

DT Progression of Skills

Curriculum Intent: To create a memorable curriculum that builds upon prior learning whilst moving knowledge and skills forward and is based upon robust assessments.

Subject Intent: At Howe Dell our Design and Technology is inspiring, rigorous and practical. We provide all children with the opportunity to create a range of structures, mechanisms, textiles, electrical systems and food products which link to relevant real world purposes. Teachers deliver the vocabulary rich DT curriculum, through CUSP tasks and Curriculum Visions which are modified to meet the needs, strengths and abilities of the children. Building on their prior knowledge, they continue to develop their skills throughout their time at Howe Dell



Year Group	Developing, Planning and Communicating ideas (across all units)	DT progression of skills					Evaluation (across all units)	Key Vocabulary
		Food	Structures	Mechanisms		Textiles		
Nursery	<ul style="list-style-type: none"> <li>• Begin to explain choices linked to shape, texture and properties</li> <li>• With support use tools safely.</li> <li>• Begin to use key vocabulary to describe what they have created.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Begin to use cutlery accurately</li> </ul>	<ul style="list-style-type: none"> <li>• Use various construction materials to join, stack and balance.</li> <li>• Join different materials beginning to explain choices.</li> </ul>	<ul style="list-style-type: none"> <li>• Explore how things work e.g. wind up toys and pulleys</li> </ul>		<ul style="list-style-type: none"> <li>• Explore different materials freely to develop their ideas.</li> <li>• Join different materials beginning to explain choices.</li> <li>• Use scissors accurately</li> </ul>	<ul style="list-style-type: none"> <li>• Express simple likes and dislikes and why they think/feel this.</li> <li>• Say what they like about their creation</li> <li>• Say what was hard and easy.</li> <li>•</li> </ul>	<u>Structures</u> Build, join, plastic, paper, cardboard, tools, goggles, safety <u>Textiles</u> <u>Mechanisms</u> Cogs, gears, join, work, turn

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Reception	<ul style="list-style-type: none"> <li>• Explain choices of materials and joining for a specific job.</li> <li>• Accurately use a range of small tools</li> <li>• Use correct vocabulary to describe processes</li> <li>• Make decisions about what to do</li> </ul>	<ul style="list-style-type: none"> <li>• Accurately use cutlery</li> </ul>	<ul style="list-style-type: none"> <li>• Join different materials explaining why they have chosen fixings.</li> <li>• Purposely choose construction materials for a job</li> </ul>	<ul style="list-style-type: none"> <li>• Know how equipment works</li> <li>• Know the effect of a simple push and pull force.</li> </ul>		<ul style="list-style-type: none"> <li>• Develop ideas though experimenting with a range of materials.</li> <li>• Increasing choose appropriate materials for the job.</li> <li>• Join different materials explaining why they have chosen fixings.</li> </ul>	<ul style="list-style-type: none"> <li>• Express clear opinions and justify their reasoning.</li> <li>• Share their creation explaining processes they have used.</li> <li>• Return to previous learning to refine ideas and develop them.</li> </ul>	<u>Structures</u> Material, wood, plastic, metal, Trowel, drill, vice, saw, safety equipment <u>Textiles</u> Fabric, fixing <u>Mechanisms</u> Push, pull, action, tools, together, apart, connect, electricity, battery	
		Linked Designers							

Year Group	Developing, Planning and Communicating ideas (across all units)	DT progression of skills					Evaluation (across all units)	Key Vocabulary
		Food	Structures	Mechanisms	Understanding materials (KS1) Systems (Y3&5) Electrical systems (Y4&6)	Textiles		
Year 1	<ul style="list-style-type: none"> <li>Follow verbal instructions</li> <li>Explain what they are making and which materials they are using</li> <li>Name the tools they are using</li> <li>Describe what they need to do next</li> <li>Select materials from a limited range</li> <li>Select and name the tools</li> <li>Select appropriate technique explaining First, Next, Last</li> <li>Model ideas with kits, reclaimed materials</li> <li>Use pictures and words to convey what they want to design and make</li> <li>Describe their models and drawings</li> <li>Use kits/reclaimed materials to develop an idea</li> <li>Discuss their work as it progresses</li> </ul>	<ul style="list-style-type: none"> <li>Group familiar food products e.g. fruit and vegetables</li> <li>Cut and chop a range of ingredients</li> <li>Understand the need for a variety of foods in a diet</li> <li>Measure and weigh food items, using spoons, cups</li> <li>Use equipment and utensils safely and purposefully</li> </ul>	<ul style="list-style-type: none"> <li>Fold, tear and cut paper and card</li> <li>Roll paper to create tubes</li> <li>Cut along lines, straight and curved</li> <li>Curl paper</li> <li>Join appropriately for different materials and situations e.g. glue, tape.</li> <li>Use hole punch</li> <li>Insert paper fasteners for card linkages</li> <li>Create hinges</li> </ul>	<ul style="list-style-type: none"> <li>Fold, tear and cut paper and card</li> <li>Cut along lines, straight and curved</li> <li>Design and make simple slider</li> <li>Use simple pop ups</li> <li>Mark out materials to be cut using a template</li> <li>Investigate joining - temporary, fixed and moving</li> </ul>	<ul style="list-style-type: none"> <li>Investigate strengthening materials</li> <li>Investigate joining - temporary, fixed and moving</li> <li>Design and make simple house</li> </ul>	<ul style="list-style-type: none"> <li>Create a running stitch</li> <li>Select tools for sewing</li> <li>Thread a needle</li> <li>Join fabrics together using a running stitch</li> <li>Mark out materials to be cut using a template</li> </ul>	<ul style="list-style-type: none"> <li>Say what they like and do not like about items they have made and attempt to say why</li> <li>Talk about their designs as they develop and identify good and bad points</li> <li>Discuss how closely their finished products meet their design criteria</li> </ul>	<p><u>Food</u>, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, ingredients, tasting, stirring, vitamins, minerals</p> <p><u>Structures</u> structure, wall, tower, foundation, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, perpendicular, balanced</p> <p><u>Mechanisms</u> slider, lever, pivot, slot, bridge/guide, join, cut, fold, fix</p> <p><u>Textiles</u> Needle, thread, Binca, sewing, felt, running stitch, attach, pouch</p> <p><u>Design/Evaluate</u> design, make, evaluate, user, purpose, ideas, design criteria, product, function</p>
		Linked Designers					Frank Lloyd Wright (1867 – 1959) Frank Lloyd Wright was an American architect, designer, writer and educator.	The Bayeux Tapestry (1077)

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Year 2	<ul style="list-style-type: none"> <li>Follow verbal instructions</li> <li>Explain what they are making and which materials they are using</li> <li>Name the tools they are using</li> <li>Describe what they need to do next</li> <li>Select materials from a limited range that will meet the design criteria</li> <li>Select and name the tools needed to work the materials</li> <li>Select appropriate technique explaining First, Next, Last</li> <li>Explore ideas by rearranging materials</li> <li>Model ideas with kits, reclaimed materials</li> <li>Select pictures to help develop ideas</li> <li>Use pictures and words to convey what they want to design and make</li> <li>Describe their models and drawings of ideas and intentions</li> <li>Use kits/reclaimed materials to develop an idea</li> <li>Use drawings to record ideas as they are developed</li> <li>Discuss their work as it progresses</li> <li>Add notes to drawings to help explanations</li> </ul>	<ul style="list-style-type: none"> <li>Group familiar food products e.g. fruit and vegetables</li> <li>Cut, peel, grate, chop a range of ingredients</li> <li>Measure and weigh food items, non-standard measures e.g. spoons, cups</li> </ul>	<ul style="list-style-type: none"> <li>test the strength of different shaped paper pillars</li> <li>to experiment with using different folds.</li> <li>To build a multi-storey structure to bear weight</li> <li>Design and make a structure according to criteria</li> <li>Modify design inlight of test results.</li> <li>Rebuild structure to incorporate design changes.</li> </ul>	<ul style="list-style-type: none"> <li>Make vehicles with which contain moving parts</li> <li>Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels</li> <li>Attach wheels to a chassis using an axle</li> <li>Join appropriately for different materials and situations e.g. glue, tape.</li> <li>Cut strip wood/dowel using hacksaw and bench hook</li> <li>Investigate joining - temporary, fixed and moving</li> </ul>	<ul style="list-style-type: none"> <li>To fold paper to in the style of origami to form a hat</li> <li>Investigate and group materials by properties</li> <li>To test media to create a waterproof barrier</li> </ul>	<ul style="list-style-type: none"> <li>Cut out shapes</li> <li>draw round a template onto the fabric</li> <li>Join fabrics by using running</li> <li>Join materials using different techniques e.g. stitch, glue, staples, over sewing, tape</li> </ul>	<ul style="list-style-type: none"> <li>Say what they like and do not like about items they have made and attempt to say why</li> <li>Talk about their designs as they develop and identify good and bad points</li> <li>Talk about changes made during the making process</li> <li>Discuss how closely their finished products meet their design criteria</li> </ul>	<p><u>Food</u> skin, seed, pip, core, slicing, peeling, cutting, squeezing, bake, mix, healthy diet, ingredients, investigating, tasting, layering, free-range, processed, coagulate, vitamins, protein, wholemeal, fibre, starch</p> <p><u>Mechanisms</u> cutting, joining vehicle, wheel, axle, axle holder, chassis, body, fixed, free, moving, mechanism, rotate, position, centre</p> <p><u>Textiles</u> mark out, join, finish, patchwork, overstitch, repurpose, template, appliqué, quilt</p> <p><u>Structures</u> paper, crease, corrugated, pillar, storey, load</p> <p><u>Understanding materials</u> Manipulate, flexible, barrier, waterproof, resist, absorbent</p> <p><u>Design/Evaluate</u> design, make, evaluate, user, purpose, ideas, design criteria, product, function, functional, features, suitable, quality, mock-up</p>	
		Linked Designers							
				Dame Zaha Mohammad Hadid (1950 – 2016) Dame Zaha Mohammad Hadid was an Iraqi architect, artist and designer.	Karl Friedrich Benz (1844 – 1929) Karl Friedrich Benz was a German mechanical engineer who designed and built the world’s first practical automobile to be powered by an internal combustion engine.	Arthur Wellesley (1769 – 1852) Arthur Wellesley, First Duke of Wellington. The Duke designed a boot for his soldiers in 1917 which became known as the Wellington boot.	Frank Havrah ‘Kaffe’ Fassett (born 1937) Frank Havrah ‘Kaffe’ Fassett, MBE, is an American-born, British-based artist who is best known for his colourful designs in the decorative arts		

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Year 3	<ul style="list-style-type: none"> <li>Investigate similar products to the one to be made to give starting points for a design</li> <li>Draw/sketch products to help analyse and understand how products are made</li> <li>Think ahead about the order of their work and decide upon tools and materials</li> <li>Plan a sequence of actions to make a product</li> </ul>	<ul style="list-style-type: none"> <li>Analyse the taste, texture, smell and appearance of a range of foods</li> <li>Follow instructions</li> <li>Make healthy eating choices from and understanding of a balanced diet</li> <li>Measure and weigh ingredients appropriately</li> <li>Build a vocabulary of the names of food, equipment and utensils used</li> </ul>	<ul style="list-style-type: none"> <li>Create shell or frame structures, strengthen frames with diagonal struts</li> <li>Make structures more stable by giving them a wide base</li> <li>Prototype frame and shell structures</li> <li>Use glue gun with close supervision (one to one)</li> <li>Develop a vocabulary of the tools and the properties of materials used</li> </ul>	<ul style="list-style-type: none"> <li>Investigate linkages and levers.</li> <li>Design and make a linkages and lever product</li> <li>Select and use a variety of modelling materials</li> </ul>	<ul style="list-style-type: none"> <li>Identify different types of energy</li> <li>Consider how design choices are influenced by energy sources.</li> </ul>	<ul style="list-style-type: none"> <li>Join fabrics using running stitch, over sewing, back stitch</li> <li>Explore fastenings and recreate some e.g. sew on buttons and make loops</li> <li>Prototype a product using J cloths</li> <li>Create a simple pattern</li> <li>Explore a range of solutions to stiffen fabric.</li> <li>Create a fair test</li> <li>Draw conclusions from tests.</li> <li>Use a template to cut fabric to appropriate size and shape.</li> <li>Fold and manipulate fabric</li> <li>Use mould to create box out of fabric.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the strengths and weaknesses of their design ideas</li> <li>Decide which design idea to develop</li> <li>Consider and explain how the finished product could be improved</li> <li>Discuss how well the finished product meets the design criteria and how well it meets the needs of the users</li> </ul>	<u>Food</u> bake, mix, weigh, measure, slice, peel, grate, spread, healthy/varied diet, ingredients, texture, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested, balance, preserve, stew, pressure, seasoning <u>Structures</u> shell structure, 3-D, net, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, corrugating, ribbing, laminating font, lettering, text, graphics, prototype <u>Mechanisms</u> Lever, load, effort, fulcrum, linkage, mechanism, force <u>Textiles</u> fastening, compartment, templates, stitch, seam, seam allowance, stiffen, interfacing, cloth <u>Systems</u> Energy, energy source, types of energy – potential energy, kinetic energy, turbine, source, intermittent, renewable, <u>Design/Evaluate</u> design, make, evaluate, user, purpose, design criteria, product, function, functional, features, suitable, quality, mock-up prototype, innovative

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Year 4	<ul style="list-style-type: none"> <li>Investigate similar products to the one to be made to give starting points for a design</li> <li>Draw/sketch products to help analyse and understand how products are made</li> <li>Think ahead about the order of their work and decide upon tools and materials</li> <li>Plan a sequence of actions to make a product</li> <li>Record the plan by drawing (labelled sketches) or writing</li> <li>Develop more than one design or adaptation of an initial design</li> <li>Propose realistic suggestions as to how they can achieve their design ideas</li> <li>Add notes to drawings to help explanations</li> </ul>	<ul style="list-style-type: none"> <li>Develop sensory vocabulary/knowledge using, smell, taste, texture and feel</li> <li>Analyse the taste, texture, smell and appearance of a range of foods</li> <li>Follow instructions</li> <li>Make healthy eating choices from and understanding of a balanced diet</li> <li>Join and combine a range of ingredients e.g. snack foods</li> <li>Measure and weigh ingredients appropriately</li> </ul>	<ul style="list-style-type: none"> <li>Explore shapes to ensure stability in structure</li> <li>Use a range of materials to investigate 3D shapes.</li> <li>Create shell or frame structures, strengthen frames with diagonal struts</li> <li>Make structures more stable by giving them a wide base</li> <li>Prototype frame and shell structures</li> <li>Measure and mark square selection, strip and dowel accordingly to 1cm</li> <li>Use glue gun with close supervision (one to one)</li> </ul>	<ul style="list-style-type: none"> <li>Cut slots</li> <li>Cut internal shapes</li> <li>Use lolly sticks/card to make levers and linkages</li> <li>Use linkages to make movement larger or more varied.</li> <li>Use and explore complex pop ups</li> <li>Create nets</li> </ul>	<ul style="list-style-type: none"> <li>Explore how different types of switch work</li> <li>Build a simple circuit to explore a switch</li> <li>Draw a simple circuit diagram</li> <li>Incorporate a circuit with a buzzer into a model</li> </ul>	<ul style="list-style-type: none"> <li>Explore a range of fasteners</li> <li>Use sewing techniques to attach fasteners e.g. running stitch</li> <li>Use a running stitch to create a pocket.</li> <li>Sew a button onto fabric</li> <li>Make a shank for a button</li> </ul>	<ul style="list-style-type: none"> <li>Identify the strengths and weaknesses of their design ideas</li> <li>Decide which design idea to develop</li> <li>Consider and explain how the finished product could be improved</li> <li>Discuss how well the finished product meets the design criteria and how well it meets the needs of the user.</li> </ul>	<p><u>Food</u> bake, mix, weigh, measure, chop, slice, peel, grate, spread, knead, prove healthy/varied diet, ingredients, plan, investigate, tasting, arranging, texture, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested</p> <p><u>Structures</u> Structural engineer, geodesic, gravity, truss, compression, tension</p> <p><u>Mechanisms</u> join, mechanism, lever, linkage, pivot, slot, bridge, guide system, linear, rotary, oscillating, reciprocating user</p> <p><u>Electrical Systems</u> series circuit, fault, connection, switch, insulator, conductor, component, current, crocodile clip, control, program, system, input device, interruption, unbroken, multi-purpose</p> <p><u>Textiles</u> Shank, burr, hook and loop, buckle, fastener, raw edge</p> <p><u>Design/Evaluate</u> design, make, evaluate, user, purpose, design criteria, product, function, functional, features, suitable, quality, mock-up prototype, innovative</p>

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Year 5	<ul style="list-style-type: none"> <li>Investigate products/images to collect ideas</li> <li>Sketch and model alternative ideas</li> <li>Develop one idea in depth</li> <li>Plan the sequence of work using a storyboard</li> <li>Record ideas using annotated diagrams</li> <li>Use models, kits and drawings to help formulate design ideas</li> </ul>	<ul style="list-style-type: none"> <li>Prepare food products taking into account the properties of ingredients and sensory characteristics</li> <li>Select and prepare foods for a particular purpose</li> <li>Taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing.</li> <li>Weigh and measure using scales</li> <li>Cut and shape ingredients using appropriate tools and equipment e.g. grating</li> <li>Join and combine food ingredients appropriately e.g. beating, rubbing in</li> <li>Decorate appropriately</li> </ul>	<ul style="list-style-type: none"> <li>Explore ways to reinforces framed structures.</li> <li>Experiment methods of joining straws securely e.g. forming gussets and inserting pipe cleaners to create a flexible join.</li> <li>Use a hacksaw and bench block to accurately cut wood</li> <li>Join materials using appropriate methods</li> <li>Use glue gun with close supervision</li> <li>Design and annotate a model of a shelter</li> <li>Use carpentry skills to construct a stable frame, incorporating structural joints for additional support and strength</li> <li>Evaluate and modify the design and structure as needed</li> </ul>	<ul style="list-style-type: none"> <li>Identify different types of gears and their applications</li> <li>Construct simple pulley system to lift a load</li> <li>Use diagrams, photos and annotations to record information about gears and pulleys</li> <li>Identify specific constraints and limitations related to a design brief</li> <li>Make a structure containing a pulley system for a specific purpose</li> <li>Apply modelling, measuring, joining and cutting skills</li> </ul>	<ul style="list-style-type: none"> <li>Select materials based on their properties</li> <li>Combine materials to fulfil a design brief</li> <li>design to a specific brief, giving and responding to feedback</li> <li>Measure and cut a paper template</li> <li>Apply basic stitching skills</li> <li>Develop an algorithm</li> <li>Write and test a simple program using coding knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Create 3D products using pattern pieces and seam allowance</li> <li>Understand pattern layout</li> <li>Decorate textiles appropriately often before joining components</li> <li>Pin and tack fabric pieces together</li> <li>Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision)</li> <li>Make quality products</li> </ul>	<ul style="list-style-type: none"> <li>Use the design brief to inform their decisions about ways to proceed</li> <li>Justify their decisions about materials and methods of construction</li> <li>Reflect on their work using design criteria stating how well the design fits the needs of the user</li> <li>Identify what does and does not work in the product.</li> <li>Make suggestions as how their design could be improved</li> <li>Evaluate outcomes, identifying where modifications need to be made and assess whether the requirements and specifications of the brief have been met</li> </ul>	<p><u>Food</u> nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble</p> <p><u>Structures</u> frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent, frame, I-beam, struts, brace, mitre, gussets</p> <p><u>Mechanisms</u> gear, pulley, mechanism, gear train, driver gear, idler, design brief, specification, function</p> <p><u>Systems</u> Properties, algorithms, fastener, reflective, debug, fluorescent, programming, attachment point,</p> <p><u>Textiles</u> seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces pinking shears, fastenings, iron transfer paper</p> <p><u>Design/Evaluate</u> design, make, evaluate, user, purpose, design criteria, product, function, functional, features, suitable, quality, mock-up prototype, innovative, annotate, design decisions, authentic</p>
		Linked Designer						
			Abraham Darby III (1750 – 1789) Abraham Darby III was an English ironmaster and Quaker. He was the third man of that name in several generations of an English Quaker family that played a pivotal role in the industrial revolution.	Emily Brooke (born 1985) Emily Sophie Hastings Brooke (MBE) is a British inventor, industrial designer and entrepreneur who is best known for developing the Beryl (formerly Blaze) laser bike light projector which helps to protect cyclists caught in the blind spot of drivers.	Levi Strauss (1829 – 1902) Levi Strauss was a German-born American businessman and clothing manufacturer who founded the first company to produce riveted blue jeans.			

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Year 6	<ul style="list-style-type: none"> <li>Investigate products/images to collect ideas</li> <li>Sketch and model alternative ideas</li> <li>Develop one idea in depth</li> <li>Combine modelling and drawing to refine ideas</li> <li>Plan the sequence of work using a storyboard</li> <li>Record ideas using annotated diagrams</li> <li>Use models, kits and drawings to help formulate design ideas</li> <li>Make prototypes</li> <li>Use found information to inform decisions</li> <li>Use a computer to model ideas</li> <li>Draw plans which can be read/followed by someone else</li> <li>Give a report using correct technical vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>Select and prepare foods for a particular purpose</li> <li>Taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing.</li> <li>Weigh and measure using scales</li> <li>Cut and shape ingredients using appropriate tools and equipment e.g. grating</li> <li>Join and combine food ingredients appropriately e.g. beating, rubbing in</li> <li>Decorate appropriately</li> </ul>	<ul style="list-style-type: none"> <li>Devise and carry out an experiment to test strength and stability.</li> <li>Explore ways to increase a products weight that it can withstand</li> <li>Draw conclusions from observations and test results.</li> <li>Investigate the stability and strength of 3D shapes.</li> <li>Explore effects of adding features to a structure e.g. flying buttresses</li> <li>Combine techniques and features to construct a stable tower from limited materials e.g. cubes and pyramids</li> <li>Build a tower at least 1m tall</li> <li>Identify ways in which a structure can be made more stable and modify a design as necessary</li> </ul>	<ul style="list-style-type: none"> <li>Make accurate measurements of force using a Newton meter</li> <li>compare the mechanical advantage provided by different pulley systems</li> <li>Apply knowledge of gear trains to design and construct a model Ferris wheel</li> </ul>	<ul style="list-style-type: none"> <li>Explore switches and describe and compare products</li> <li>Create a circuit using a switch or buzzer</li> <li>Draw circuit diagrams to represent a circuit including a bulb, or buzzer and a switch</li> <li>Build circuits according to specific criteria e.g. series and parallel</li> <li>Draw circuit diagrams to represent those circuits (series and parallel)</li> <li>Compare series and parallel circuits</li> <li>Design and make circuit product to fit design brief</li> <li>Identify and explain advantages and disadvantages or the functionality of different products.</li> </ul>	<ul style="list-style-type: none"> <li>Create 3D products using pattern pieces and seam allowance</li> <li>Understand pattern layout</li> <li>Decorate textiles appropriately often before joining components</li> <li>Pin and tack fabric pieces together</li> <li>Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision)</li> <li>Combine fabrics to create more useful properties</li> <li>Make quality products</li> </ul>	<ul style="list-style-type: none"> <li>Use the design criteria to inform their decisions about ways to proceed</li> <li>Justify their decisions about materials and methods of construction</li> <li>Reflect on their work using design criteria stating how well the design fits the needs of the user</li> <li>Identify what does and does not work in the product.</li> <li>Make suggestions as how their design could be improved</li> </ul>	<p><u>Food</u> nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble, simmer, boil, brown, fry</p> <p><u>Structures</u> frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent, series circuit, parallel circuit, input device, output device, system, monitor, control, program, flowchart, guyed mast, flying buttress, load, aesthetic, edifice, constraints</p> <p><u>Mechanisms</u> Pulley, fixed pulley, moveable pulley, block and tackle, driver gear, driven gear, rack and pinion</p> <p><u>Electrical systems</u> Switch, parallel circuit, series circuit, component, functionality, multi-function, brief, simultaneous</p> <p><u>Textiles</u> seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces pinking shears, fastenings, iron transfer paper</p> <p><u>Design/Evaluate</u> design, make, evaluate, user, purpose, design criteria, product, function, functional, features, suitable, quality, mock-up prototype, innovative, annotate, design decisions, authentic</p>
		Linked Designer						
				James Maxwell (1838 – 1893) William Charles Tuke (1843 – 1893) Blackpool Tower was designed by Lancashire architects James Maxwell and William Charles Tuke who oversaw the laying of its foundation stone on 29th September 1891		Albert Sadacca (1901 – 1980) Albert Sadacca is credited with popularising electric Christmas tree lights for private use. At the age of 15, after a fire in New York City which was started by candles suspended in a tree, Sadacca adapted the novelty lighting that his parents sold for use in Christmas trees.		Isatou Ceesay (born 1972) Isatou is a Gambian activist and social entrepreneur who is often referred to as The Queen of Recycling.

