

Curriculum Skills and Progression Map Design & Technology: 2024 to 2025



Nebula
where stars are born



The Design and Technology Curriculum and Christian Distinctiveness
at Horsford CofE VA Primary School

“The Lord has made everything for its own purpose,” Proverbs 16:4

Courage – While exploring Design & Technology, we hope that children will feel courageous to explore new and challenging concepts to design, create and evaluate products that may be far from their usual interests or ‘comfort zone’.

Compassion – An essential part of Design & Technology is the ability to objectively evaluate how successful our endeavours were. We recognise that not all of our attempts will turn out the way we wanted, and that this is an important part of the Design & Technology process. We encourage the children to show compassion to themselves and others as they go through this process.

Responsibility – At Horsford C.E. V.A. Primary school, we give the children all the support they need with tackling new Design & Technology challenges, and we instil that it is their responsibility to always try the best they can – whatever their initial ability might be, and to take care of the Design & Technology resources they use with increasing care and attention.

Our story of ‘The Good Samaritan’ teaches the children to work together and to support each other in their Design & Technology learning, even if they would not usually choose to be friends.

‘Spirituality is the bitter-sweet yearning for beauty, truth, love and wonder beyond ourselves. It is a longing we pursue together and a treasure we glimpse in ourselves and one another and seek beyond us into eternity. It is life in all its fullness.’

DESIGN & TECHNOLOGY: AGE RELATED STATUTORY COVERAGE

EYFS	KEY STAGE ONE LEARNING	KEY STAGE TWO LEARNING
<p>Expressive Arts and Design EYFS Statutory Educational Programme: The development of children’s artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.</p> <p>DESIGN</p> <ul style="list-style-type: none"> • Talk about what they want to make <p>MAKE</p> <ul style="list-style-type: none"> • Use a variety of tools and materials to make models. <p>Creating with materials ELG</p> <ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; <p>Physical development: Fine Motor Skills ELG</p> <ul style="list-style-type: none"> • Use a range of small tools, including scissors, paint brushes and cutlery; competently, safely and confidently. <p>EVALUATE</p> <ul style="list-style-type: none"> • Be excited about what they have made • Share their creations, explaining the process they have used; • Make use of props and materials when role playing characters in narratives and stories. 	<p>DESIGN</p> <ul style="list-style-type: none"> • Design purposeful, functional, appealing products based on design criteria • Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT and, where appropriate, information and communication technology <p>MAKE</p> <ul style="list-style-type: none"> • 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, ingredients according to their characteristics <p>EVALUATE</p> <ul style="list-style-type: none"> • Explore and evaluate a range of existing products • Evaluate ideas and products against design criteria <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> • Build structures, exploring how they can be made stronger, stiffer and more stable • Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from. 	<p>DESIGN</p> <ul style="list-style-type: none"> • Use research and develop 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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>MAKE</p> <ul style="list-style-type: none"> • 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. <p>EVALUATE</p> <ul style="list-style-type: none"> • Investigate and analyse a range of existing products • Evaluate ideas and products against their own design criteria and consider the views of others to improve their work • Understand how key events and individuals have helped shape the world <p>TECHNICAL</p> <ul style="list-style-type: none"> • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures • Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • Apply their understanding of computing to program, monitor and control products. <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.

Skills Map – Design & Technology			
Early Years			
<u>Reception Statements</u>			
Design		Make	Evaluate
Objectives	<ul style="list-style-type: none"> Talk about what they want to make, individually and collaboratively. 	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; Use a range of small tools, including scissors, paint brushes and cutlery; competently, safely and confidently. Use a variety of tools and materials to make models. 	<ul style="list-style-type: none"> Be excited about what they and others have made Share their creations, explaining the process they have used; Make use of props and materials when role playing characters in narratives and stories.
Skills	<ul style="list-style-type: none"> Think of their own ideas. Consider which materials to use. Plan how best to approach a task. 	<ul style="list-style-type: none"> Select appropriate resources & tools. Work safely and hygienically with support. Join materials, using tape or glue. 	<ul style="list-style-type: none"> Describe the making process and say if their product works as they wanted it to and if they like it or not.
Design Inquiry			
<p>Design and Technology is covered throughout the year through weekly themes taken from the interests of the children. A weekly hook sheet is published and computing work can be identified on it. Weekly enhanced provision is planned to ensure the children have the opportunity to explore designing and making skills independently throughout the week.</p>			
Greater Depth			
<p>Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.</p>			

Skills Map – Design & Technology

Year 1

	Objectives	Technical Knowledge	Design	Make	Evaluate
Construction	<p>Design</p> <ul style="list-style-type: none"> Design purposeful, functional, appealing products based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT and, where appropriate, information and communication technology. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 	<ul style="list-style-type: none"> Design products that have a purpose and are aimed at an intended user. Explain how their products will look and make simple annotated drawings. Plan and test ideas using templates. 	<ul style="list-style-type: none"> With support, follow a simple plan with support on what materials to use and why. Cut, shape and score some materials with some accuracy. 	<ul style="list-style-type: none"> Discuss and compare their designs with their peers. Explain what they could do next time to improve their product. evaluate their product against their original design criteria
Textiles	<p>Make</p> <ul style="list-style-type: none"> 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, ingredients according to their characteristics. <p>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products. Evaluate ideas and products against design criteria. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. 	<ul style="list-style-type: none"> Design products that have a purpose and are aimed at an intended user. Explain how their products will look and make simple annotated drawings. Plan and test ideas using templates. 	<ul style="list-style-type: none"> With support, follow a simple plan with support on what materials to use and why. Demonstrate how to cut, shape and join fabric to make a simple product. Manipulate fabrics in a simple way to create a desired effect. 	<ul style="list-style-type: none"> Discuss and compare their designs with their peers. Explain what they could do next time to improve their product. evaluate their product against their original design criteria
Cooking	<p>Make</p> <ul style="list-style-type: none"> 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, ingredients according to their characteristics. <p>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products. Evaluate ideas and products against design criteria. 	<ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes. understand where food comes from. 	<ul style="list-style-type: none"> Explain where in the world different foods come from. Understand that all foods come from plants or animals. Understand that food has to be farmed, grown elsewhere or caught. 	<ul style="list-style-type: none"> Name and sort foods into 5 groups of the Eatwell guide. Use their Eatwell knowledge to prepare a balanced diet dish. 	<ul style="list-style-type: none"> Explain why they chose certain amounts of food compared to the Eatwell guide.

Greater Depth

Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.

Skills Map – Design & Technology

Year 2

	Objectives	Technical Knowledge	Design	Make	Evaluate
Construction	<p>Design</p> <ul style="list-style-type: none"> Design purposeful, functional, appealing products based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT and, where appropriate, information and communication technology. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 	<ul style="list-style-type: none"> Design products that have a purpose and are aimed at an intended user. Explain how their products will look and make simple annotated drawings. Plan and test ideas using templates. 	<ul style="list-style-type: none"> With support, follow a simple plan with support on what materials to use and why. Cut, shape and score some materials with some accuracy. 	<ul style="list-style-type: none"> Discuss and compare their designs with their peers. Explain what they could do next time to improve their product. evaluate their product against their original design criteria
Textiles	<p>Make</p> <ul style="list-style-type: none"> 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, ingredients according to their characteristics. <p>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products. Evaluate ideas and products against design criteria. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. 	<ul style="list-style-type: none"> Design products that have a purpose and are aimed at an intended user. Explain how their products will look and make simple annotated drawings. Plan and test ideas using templates. 	<ul style="list-style-type: none"> With support, follow a simple plan with support on what materials to use and why. Demonstrate how to cut, shape and join fabric to make a simple product. Manipulate fabrics in a simple way to create a desired effect. 	<ul style="list-style-type: none"> Discuss and compare their designs with their peers. Explain what they could do next time to improve their product. evaluate their product against their original design criteria
Cooking	<p>Make</p> <ul style="list-style-type: none"> 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, ingredients according to their characteristics. <p>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products. Evaluate ideas and products against design criteria. 	<ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes. understand where food comes from. 	<ul style="list-style-type: none"> Explain where in the world different foods come from. Understand that all foods come from plants or animals. Understand that food has to be farmed, grown elsewhere or caught. 	<ul style="list-style-type: none"> Name and sort foods into 5 groups of the Eatwell guide. Use their Eatwell knowledge to prepare a balanced diet dish. 	<ul style="list-style-type: none"> Explain why they chose certain amounts of food compared to the Eatwell guide.

Greater Depth

Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.

Skills Map – Design & Technology

Year 3

	Objectives	Technical Knowledge	Design	Make	Evaluate
Construction	<p>Design</p> <ul style="list-style-type: none"> Use research and develop 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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 	<ul style="list-style-type: none"> design innovative and appealing product that has a clear purpose and are aimed at a specific user. explain how particular parts of their products work. Explore different initial ideas before coming up with a final design. 	<ul style="list-style-type: none"> Increased ability to plan by suggesting what to do next with adult intervention and support. with growing confidence, select from a wide range of tools and equipment, explaining their choices; and use them safely and appropriately. cut, shape or score a range of materials with some degree of accuracy. 	<ul style="list-style-type: none"> Complete peer assessment, making comments on what they like about someone’s design. consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product. evaluate their product against their original design criteria
Textiles	<p>Make</p> <ul style="list-style-type: none"> 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. <p>Evaluate</p> <ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. <p>Understand how key events and individuals have helped shape the world.</p>	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. 	<ul style="list-style-type: none"> design innovative and appealing product that has a clear purpose and are aimed at a specific user. Explore different initial ideas before coming up with a final design. 	<ul style="list-style-type: none"> Increased ability to plan by suggesting what to do next with adult intervention and support. with growing confidence, select from a wide range of tools and equipment, explaining their choices; and use them safely and appropriately. Demonstrate how to measure, cut, shape and join fabrics with some accuracy to make a simple product. Join textiles with an appropriate sewing technique. 	<ul style="list-style-type: none"> Complete peer assessment, making comments on what they like about someone’s design. consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product. evaluate their product against their original design criteria
Cooking	<ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. <p>Understand how key events and individuals have helped shape the world.</p>	<ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes. understand where food comes from. 	<ul style="list-style-type: none"> Start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world. 	<ul style="list-style-type: none"> Use a range of techniques such as mashing, whisking, crushing, grating, and kneading. Start to independently follow a recipe. 	<ul style="list-style-type: none"> Understand how to prepare and cook a variety of predominately savoury dishes safely and hygienically. With support, use a heat source to cook ingredients, showing an awareness of needing to control the temperature.

Greater Depth

Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.

Skills Map – Design & Technology

Year 4

	Objectives	Technical Knowledge	Design	Make	Evaluate
Construction	<p>Design</p> <ul style="list-style-type: none"> Use research and develop 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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 	<ul style="list-style-type: none"> design innovative and appealing product that has a clear purpose and are aimed at a specific user. explain how particular parts of their products work. Explore different initial ideas before coming up with a final design. 	<ul style="list-style-type: none"> Increased ability to plan by suggesting what to do next with adult intervention and support. with growing confidence, select from a wide range of tools and equipment, explaining their choices; and use them safely and appropriately. cut, shape or score a range of materials with some degree of accuracy. 	<ul style="list-style-type: none"> Complete peer assessment, making comments on what they like about someone’s design. consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product. evaluate their product against their original design criteria
Textiles	<p>Make</p> <ul style="list-style-type: none"> 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. <p>Evaluate</p> <ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. <p>Understand how key events and individuals have helped shape the world.</p>	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. 	<ul style="list-style-type: none"> design innovative and appealing product that has a clear purpose and are aimed at a specific user. Explore different initial ideas before coming up with a final design. 	<ul style="list-style-type: none"> Increased ability to plan by suggesting what to do next with adult intervention and support. with growing confidence, select from a wide range of tools and equipment, explaining their choices; and use them safely and appropriately. Demonstrate how to measure, cut, shape and join fabrics with some accuracy to make a simple product. Join textiles with an appropriate sewing technique. 	<ul style="list-style-type: none"> Complete peer assessment, making comments on what they like about someone’s design. consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product. evaluate their product against their original design criteria
Cooking	<ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. <p>Understand how key events and individuals have helped shape the world.</p>	<ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes. understand where food comes from. 	<ul style="list-style-type: none"> Start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world. 	<ul style="list-style-type: none"> Use a range of techniques such as mashing, whisking, crushing, grating, and kneading. Start to independently follow a recipe. 	<ul style="list-style-type: none"> Understand how to prepare and cook a variety of predominately savoury dishes safely and hygienically. With support, use a heat source to cook ingredients, showing an awareness of needing to control the temperature.

Greater Depth

Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.

Skills Map – Design & Technology

Year 5

	Objectives	Technical Knowledge	Design	Make	Evaluate
Construction	<p>Design</p> <ul style="list-style-type: none"> Use research and develop 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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	<ul style="list-style-type: none"> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers, and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] 	<ul style="list-style-type: none"> design products that have a clear purpose and indicate the design features of their products that will appeal to the intended use. explain how particular parts of their products work. generate a range of design ideas and clearly communicate final designs 	<ul style="list-style-type: none"> Increased ability to independently plan by suggesting what to do next. with growing confidence, select from a wide range of tools and equipment, explaining their choices; and use them safely and appropriately. cut, shape or score a range of materials with precision and accuracy. 	<ul style="list-style-type: none"> complete detailed peer assessment to analyse other products. critically evaluate the quality of their design, and its fitness for purpose of products as they design and make. evaluate their ideas and products against the original design criteria, making changes as needed
Textiles	<p>Make</p> <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. 	<ul style="list-style-type: none"> design products that have a clear purpose and indicate the design features of their products that will appeal to the intended use. generate a range of design ideas and clearly communicate final designs 	<ul style="list-style-type: none"> Increased ability to independently plan by suggesting what to do next. learn to use a range of tools and equipment safely and appropriately. demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product. join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch 	<ul style="list-style-type: none"> complete detailed peer assessment to analyse other products. critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make. evaluate their ideas and products against the original design criteria, making changes as needed
Cooking	<p>Evaluate</p> <ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals have helped shape the world. 	<ul style="list-style-type: none"> Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed. 	<ul style="list-style-type: none"> know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world. understand about seasonality, how this may affect the food availability and plan recipes according to seasonality. explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes. adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma 	<ul style="list-style-type: none"> alter methods, cooking times and/or temperatures. measure accurately and calculate ratios of ingredients to scale up or down from a recipe. independently follow a recipe 	<ul style="list-style-type: none"> demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling

Greater Depth

Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.

Skills Map – Design & Technology

Year 6

	Objectives	Technical Knowledge	Design	Make	Evaluate
Construction	<p>Design</p> <ul style="list-style-type: none"> Use research and develop 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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	<ul style="list-style-type: none"> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers, and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] 	<ul style="list-style-type: none"> design products that have a clear purpose and indicate the design features of their products that will appeal to the intended use. explain how particular parts of their products work. generate a range of design ideas and clearly communicate final designs 	<ul style="list-style-type: none"> independently plan by suggesting what to do next. with growing confidence, select from a wide range of tools and equipment, explaining their choices; and use them safely and appropriately. cut, shape or score a range of materials with precision and accuracy. 	<ul style="list-style-type: none"> complete detailed peer assessment to analyse other products. critically evaluate the quality of their design, and its fitness for purpose of products as they design and make. evaluate their ideas and products against the original design criteria, making changes as needed
Textiles	<p>Make</p> <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. 	<ul style="list-style-type: none"> design products that have a clear purpose and indicate the design features of their products that will appeal to the intended use. generate a range of design ideas and clearly communicate final designs 	<ul style="list-style-type: none"> independently plan by suggesting what to do next. learn to use a range of tools and equipment safely and appropriately. demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product. join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch 	<ul style="list-style-type: none"> complete detailed peer assessment to analyse other products. critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make. evaluate their ideas and products against the original design criteria, making changes as needed
Cooking	<p>Evaluate</p> <ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals have helped shape the world. 	<ul style="list-style-type: none"> Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed. 	<ul style="list-style-type: none"> know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world. understand about seasonality, how this may affect the food availability and plan recipes according to seasonality. explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes. adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma 	<ul style="list-style-type: none"> alter methods, cooking times and/or temperatures. measure accurately and calculate ratios of ingredients to scale up or down from a recipe. independently follow a recipe 	<ul style="list-style-type: none"> demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling

Greater Depth

Through regularly returning to the processes involved in Design & Technology, greater depth of knowledge and understanding in a range of contexts will be achieved.

	Year 1	Year 2
Examples of Deeper Thinking Questions	<ul style="list-style-type: none"> • What would you change about your design? • How could you make your design faster/stronger etc? • What do you like about someone else’s design? • What would happen if you changed....? 	<ul style="list-style-type: none"> • What could you do to make your design better? • Find one thing that is better about someone else’s design. • How would you help someone who wanted to make their own...? • What is the best/worst thing about your design?
Cross-Curricular Links	<p>Cycle 1:</p> <ul style="list-style-type: none"> • Au1: Wolf Trap – Science (materials), English (Three Little Pigs), Geography (fairy tale map drawing) • Sp1: Make a Cape – Science (superhero bodies), English (superhero stories), History (superhero story – Edith Cavell) • Su1: Make a Treasure Chest – English (pirate stories), History (shipwreck – Henry Blogg) • Su2: Cooking and nutrition – Maths (measurement) <p>Cycle 2:</p> <ul style="list-style-type: none"> • Au1: Tea Party – English (Fairy Tales) • Sp2: Rocket Crawler –English (Stargazing), Science (rockets), History (moon landing) • Su1: Design and make a boat – Geography (where the boat could sail to) 	
Suggested Writing Opportunities	<p>All DT topics can include writing for planning, designing and evaluating.</p> <p>Cycle 1:</p> <ul style="list-style-type: none"> • Au1: Wolf Trap – instructions for building a wolf trap, Designing & Evaluating. • Sp1: Make a cape – English (description of cape, stories with capes), Designing & Evaluating. • Su1: Make a Treasure Chest – English (pirate stories), Designing & Evaluating. • Su2: Cooking and nutrition –writing recipes, Designing & Evaluating. <p>Cycle 2:</p> <ul style="list-style-type: none"> • Au1: Tea Party – recipe writing, Designing & Evaluating. • Sp2: Rocket Crawler – space stories, Designing & Evaluating. • Su1: Design and make a boat – Designing & Evaluating, stories about boats. 	

	Years 3 & 4		Years 5 & 6	
Examples of Deeper Thinking Questions	<p>Year 3</p> <ul style="list-style-type: none"> • What could you change to improve your design? • What made creating your design difficult? • What questions would you ask if...? 	<p>Year 4</p> <ul style="list-style-type: none"> • Explain what you could change and how it would improve your design? • How would you change your design for the 'real world'? • How effective at.... Is your...? 	<p>Year 5</p> <ul style="list-style-type: none"> • How could you make your design more suited to mass production? • What developments would need to be made for your design to....? • What tests would you need to do to...? 	<p>Year 6</p> <ul style="list-style-type: none"> • What would you need to change to be able to sell your design? • How could you adapt... to make...? • What do you predict would happen if...? • Judge whether.... would cause/change/affect....
Cross-Curricular Links	<ul style="list-style-type: none"> • Cycle 1: • Au1: Cooking a locally sourced meal – Geography (where does our food come from?), Science (Healthy Eating) • Sp2: Stone Age tool/jewellery – History (the Stone Age), Science (Rocks and fossils), English Y4 (Ug: Boy Genius of the Stone Age). • Su2: Cooking (Great bread Bake Off) – Geography (earning a living), Maths (measures) • Cycle 2: • Au2: Christmas crafts and pop-up books • Sp2: Cereal Bars with raisins – History (Anglo-Saxons) • Su2: Roman Catapults – History (Romans) 		<p>Cycle 1:</p> <ul style="list-style-type: none"> • Sp1&2: Structures – Geography (North and South America) • Su1: Creating a healthy, locally sourced meal – Science (the human body), Geography (locally sourced food), Maths (measurement) • Cycle 2: • Au2: WW1 designing a trench – English (War Poets & War Horse), History (WW1), Art (WW1 artists). • Sp2: Cooking different types of bread –English (Historical stories, Anglo-Saxons & Vikings), Science (permanent changes of state), Maths (measurement) • Su1: 3D map of UK/mountain range – English (Foodland), Geography (UK geography) 	
Suggested Writing Opportunities	<ul style="list-style-type: none"> • All DT topics can include writing for planning, designing and evaluating. • Cycle 1: • Au1: Cooking a locally sourced meal – Geography (explanation texts about where food for recipe came from/debate about food sources), Science (explaining and justifying menu choices), Recipe writing • Sp2: Stone Age tool/jewellery – History (the Stone Age), Science (Rocks and fossils), English Y4 (Ug: Boy Genius of the Stone Age). • Su2: Cooking (Great bread Bake Off) – Geography (discussion of how they ensured their product would make a profit), Recipe writing, advertising etc • Cycle 2: • Au2: Christmas crafts and pop-up books • Sp2: Cereal Bars with raisins – History (Explanation of Anglo-Saxon diets), Recipe writing • Su2: Roman Catapults – History (description/explanation of Roman weapons and battles) 		<ul style="list-style-type: none"> • All DT topics can include writing for planning, designing and evaluating. • Cycle 1: • Sp1&2: Structures – English/Geography (description of super-structures) • Su1: Creating a healthy, locally sourced meal – Science (recipes, explaining how it's healthy), Geography (debate about locally sourced food) • Cycle 2: • Au2: WW1 designing a trench – English/history (descriptions of trenches and life in a trench), History (WW1), Art (WW1 artists). • Sp2: Cooking different types of bread – History (historically accurate recipes) • Su1: 3D map of UK/mountain range – English/Geography (description) 	



Design & Technology Long Term Plan

Key Stage One

Years 1 and 2

Cycle One		Cycle Two	
Term/Theme enrichment	Coverage – see skills map	Term/Theme enrichment	Coverage – see skills map
A1: DT - Fairy-tale spoon puppets.	Textiles Using glue, no sewing Yr2 to use 2 pieces of felt the same size either side of the spoon.	A1: DT - Tea party	Cooking
		A2: DT - Rocket crawler.	Construction with mechanism. with wheels, axels
		Sp2: DT - Wild thing mask.	Textiles Using a range of materials including felt, fur, string and others. Yr1 have mask on sticks Yr2 need to measure string or elastic for head.
Su1: DT - Treasure chest	Construction with mechanism. with a hinge/axel Yr2 add a hasp and staple for a lock.		
Su2: DT - Where food comes from	Cooking		



Design & Technology Long Term Plan

Lower Key Stage Two

Years 3 and 4.

Cycle One		Cycle Two	
Term/Theme enrichment	Coverage – see skills map	Term/Theme enrichment	Coverage – see skills map
		A1: DT - Mechanical puppets.	Construction with mechanisms or electrical system With linkages and leavers Yr4 with light up eyes.
A2: DT – Pop-up Christmas cards and light up ornaments	Construction with mechanism or electrical system. Yr3 pop-up cards with sliders and pop-ups Yr4 ornaments with light up system inside.		
		SP2: DT - Pizza	Cooking Using scissors for cutting toppings, rolling pins to roll dough, shape cutters for cutting the pizza.
Su1: DT – Seasonal Soup.	Cooking Blenders and scissors with seasonal veg.	Su1: DT - Travel pillows.	Textiles with sequins, buttons and decorative stitches. Yr3 running stitch or over stitch. Yr4 blanket stitch or back stitch.
Su2: DT - Norman coin purse	Textiles sequins, buttons and decorative stitches. YR4 button clasp.		



Design & Technology Long Term Plan

Upper Key Stage Two

Years 5 and 6

Cycle One		Cycle two	
Term/Theme Enrichment	Coverage – see skills map	Term/Theme Enrichment	Coverage – see skills map
		A2: DT – Make, do, mend with applique. (Children bring in old clothes)	Textiles Yr5 pencil case roll Yr6 WW1 repurposed item (their choice)
Sp1: DT – Stuffed toy animals with applique.	Textiles Back stitch, blanket stitch and cross stitch.		
Sp2: DT – Bridges	Construction with mechanical system: a mechanical draw bridge using pulleys and levers. Yr6 add an electrical systems (buzzer or light system for the bridge)	Sp2: DT - Electrical space buggy	Construction with electrical mechanism: with axel, wheel, motor. Yr6 add additional electrical component light or buzzer system
Su2: DT - Veggie quesadilla and salsa dips.	Cooking Knife skills, using an oven.	Su2: DT - Reimaged, 2 ingredients savoury scones.	Cooking Following recipes accurately with measuring and weighing