**Hudson Road Primary School**

**Design and Technology**

**Progression of Knowledge, Vocabulary and Skills Document**

Hudson Road Primary School

| | Early Years | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|---|
| **Structures** | Lego constructions | Free Standing Structures<br>Junk Modelling of enclosure for zoo animal | | Shell Structures Using CAD<br>Boxes | Simple Circuits and Switches using CA control<br>Designing and Creating a Lighthouse | | Frame Structures<br>Bird hides |
| **Mechanisms** | Playing with vehicles with wheels | Sliders and Levers<br>Greetings card | Wheels and Axels<br>Vehicles | | Levers and Linkages<br>Book/poster | CAMS<br>A kids' toy with a moving part | Complex Circuits<br>Moving vehicle with a motor |
| **Food** | Weekly Cooking | Preparing Fruit and Vegetables<br>Vegetable Soup | Preparing Fruit and Vegetables<br>Fruit Smoothies<br>or<br>Fruit Crumble | Healthy and Varied Diet<br>Toad in the hole with Veg | Healthy and Varied Diet<br>Vegetable Curry | Healhy and Varied Diet<br>Pizza<br>or<br>Quiche | Healhy and Varied Diet<br>Stew<br>or<br>Spaghetti Bolognaise |
| **Textiles** | Collages | | Templates and Joining<br>Place Mats | 2D to 3D Product<br>Dress for a Tudor doll | | Combining Fabric Shapes inc. CAD<br>Bags | |

| Structure | | | |
|---|---|---|---|
| | EYFS | Year 1 | Year 2 |
| Research and Design | Explore different materials freely, in order to develop their ideas about how to use them and what to make.<br>**Develop their own ideas and then decide which materials to use to express them. (3&4)(DISCIPLINARY KNOWLEDGE)**<br>**Explore, use and refine a variety of artistic effects to express their ideas and feelings (R)(DISCIPLINARY** | Talk about what they want to make, in relation to the design brief and their research.<br>**Draw a labelled picture of their product, which may include parts, components or materials. (DISCIPLINARY KNOWLEDGE)** | |
| Construct | Join different materials and explore different textures. (3&4)<br>Use one-handed tools and equipment, for example, making snips in paper with scissors.<br>Use a comfortable grip with good control when holding pens and pencils. (3&4)<br>**Develop their small motor skills so that they can use a range of tools competently, safely and confidently. ® (DISCIPLINARY KNOWLEDGE)**<br>Create collaboratively sharing ideas, resources and skills. ®<br>Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings | Plan by suggesting what to do next.<br>**Select and use tools, skills and techniques, explaining their choices. (DISCIPLINARY KNOWLEDGE)**<br>Select new and reclaimed materials and construction kits to build their structures. • Use simple finishing techniques suitable for the structure they are creating. | |
| Evaluate | **Understand 'why' questions (3&4)(DISCIPLINARY KNOWLEDGE)**<br>**Return to and build on their previous learning, refining ideas and developing their ability to represent them. (R) (DISCIPLINARY KNOWLEDGE)** | Explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings.<br>**Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria. (DISCIPLINARY KNOWLEDGE)** | |
| Vocabulary & Tech Knowledge | Design Make<br>Designer Cut<br>Materials Join<br>Tools Stick<br>Construct | **Know how to make freestanding structures stronger, stiffer and more stable. (DISCIPLINARY KNOWLEDGE)**<br>**Know and use technical vocabulary relevant to the project**:<br>***Design, Materials, Tools, Brief, Product, Evaluate, Label, Structure, Strong, Stiff, Stable*** | |

| Structure | | | | |
|---|---|---|---|---|
| | Year 3 | Year 4 | Year | Year 6 |
| Research and Design | **Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and the functional and aesthetic purposes of the product. Draw and label designs. (DISCIPLINARY KNOWLEDGE)**<br><br>Develop ideas through the analysis of existing shell structures and **use computer-aided design** to model and communicate ideas.<br><br>Order stages of making, thinking about tools and materials. | Gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.<br><br>**Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, *annotated sketches, cross-sectional and exploded diagrams.* (DISCIPLINARY KNOWLEDGE)** | | Carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources.<br><br>Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.<br><br>Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.<br><br>**Formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used. (DISCIPLINARY KNOWLEDGE)** |
| Construct | Select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy.<br><br>**Explain their choice of materials according to functional properties and aesthetic qualities, drawing on prior knowledge. (DISCIPLINARY KNOWLEDGE)**<br><br>Use computer-generated finishing techniques suitable for the product they are creating . | Select from and use tools and equipment to cut, shape, join and finish with some accuracy.<br><br>Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities.<br><br>**Test their product as they work, making informed adjustments to ensure their product meets the design criteria. (DISCIPLINARY KNOWLEDGE)**<br><br>**Program a standalone control box, microcontroller or interface box to enhance the way the product works.(DISCIPLINARY KNOWLEDGE)** | | **Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make strong, stable frameworks. (DISCIPLINARY KNOWLEDGE)**<br><br>Use finishing and decorative techniques suitable for the product they are designing and making. |
| Evaluate | **Investigate and evaluate a range of shell structures including the materials, components and techniques that have been used. Test and evaluate their own products against design criteria and the intended user and purpose. (DISCIPLINARY KNOWLEDGE)** | Investigate and analyse a range of existing battery-powered products.<br><br>**Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. (DISCIPLINARY KNOWLEDGE)** | | Investigate and evaluate a range of existing frame structures.<br><br>**Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. (DISCIPLINARY KNOWLEDGE)**<br><br>Research key events and individuals relevant to frame structures. |

| | | | | |
|---|---|---|---|---|
| Vocabulary & Tech Knowledge | Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.<br><br>**Develop and use knowledge of how to construct strong, stiff shell structures. (DISCIPLINARY KNOWLEDGE)**<br><br>Know and use technical vocabulary relevant to the project:<br><br>Design, Technology, Product, Intended User, Annotated sketch, Net, Scoring, Tab, Accuracy, Packaging, Product Designer, | Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers.<br><br>Apply their understanding of computing to program and control their products.<br><br>**Know and use technical vocabulary relevant to the project. (DISCIPLINARY KNOWLEDGE)** Component design, Criteria, Computer-aided design, Battery, Circuit, Switch, Bulb, Electrical engineer | | **Understand how to strengthen, stiffen and reinforce 3-D frameworks. (DISCIPLINARY KNOWLEDGE)**<br><br>Know and use technical vocabulary relevant to the project.<br><br>Structure, stable, strengthen, join, joints, triangulation, tension, frame structure, diagonal, horizontal, verticle |

| Mechanisms | | | |
|---|---|---|---|
| | EYFS | Year 1 | Year 2 |
| Research and Design | Explore different materials freely, in order to develop their ideas about how to use them and what to make.<br>**Develop their own ideas and then decide which materials to use to express them. (3&4) (DISCIPLINARY KNOWLEDGE)**<br>**Explore, use and refine a variety of artistic effects to express their ideas and feelings (R)(DISCIPLINARY** | Generate ideas based on simple design criteria and their own experiences, explaining what they could make.<br>**Develop, model and communicate their ideas through drawings and mock-ups with card and paper . (DISCIPLINARY KNOWLEDGE)**<br>Explore a range of existing books and everyday products that use simple sliders and levers. | Generate initial ideas and simple design criteria through talking and using own experiences.<br>Develop and communicate ideas through drawings and mock-ups.<br>**Explore and evaluate a range of products with wheels and axles. (DISCIPLINARY KNOWLEDGE)** |
| Construct | Join different materials and explore different textures. (3&4)<br>Use one-handed tools and equipment, for example, making snips in paper with scissors.<br>**Use a comfortable grip with good control when holding pens and pencils. (3&4) (DISCIPLINARY KNOWLEDGE)**<br>**Develop their small motor skills so that they can use a range of tools competently, safely and confidently. (R) (DISCIPLINARY KNOWLEDGE)**<br>Create collaboratively sharing ideas, resources and skills. ® | Plan by suggesting what to do next.<br>Select and use tools, explaining their choices, to cut, shape and join paper and card.<br>**Use sliders and levers in their products. (DISCIPLINARY KNOWLEDGE)**<br>Use simple finishing techniques suitable for the product they are creating. | Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.<br>**Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics. (DISCIPLINARY KNOWLEDGE)**<br>Mark materials before cutting and sometimes measure using chosen resources i.e. rulers or tape measures.<br>**Test their products to see if they work, to see if it meets the requirements of the intended user. (DISCIPLINARY KNOWLEDGE)**<br>Explore and use wheels, axles and axle holders. |
| Evaluate | **Understand 'why' questions (3&4) (DISCIPLINARY KNOWLEDGE)**<br>**Return to and build on their previous learning, refining ideas and developing their ability to represent them. (R) (DISCIPLINARY KNOWLEDGE)** | **Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria. (DISCIPLINARY KNOWLEDGE)** | Discuss what the intended user might think about the product.<br>**Suggest how their product could be improved. (DISCIPLINARY KNOWLEDGE)** |
| Vocabulary & Tech knowledge | Design Make<br>Designer Cut<br>Materials Join<br>Tools Stick<br>Construct | Explore and use sliders and levers.<br>**Understand that different mechanisms produce different types of movement. (DISCIPLINARY KNOWLEDGE)**<br>Know and use technical vocabulary relevant to the project.<br>Mechanism, Lever, Slider, Movement, Slot, Guide or Bridge, Card, Tools | Explore and use wheels, axles and axle holders.<br>Distinguish between fixed and freely moving axles.<br>**Know and use technical vocabulary relevant to the project. (DISCIPLINARY KNOWLEDGE)**<br>Wheels, Axle, Axle Holder, Chassis, Friction, Dowel, Movement, Function, Vehicle |

| Mechanisms | | | | |
|---|---|---|---|---|
| | Year 3 | Year 4 | Year 5 | Year 6 |
| Research and Design | | Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user.<br><br>Use annotated sketches and prototypes to develop, model and communicate ideas.<br><br>Order the main stages of making.<br><br>**Investigate and analyse books and, where available, other products with lever and linkage mechanisms. (DISCIPLINARY KNOWLEDGE)** | **Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources. (DISCIPLINARY KNOWLEDGE)**<br><br>Develop a simple design specification to guide their thinking.<br><br>Develop and communicate ideas through discussion, ***annotated drawings, exploded drawings and drawings from different views.***<br><br>Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. | Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources.<br><br>Develop a simple design specification to guide their thinking.<br><br>**Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. (DISCIPLINARY KNOWLEDGE)**<br><br>**Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. (DISCIPLINARY KNOWLEDGE)**<br><br>Investigate famous manufacturing and engineering companies relevant to the project.<br><br>Show how a computer programme will monitor/control the product. |
| Construct | | Select from and use appropriate tools with some accuracy to cut, shape and join paper and card.<br><br>**Select from and use finishing techniques suitable for the product they are creating. (DISCIPLINARY KNOWLEDGE)** | Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished.<br><br>Work within the constraints of time, resources and cost.<br><br>**Use cams to make their toy move.(DISCIPLINARY KNOWLEDGE)** | Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost.<br><br>**Include gears or pulleys in their product. (DISCIPLINARY KNOWLEDGE)**<br><br>**Include electrical circuit in their product. (DISCIPLINARY KNOWLEDGE)** |
| Evaluate | | **Evaluate their own products and ideas against criteria and user needs, as they design and make. (DISCIPLINARY KNOWLEDGE)** | Compare the final product to the original design specification.<br><br>**Test products with the intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. (DISCIPLINARY KNOWLEDGE)**<br><br>Consider the views of others to improve their work.<br><br>Investigate famous manufacturing and engineering companies relevant to the project. | Compare the final product to the original design specification.<br><br>**Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. (DISCIPLINARY KNOWLEDGE)**<br><br>Consider the views of others to improve their work. |

| | | | | |
|---|---|---|---|---|
| Vocabulary & Technical Knowlegde | | **Understand and use lever and linkage mechanisms. (DISCIPLINARY KNOWLEDGE)**<br><br>**Distinguish between fixed and loose pivots. (DISCIPLINARY KNOWLEDGE)**<br><br>Know and use technical vocabulary relevant to the project.<br><br>mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating user, purpose, function | **Understand that mechanical systems have an input, process and an output. (DISCIPLINARY KNOWLEDGE)**<br><br>**Understand how cams can be used to produce different types of movement and change the direction of movement. (DISCIPLINARY KNOWLEDGE)**<br><br>Know and use technical vocabulary relevant to the project.<br><br>cam, snail cam, off-centre cam, peg cam, pear shaped cam follower, axle, shaft, crank, handle, housing, framework rotation, rotary motion, oscillating motion, reciprocating motio | Understand that mechanical and electrical systems have an input, process and an output.<br><br>**Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. (DISCIPLINARY KNOWLEDGE)**<br><br>Know and use technical vocabulary relevant to the project.<br><br>pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch, circuit diagram annotated drawings, exploded diagrams mechanical system, electrical system, input, process, output |

| Food and Cookery | | | |
|---|---|---|---|
| | EYFS | Year 1 | Year 2 |
| Research and Design | **Choose the right resources to carry out their own plan (3&4) (DISCIPLINARY KNOWLEDGE)**<br>Make healthy choices about food (3&4)<br>**Know and talk about the different factors that support their overall health and wellbeing: healthy eating (R ) (DISCIPLINARY KNOWLEDGE)** | Understand that the basic principles of a healthy and varied diet feature within their design.<br>**Create a basic recipe, using drawings and labels. (DISCIPLINARY KNOWLEDGE)**<br>Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences. | Understand that the basic principles of a healthy and varied diet feature within their design.<br>**Create a basic recipe, using drawings and labels. (DISCIPLINARY KNOWLEDGE)**<br>Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences. |
| Make | **Start to eat independently and learning how to use a knife and fork. (3&4) (DISCIPLINARY KNOWLEDGE)**<br>Be increasingly independent in meeting their own care needs, e.g. washing and drying their hands thoroughly. (3&4)<br>Further develop the skills they need to manage the school day successfully: -mealtimes - personal hygiene (R )<br>**Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: knives, forks and spoons. (R ) (DISCIPLINARY KNOWLEDGE)** | Observe basic food hygiene procedures with support – washing hands; washing fruit/veg; keeping meat separate; cleaning surfaces before and after preparing food.<br>**Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. (DISCIPLINARY KNOWLEDGE)**<br>Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product | Observe basic food hygiene procedures with support – washing hands; washing fruit/veg; keeping meat separate; cleaning surfaces before and after preparing food.<br>**Use a knife and chopping board to neatly chop ingredients. (DISCIPLINARY KNOWLEDGE)**<br>Serve food in an appealing way.<br>Clean/wash up after themselves.<br>**Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. (DISCIPLINARY KNOWLEDGE)**<br>Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product |
| Evaluate | **Understand 'why' questions (3&4) (DISCIPLINARY KNOWLEDGE)**<br>**Articulate their ideas and thoughts in well-formed sentences. (R ) (DISCIPLINARY KNOWLEDGE)** | **Evaluate ideas and finished products against design criteria, including intended user and purpose. (DISCIPLINARY KNOWLEDGE)** | Discuss what the intended user might think about the product.<br>**Suggest how their product could be improved. (DISCIPLINARY KNOWLEDGE)** |
| Vocabulary | ingredients<br>healthy<br>cook<br>taste | Ingredients<br>Hygiene<br>Balanced diet<br>Condiment<br>Prepare | Nutritious<br>Appealing<br>Product<br>Food hygiene<br>Ingredients |

| Food and Cookery | | | | |
|---|---|---|---|---|
| | Year 3 | Year 4 | Year 5 | Year 6 |
| Research and Design | Use the principles of a healthy and varied diet to help inform their design decisions.<br><br>Understand seasonality and locality of food and use this knowledge when designing their product.<br><br>Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose.<br><br>Use annotated sketches to communicate ideas.<br><br>Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs. | Create/adapt a recipe, including some weight/volume measurements.<br><br>Understand seasonality and locality of food and use this knowledge when designing their product.<br><br>Use annotated sketches to communicate ideas.<br><br>Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose. | Independently apply the principles of a healthy and varied diet to inform their design decisions.<br><br>Apply their knowledge of seasonality and locality of food to inform their design decisions.<br><br>Create/adapt a recipe, including weight/ volume measurements.<br><br>Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. | Independently apply the principles of a healthy and varied diet to inform their design decisions.<br><br>Apply their knowledge of seasonality and locality of food to inform their design decisions.<br><br>Create/adapt a recipe, including weight/ volume measurements. |
| Construct | Observe basic food hygiene procedures – washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food.<br><br>Cook the product in the oven, ensuring it is fully cooked.<br><br>Clean/wash up after themselves.<br><br>Select and use appropriate utensils and equipment to prepare and combine ingredients. | Use appropriate tools to peel, chop, slice, grate and mix ingredients.<br><br>Serve food in an appealing way.<br><br>Select and use appropriate utensils and equipment to prepare and combine ingredients. | Observe basic food hygiene procedures – washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food.<br><br>Use appropriate tools to peel, chop, slice, grate and mix ingredients.<br><br>Cook food in the oven and/or on a stove top, ensuring it is fully cooked.<br><br>Serve food in an appealing way.<br><br>Clean/wash up after themselves | Observe basic food hygiene procedures – washing hands, washing fruit/veg; avoiding cross contamination when preparing raw meat; cleaning surfaces before and after preparing food.<br><br>Use appropriate tools to peel, chop, slice, grate and mix ingredients.<br><br>Cook food in the oven and/or on a stove top, ensuring it is fully cooked.<br><br>Serve food in an appealing way.<br><br>Clean/wash up after themselves |
| Evaluate | Evaluate the ongoing work and the final product with reference to the design criteria and the views of others | Discuss whether the product meets the requirements of the brief/the needs of the user – Is it fit for purpose?<br><br>Take part in peer evaluation, giving and receiving feedback from fellow pupils. | Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. | Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. |

| | | | | |
|---|---|---|---|---|
| Vocabulary | Hygiene, Grown, Reared, Local producer, | Seasonal produce, Dough, Knead, Bake, Melt | Hygiene, Cross contamination, Local produce, Seasonality, Cooking, Technique | Deconstructed Food, Heston Blumenthal, Blend, Layer, Contrast |

| Textiles | | | |
|---|---|---|---|
| | EYFS | Year 1 | Year 2 |
| Research and Design | Choose the right resources to carry out their own plan. (3&4)<br>**Develop their own ideas and then decide which materials to use to express them.(3&4) (DISCIPLINARY KNOWLEDGE)** | | Choose materials and tools they will use independently from a selection.<br>Write a list of the materials and tools they will need to be successful<br>**Design a functional and appealing product for a chosen user and purpose based on simple design criteria. (DISCIPLINARY KNOWLEDGE)**<br>Generate, develop, model and communicate their ideas as appropri- |
| Make | Use one-handed tools and equipment, for example, making snips in paper with scissors. (3&4)<br>**Explore different materials freely, in order to develop their ideas about how to use them and what to make. (3&4) (DISCIPLINARY KNOWLEDGE)**<br>Join different materials and explore different textures (3&4)<br>**Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. (R ) (DISCIPLINARY KNOWLEDGE)**<br>**Explore, use and refine a variety of artistic effects to express their ideas and feelings. (DISCIPLINARY KNOWLEDGE)**<br>Create collaboratively sharing ideas, resources and skills | | **Sewing using running stitch, attempting to produce neat, equal stitches (DISCIPLINARY KNOWLEDGE)**<br>Creating a design on fabric using applique.<br>Creating a design on fabric using pens/paint.<br>**Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. (DISCIPLINARY KNOWLEDGE)**<br>Select from and use textiles according to their characteristics.<br>Understand how simple 3-D textile products are made, using a template to create two identical shapes.<br>**Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. (DISCIPLINARY KNOWLEDGE)**<br>Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons. |
| Evaluate | **Understand 'why' questions (DISCIPLINARY KNOWLEDGE)**<br>• Return to and build on their previous learning, refining ideas and developing their ability to represent them. | | Discuss what the intended user might think about the product.<br>Suggest how their product could be improved.<br>**Evaluate their ideas throughout and their final products against original design criteria. (DISCIPLINARY KNOWLEDGE)** |
| Vocabulary | Make, cut, join, fabric | | Textiles, Needle, Thread, Pin, Pattern, Piece, Applique names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out, join, decorate, finish |

| Textiles | | | | |
|---|---|---|---|---|
| | Year 3 | Year 4 | Year 5 | Year 6 |
| Research and Design | Use their research to develop some of their own design criteria.<br>**Draw a fully labelled sketch/diagram of their product, including some measurements. (DISCIPLINARY KNOWLEDGE)**<br>List the materials/ ingredients/tools they will need.<br>Order the main stages of making.<br>Investigate a range of 3-D textile products relevant to the project. | | Use their research to develop their own design criteria.<br>Draw a fully labelled/annotated sketch/diagram of their product, including<br>**Choose the materials/tools they will use, based on their suitability for the task, including sourcing their own materials where appropriate. (DISCIPLINARY KNOWLEDGE)**<br>List the materials/ tools they will need.<br>**Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. (DISCIPLINARY KNOWLEDGE)** | |
| Construct | Making/using simple paper pattern pieces.<br>Cutting fabric carefully.<br>**Learning sewing basics – threading a needle, knotting your thread, finishing off. (DISCIPLINARY KNOWLEDGE)**<br>Sewing using running stitch, attempting to produce<br>Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing.<br>**Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern. (DISCIPLINARY KNOWLEDGE)** | | Making/using a paper pattern (front and back pieces).<br>Including a seam allowance.<br>Cutting fabric accurately.<br>**Sewing basics – threading a needle, knotting your thread, finishing off. (DISCIPLINARY KNOWLEDGE)**<br>**Select from and use a range of tools and equipment, including CAD, to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost. (DISCIPLINARY KNOWLEDGE)** | |
| Evaluate | Identify and discuss the strengths of their product.<br>Identify any areas for development/ improvements that could be made.<br>**Test their product against the original design criteria and with the intended user.(DISCIPLINARY KNOWLEDGE)**<br>Take into account others' views.<br>Understand how a key event/individual has influenced the development of the chosen product and/or fabric. | | Compare the final product to the original design specification.<br>**Test products with intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. (DISCIPLINARY KNOWLEDGE)**<br>Consider the views of others to improve their work | |
| Vocabulary | Know how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. • Understand the need for patterns and seam allowances. **(DISCIPLINARY** | | Textiles, Pattern pieces, Back stitch, Tension, Seam, Allowance,<br>**A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. • Fabrics can be strength-** | |