stage.</p>	<p>To evaluate the success of their project against success criteria</p>	<p>To evaluate in detail the similarities and differences of their finished product to their design. To describe the challenges of the making stage and reflect on how these could be improved next time.</p>	<p>To evaluate own product and suggest changes where changes could be made and why these would improve the finished product. Ask another user to evaluate their product against success criteria</p>	<p>Reflect on other user's comments on own designs. Suggest changes that could be made next time</p>	<p>Evaluate critically and adapt as necessary. Reflect on how technology has had an impact on designing and making products</p>