

Inspire to Aspire

Nightingale Primary School

Design Technology Progression of Knowledge and Skills

Nightingale Primary School

EYFS

EYFS Framework Objectives	Mechanisms	Structures	Textiles
<ul style="list-style-type: none"> ● Make comments about what they have heard and ask questions to clarify their understanding ● Use a range of small tools, including scissors, paintbrushes and cutlery ● Begin to show accuracy and care when drawing ● 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 ● Explore different materials freely, in order to develop their ideas about how to use them and what to make; ● Develop their own ideas and then decide which materials to use to express them ● Explain how things work ● Develop their small motor skills so that they can use a range of tools competently, safely and confidently; ● Create collaboratively, sharing ideas, resources and skills 	<p>Joining and fixing using:</p> <ul style="list-style-type: none"> ● Glue ● Masking tape ● Staplers and staples ● Hole punching and treasury tags ● Split pins <p>Introducing wheels and axles using:</p> <ul style="list-style-type: none"> ● K'Nex ● Toy Cars ● Wind Up toys 	<p>Clay Structures</p> <ul style="list-style-type: none"> ● Making hedgehogs – scissor skills (hold and snip) ● Diwali lanterns – moulding and sculpting ● What the Ladybird Heard – clay ladybirds <p>Building Structures using:</p> <ul style="list-style-type: none"> ● Large polydron ● Large outdoor bricks <p>Construction using:</p> <ul style="list-style-type: none"> ● Wooden bricks ● Duplo ● Stickle Bricks ● K'Nex ● Lego 	<p>Scissor Skills including:</p> <ul style="list-style-type: none"> ● Hold and snip ● Cutting along a straight line ● Cutting around a shape with straight edges ● Cutting around a shape with curved edges <p>Making props and puppets linking to text drivers using a range of materials</p>

Year 1 – Mechanisms

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, according to their characteristics ● 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"> *have own ideas *use pictures and words to plan, begin to use models *design a product for myself following design criteria 	<ul style="list-style-type: none"> *explain what I'm making and why *consider what I need to do next *select tools/equipment to cut, shape, join, finish and explain choices *measure, mark out, cut and shape, with support *with support, choose suitable materials and explain choices *try to use finishing techniques to make product look good 	<ul style="list-style-type: none"> *talk about my work, linking it to what I was asked to do *talk about existing products considering: use, materials, how they work, audience, where they might be used *talk about existing products, and say what is and isn't good *talk about things that other people have made *begin to talk about what could make product better 	<ul style="list-style-type: none"> *begin to use levers or slides

Year 2 – Mechanisms

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, according to their characteristics ● 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"> *have own ideas and plan what to do next *explain what I want to do and describe how I may do it *explain purpose of product, how it will work and how it will be suitable for the user *describe design using pictures, words, models, diagrams *design products for myself and others following design criteria *choose best tools and materials, and explain choices *use knowledge of existing products to produce ideas 	<ul style="list-style-type: none"> *explain what I am making and why it fits the purpose *make suggestions as to what I need to do next. *join materials/components together in different ways *measure, mark out, cut and shape materials and components, with support. *describe which tools I'm using and why *choose suitable materials and explain choices depending on characteristics. *use finishing techniques to make product look good 	<ul style="list-style-type: none"> *describe what went well, thinking about design criteria *talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion *talk about what I would do differently if I were to do it again and why 	<ul style="list-style-type: none"> *use levers or slides *begin to understand how to use wheels and axles

Year 3 – Mechanisms

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 ● Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 	<ul style="list-style-type: none"> *describe purpose of product *follow a given design criteria *have at least one idea about how to create product *create a plan which shows order, equipment and tools *describe design using an accurately labelled sketch and words *make design decisions *explain how product will work 	<ul style="list-style-type: none"> *select suitable tools/equipment, explain choices; begin to use them accurately *select appropriate materials, fit for purpose. *consider how good product will be *begin to measure, mark out, cut and shape materials/components with some accuracy *begin to assemble, join and combine materials and components with some accuracy *begin to apply a range of finishing techniques with some accuracy 	<ul style="list-style-type: none"> *look at design criteria while designing and making *use design criteria to evaluate finished product * say what I would change to make design better *begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose 	<ul style="list-style-type: none"> *select appropriate tools / techniques *alter product after checking, to make it better *begin to try new/different ideas *use simple lever and linkages to create movement

Year 4 – Mechanisms

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 ● Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 	<ul style="list-style-type: none"> *show design meets a range of requirements and is fit for purpose *begin to create own design criteria *have at least one idea about how to create product and suggest improvements for design. *produce a plan and explain it to others *include an annotated sketch *explain how product will work 	<ul style="list-style-type: none"> *select suitable tools and equipment, explain choices in relation to required techniques and use accurately *select appropriate materials, fit for purpose; explain choices *work through plan in order. *realise if product is going to be good quality *measure, mark out, cut and shape materials/components with some accuracy *assemble, join and combine materials and components with some accuracy *apply a range of finishing techniques with some accuracy 	<ul style="list-style-type: none"> *refer to design criteria while designing and making *use criteria to evaluate product *begin to explain how I could improve original design *evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose 	<ul style="list-style-type: none"> *select most appropriate tools / techniques *grow in confidence about trying new / different ideas.

Year 5 – Mechanisms

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 ● Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 	<ul style="list-style-type: none"> *use internet and questionnaires for research and design ideas *take a user's view into account when designing *have a range of ideas *produce a logical, realistic plan and explain it to others. *use cross-sectional planning and annotated sketches *make design decisions considering time and resources. *clearly explain how parts of product will work. *model and refine design ideas by making prototypes and using pattern pieces. 	<ul style="list-style-type: none"> *use selected tools/equipment with good level of precision *produce suitable lists of tools, equipment/materials needed *select appropriate materials, fit for purpose; explain choices, considering functionality *create and follow detailed step-by-step plan *mainly accurately measure, mark out, cut and shape materials/components *mainly accurately assemble, join and combine materials/components *mainly accurately apply a range of finishing techniques *use techniques that involve a small number of steps 	<ul style="list-style-type: none"> *evaluate quality of design while designing and making *evaluate ideas and finished product against specification, considering purpose and appearance. *test and evaluate final product *evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose 	<ul style="list-style-type: none"> *refine product after testing *grow in confidence about trying new / different ideas

Year 6 – Mechanisms

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 ● Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 	<ul style="list-style-type: none"> * identify features of design that will appeal to the intended user *come up with innovative design ideas *use annotated sketches, cross-sectional planning and exploded diagrams *make design decisions, considering, resources and cost 	<ul style="list-style-type: none"> *use selected tools and equipment precisely *select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics *create, follow, and adapt detailed step-by-step plans *accurately measure, mark out, cut and shape materials/components *accurately assemble, join and combine materials/components *accurately apply a range of finishing techniques 	<ul style="list-style-type: none"> *evaluate quality of design while designing and making; is it fit for purpose? *keep checking design is best it can be. 	<ul style="list-style-type: none"> *refine product after testing, considering aesthetics, functionality and purpose *incorporate hydraulics and pneumatics *be confident to try new / different ideas *use cams, pulleys and gears to create movement

Year 1 – Structures

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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"> *have own ideas *explain what I want to do *explain what my product is for, and how it will work *use pictures and words to plan 	<ul style="list-style-type: none"> *explain what I'm making and why *consider what I need to do next *select tools/equipment to cut, shape, join, finish and explain choices *measure, mark out, cut and shape, with support *choose suitable materials and explain choices *try to use finishing techniques to make product look good 	<ul style="list-style-type: none"> *talk about my work, linking it to what I was asked to do *talk about existing products considering: use, materials, how they work, audience, where they might be used *talk about existing products, and say what is and isn't good *begin to talk about what could make product better 	<ul style="list-style-type: none"> *begin to measure and join materials, with some support *describe differences in materials *suggest ways to make material/product stronger, with support

Year 2 – Structures

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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"> *have own ideas and plan what to do next *explain what I want to do and describe how I may do it *explain purpose of product, how it will work and how it will be suitable for the user *design products for myself and others following design criteria *choose best tools and materials, and explain choices *use knowledge of existing products to produce ideas 	<ul style="list-style-type: none"> *explain what I am making and why it fits the purpose *make suggestions as to what I need to do next. *join materials/components together in different ways *measure, mark out, cut and shape materials and components, with support. *describe which tools I'm using and why *choose suitable materials and explain choices depending on characteristics. *use finishing techniques to make product look good 	<ul style="list-style-type: none"> *describe what went well, thinking about design criteria *talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion *evaluate how good existing products are *talk about what I would do differently if I were to do it again and why 	<ul style="list-style-type: none"> *measure materials *describe some different characteristics of materials *join materials in different ways *use joining, rolling or folding to make it stronger *use own ideas to try to make product stronger

Year 3 – Structures

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> *begin to research others' needs *show design meets a range of requirements *describe purpose of product *have at least one idea about how to create product *create a plan which shows order, equipment and tools *describe design using an accurately labelled sketch and words *make design decisions *explain how product will work * make a prototype 	<ul style="list-style-type: none"> *select suitable tools/equipment, explain choices; begin to use them accurately *select appropriate materials, fit for purpose. *work through plan in order *consider how good product will be *begin to measure, mark out, cut and shape materials/components with some accuracy *begin to assemble, join and combine materials and components with some accuracy *begin to apply a range of finishing techniques with some accuracy 	<ul style="list-style-type: none"> * look at design criteria while designing and making *use design criteria to evaluate finished product *say what I would change to make design better *begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose *learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products 	<ul style="list-style-type: none"> *use appropriate materials *work accurately to make cuts and holes *join materials *begin to make strong structures

Year 4 – Structures

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> * show design meets a range of requirements and is fit for purpose *begin to create own design criteria *have at least one idea about how to create product and suggest improvements for design. *produce a plan and explain it to others *include an annotated sketch *explain how product will work 	<ul style="list-style-type: none"> *select suitable tools and equipment, explain choices in relation to required techniques and use accurately *select appropriate materials, fit for purpose; explain choices *work through plan in order. *measure, mark out, cut and shape materials/components with some accuracy *assemble, join and combine materials and components with some accuracy *apply a range of finishing techniques with some accuracy 	<ul style="list-style-type: none"> *refer to design criteria while designing and making *use criteria to evaluate product *evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose 	<ul style="list-style-type: none"> *measure carefully to avoid mistakes *attempt to make product strong *continue working on product even if original didn't work *make a strong, stiff structure

Year 5 – Structures

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<p>*take a user's view into account when designing</p> <p>*begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose</p> <p>* have a range of ideas</p> <p>*produce a logical, realistic plan and explain it to others.</p> <p>*use cross-sectional planning and annotated sketches</p> <p>*clearly explain how parts of product will work.</p>	<p>*use selected tools/equipment with good level of precision</p> <p>*produce suitable lists of tools, equipment/materials needed</p> <p>*select appropriate materials, fit for purpose; explain choices, considering functionality</p> <p>*create and follow detailed step-by-step plan</p> <p>*mainly accurately measure, mark out, cut and shape materials/components</p> <p>*mainly accurately assemble, join and combine materials/components</p> <p>*mainly accurately apply a range of finishing techniques</p> <p>*begin to be resourceful with practical problems</p>	<p>*evaluate quality of design while designing and making</p> <p>*evaluate ideas and finished product against specification, considering purpose and appearance.</p> <p>*test and evaluate final product</p> <p>*evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose</p> <p>*talk about some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products</p>	<p>*select materials carefully, considering intended use of product and appearance</p> <p>*explain how product meets design criteria</p> <p>*measure accurately enough to ensure precision</p> <p>*ensure product is strong and fit for purpose</p> <p>*begin to reinforce and strengthen a 3D frame</p>

Year 6 – Structures

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> *use research of user's individual needs, wants, requirements for design *create own design criteria and specification *come up with innovative design ideas *follow and refine a logical plan. *use annotated sketches, cross-sectional planning and exploded diagrams *make design decisions, considering, resources and cost *clearly explain how parts of design will work, and how they are fit for purpose 	<ul style="list-style-type: none"> *use selected tools and equipment precisely *produce suitable lists of tools, equipment, materials needed, considering constraints *select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics *create, follow, and adapt detailed step-by-step plans *accurately measure, mark out, cut and shape materials/components *accurately assemble, join and combine materials/components *accurately apply a range of finishing techniques *be resourceful with practical problems 	<ul style="list-style-type: none"> *evaluate quality of design while designing and making; is it fit for purpose? *keep checking design is best it can be. *evaluate ideas and finished product against specification, stating if it's fit for purpose *test and evaluate final product; explain what would improve it and the effect different resources may have had *do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose *discuss some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products 	<ul style="list-style-type: none"> *select materials carefully, considering intended use of the product, the aesthetics and functionality. *explain how product meets design criteria *reinforce and strengthen a 3D frame

Year 1 – Textiles

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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"> *have own ideas *use pictures and words to plan, begin to use models *design a product for myself following design criteria 	<ul style="list-style-type: none"> *explain what I'm making and why *consider what I need to do next *select tools/equipment to cut, shape, join, finish and explain choices *measure, mark out, cut and shape, with support *choose suitable materials and explain choices *try to use finishing techniques to make product look good *work in a safe and hygienic manner 	<ul style="list-style-type: none"> *begin to talk about my work, linking it to what I was asked to do * talk about things that other people have made *begin to talk about what could make product better 	<ul style="list-style-type: none"> *measure, cut and join textiles to make a product, with some support

Year 2 – Textiles

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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"> *have own ideas and plan what to do next *explain what I want to do and describe how I may do it *explain purpose of product, how it will work and how it will be suitable for the user *describe design using pictures, words, models, diagrams, begin to use ICT *design products for myself and others following design criteria *use knowledge of existing products to produce ideas 	<ul style="list-style-type: none"> *explain what I am making and why it fits the purpose *make suggestions as to what I need to do next. *join materials/components together in different ways *measure, mark out, cut and shape materials and components, with support. *describe which tools I'm using and why *use finishing techniques to make product look good *work safely and hygienically 	<ul style="list-style-type: none"> *describe what went well, thinking about design criteria *talk about what I would do differently if I were to do it again and why 	<ul style="list-style-type: none"> *join textiles together to make a product, and explain how I did it *carefully cut textiles to produce accurate pieces *understand that a 3D textile structure can be made from two identical fabric shapes.

Year 3 – Textiles

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> *begin to research others needs *describe purpose of product *follow a given design criteria *create a plan which shows order, equipment and tools *describe design using an accurately labelled sketch and words *make design decisions *explain how product will work 	<ul style="list-style-type: none"> *select suitable tools/equipment, explain choices; begin to use them accurately *select appropriate materials, fit for purpose. *begin to measure, mark out, cut and shape materials/components with some accuracy *begin to assemble, join and combine materials and components with some accuracy 	<ul style="list-style-type: none"> *look at design criteria while designing and making *use design criteria to evaluate finished product *say what I would change to make design better *begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose * begin to understand by whom, when and where products were designed 	<ul style="list-style-type: none"> *join different textiles in different ways *choose textiles considering appearance and functionality *begin to understand that a simple fabric shape can be used to make a 3D textiles project

Year 4 – Textiles

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> *use research for design ideas *have at least one idea about how to create product and suggest improvements for design. *produce a plan and explain it to others *include an annotated sketch * make a prototype 	<ul style="list-style-type: none"> *select suitable tools and equipment, explain choices in relation to required techniques and use accurately *select appropriate materials, fit for purpose; explain choices *work through plan in order. *measure, mark out, cut and shape materials/components with some accuracy *assemble, join and combine materials and components with some accuracy *apply a range of finishing techniques with some accuracy 	<ul style="list-style-type: none"> *refer to design criteria while designing and making *use criteria to evaluate product *begin to explain how I could improve original design *discuss by whom, when and where products were designed *research whether products can be recycled or reused 	<ul style="list-style-type: none"> *think about user when choosing textiles *think about how to make product strong *begin to devise a template *explain how to join things in a different way *understand that a simple fabric shape can be used to make a 3D textiles project

Year 5 – Textiles

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> *use internet and questionnaires for research and design ideas *take a user's view into account when designing *begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose *create own design criteria *have a range of ideas *produce a logical, realistic plan and explain it to others. *use cross-sectional planning and annotated sketches 	<ul style="list-style-type: none"> *use selected tools/equipment with good level of precision *produce suitable lists of tools, equipment/materials needed *select appropriate materials, fit for purpose; explain choices, considering functionality *create and follow detailed step-by-step plan *mainly accurately measure, mark out, cut and shape materials/components *mainly accurately assemble, join and combine materials/components *mainly accurately apply a range of finishing techniques 	<ul style="list-style-type: none"> *evaluate quality of design while designing and making *evaluate ideas and finished product against specification, considering purpose and appearance. *test and evaluate final product *evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose *research how sustainable materials are 	<ul style="list-style-type: none"> *use own template *think about how to make product strong and look better *think of a range of ways to join things *begin to understand that a single 3D textiles project can be made from a combination of fabric shapes.

Year 6 – Textiles

National Curriculum Objectives	Designing	Making	Evaluating	Technical Knowledge
<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, textiles and ingredients, 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 	<ul style="list-style-type: none"> *use research of user's individual needs, wants, requirements for design *use annotated sketches, cross-sectional planning and exploded diagrams *make design decisions, considering, resources and cost *clearly explain how parts of design will work, and how they are fit for purpose *independently model and refine design ideas by making prototypes and using pattern pieces 	<ul style="list-style-type: none"> *use selected tools and equipment precisely *select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics *create, follow, and adapt detailed step-by-step plans *explain how product will appeal to audience; make changes to improve quality *accurately measure, mark out, cut and shape materials/components *accurately assemble, join and combine materials/components *accurately apply a range of finishing techniques *be resourceful with practical problems 	<ul style="list-style-type: none"> *evaluate quality of design while designing and making: is it fit for purpose? *keep checking design is best it can be. *evaluate ideas and finished product against specification, stating if it's fit for purpose *test and evaluate final product; explain what would improve it and the effect different resources may have had *do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose 	<ul style="list-style-type: none"> *think about user's wants/needs and aesthetics when choosing textiles *make product attractive and strong *make a prototype *use a range of joining techniques *think about how product might be sold *think carefully about what would improve product *understand that a single 3D textiles project can be made from a combination of fabric shapes.

