



The DT Curriculum Year 5

National Curriculum Objectives

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- 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

Make

- 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

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- 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.

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- 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

Make

- 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

Evaluate

- 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

Technical knowledge

- 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 their products.

4 Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key stage 2

- 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

Year 5		Autumn 1 – Textiles (Stuffed Toys)	
National Curriculum			
National Curriculum objectives <ul style="list-style-type: none">• Generate, develop, model and communicate their ideas through discussions, 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• Apply their understanding of how to strengthen, stiffen, and reinforce more complex structures• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work			
Prior Learning		Future Learning	
EYFS: <ul style="list-style-type: none">• Develop threading and weaving skills.• Develop their fine motor skills so that they can use a range of tools competently, safely and confidently.• Practice and apply weaving skills to specific materials.• Created a product using a design.• Reflected on what they have achieved. Year 1 <ul style="list-style-type: none">• Know joining technique means connecting two pieces of materials.• Know that there are various methods of joining fabric e.g., glue, pins or staples.• Know that a template is used to cut out the same shape multiple times.• Know that a design is useful to see how an idea will look.		Year 4 <ul style="list-style-type: none">• Know that a fastening is something that holds two pieces of material together.• Know that different fastening types are useful for different purposes. Year 5 <ul style="list-style-type: none">• Know that a blanket stitch is useful to reinforce edges of fabric or join two fabrics together.• Know small, neat stitches which are pulled taut see important to ensure the toy is strong and holding stuffing securely.	
Design	Make	Evaluate	Technical Knowledge
<ul style="list-style-type: none">• Designing a stuffed toy considering the main component shapes required and creating an appropriate template• Considering the proportions of individual components	<ul style="list-style-type: none">• Creating a 3D stuffed toy from a 2D design• Measuring, marking and cutting fabric accurately and independently• Creating strong and secure blanket stitches when joining fabric• Using applique to attach pieces of fabric decoration	<ul style="list-style-type: none">• Testing and evaluating an end product and giving point for further improvements	<ul style="list-style-type: none">• Learning to sew blanket stitch to join fabric• Applying blanket stitch so the space between the stitches are even and regular• Threading needles independently
Substantive Knowledge Acquired in the Unit			
<ul style="list-style-type: none">• Know that a blanket stitch is useful to reinforce edges of fabric or join two fabrics together.• Know that stuff toys are often made by creating appendages separately.• Know small, neat stitches which are pulled taut see important to ensure the toy is strong and holding stuffing securely.			
Disciplinary Knowledge Acquired in the Unit			
Fixing and joining <ul style="list-style-type: none">• Understand how different materials can be reinforced for different purposes.			

- Assembling materials in temporary ways as a trial prior to finalizing design choices.
- Cutting and joining component parts to a main structure.

Marking out and cutting

- Measuring accurately, marking out, cutting.

Key Skills Acquired in the Unit

- Designing a stuffed toy considering the main component shapes required and creating an appropriate template.
- Measuring, marking and cutting fabric accurately and independently.
- Sewing blanket stitch to join fabric.
- Considering the proportions of individual components
- Creating strong and secure blanket stitches when joining fabric.
- Applying blanket stitch so the spaces between the stitches are even and regular.
- Threading needles independently.
- Testing and evaluating an end product and giving points for further improvements.
- Creating a 3D stuffed toy from a 2D design.
- Using appliqué to attach pieces of fabric decoration.
- Testing and evaluating an end product and giving points for further improvements.

Misconceptions

Some children may think:

- Only a blanket stitch can be used around the edge.
- All toys are stuffed with cotton.
- Felt is the best fabric to make stuffed toys.
- All toys are hand stitched.
- A running stitch can be used for any product.

By the end of this unit pupils will:

- Designing a stuffed toy considering the main component shapes required and creating an appropriate template.
- Considering the proportions of individual components.
- Creating a 3D stuffed toy from a 2D design.
- Measuring, marking and cutting fabric accurately and independently.
- Creating strong and secure blanket stitches when joining fabric.
- Threading needles independently.
- Using appliqué to attach pieces of fabric decoration.
- Sewing blanket stitch to join fabric.
- Applying blanket stitch so the spaces between the stitches are even and regular.
- Testing and evaluating an end product and giving points for further improvements.

Medium Term Planning

	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Retrieval	Flashback 4 Question 1: What is the person in the picture	Flashback 4 Question 1: What do we call something that holds two pieces of fabric together	Flashback 4 Question 1: What is the third step when sewing a running stitch? (knot the needle, start	Flashback 4 Question 1: What is the name of a stencil you can use to help you draw the same shape	Flashback 4 Question 1: Why do we evaluate a product? (to help us write down our ideas, to put parts

	<p>doing? (Threading, weaving, cutting, gluing)</p> <p>Question 2: What is the picture of? (fabric, needle, template, thread)</p> <p>Question 3: What word is missing? 'A running stitch is a style of sewing in a ____ line with no overlapping. (curvy, wavy, straight, round)</p> <p>Question 4: What do you call the part of the needle you put the thread through? (nose, eye, ear, mouth)</p>	<p>securely? (assemble, template, fastening, stitch)</p> <p>Question 2: Which one of these would not be used as a fastening? (glue, button, Velcro, buckle)</p> <p>Question 3: What is the first step when sewing a running stitch? (knot the needle, start the stitch from the bottom going up and down, thread the needle, knot the last stitch)</p> <p>Question 4: What is the second step when sewing a running stitch? (knot the needle, start the stitch from the bottom going up and down, thread the needle, knot the last stitch)</p>	<p>the stitch from the bottom going up and down, thread the needle, knot the last stitch)</p> <p>Question 2: What is the final step when sewing a running stitch? (knot the needle, start the stitch from the bottom going up and down, thread the needle, knot the last stitch)</p> <p>Question 3: What is the name of notes added to a design to explain your plan? (detail, template, annotation, design)</p> <p>Question 4: Which word is used to describe when a product is aimed at a group? (target audience, fastening, evaluation, design)</p>	<p>more easily onto different materials? (audience, assemble, template, fastening)</p> <p>Question 2: When sewing a running stitch, stitches should be ____ and close together so they are strong. (large, small, round, together)</p> <p>Question 3: Which of these are types of techniques used to sew? (cross stitch, running stitch, blanket stitch, applique)</p> <p>Question 4: What word do we use to describe adding decorations to the product? (threading, knotting, shaping, embellish)</p>	<p>together, to improve a product, to draw round a product)</p> <p>Question 2: What is the final step when sewing a running stitch? (knot the needle, start the stitch from the bottom going up and down, thread the needle, knot the last stitch)</p> <p>Question 3: What is the name of a type of textiles work where small pieces of cloth are sewn or stuck in a pattern onto a larger piece? (Cross stitch, running stitch, blanket stitch, applique)</p> <p>Question 4: What do we call something that holds two pieces of fabric together securely? (assemble, template, fastening, stitch)</p>
Learning Objective:	To design a stuffed toy.	To sew blanket stitch.	To create and add decorations to fabric.	To use a blanket stitch to assemble components of a stuffed toy.	To evaluate the product and make suggestions for improvements.
Key vocabulary	<p>Tier 2</p> <p>Accurate</p> <p>Annotate</p> <p>Detail</p> <p>Design criteria</p> <p>Tier 3</p> <p>Template</p> <p>Sew</p> <p>Running-stitch</p> <p>Cross stitch</p> <p>Appliqué</p>	<p>Tier 2</p> <p>Accurate</p> <p>Detail</p> <p>Tier 3</p> <p>Template</p> <p>Sew</p> <p>Running-stitch</p> <p>Cross stitch</p> <p>Appliqué</p>	<p>Tier 2</p> <p>Accurate</p> <p>Detail</p> <p>Appendage</p> <p>Assemble</p> <p>Tier 3</p> <p>Template</p> <p>Sew</p> <p>Running-stitch</p> <p>Cross stitch</p> <p>Appliqué</p>	<p>Tier 2</p> <p>Accurate</p> <p>Detail</p> <p>Assemble</p> <p>Components</p> <p>Tier 3</p> <p>Stuffing</p> <p>Sew</p> <p>Running-stitch</p> <p>Cross stitch</p> <p>Appliqué</p>	<p>Tier 2</p> <p>Accurate</p> <p>Annotate</p> <p>Detail</p> <p>Repair</p> <p>Tier 3</p> <p>Sew</p> <p>Running-stitch</p> <p>Cross stitch</p> <p>Appliqué</p>
Possible outcome	Children will design a stuffed toy with appendages and details. Know which fabrics/resources will be needed to complete their stuffed toy. Annotate the design with ideas. Create an appropriate template for a stuffed toy.	Children will practice a blanket stitch and neatly sew around the edge of their stuffed toy. Neatly cut the fabric.	Children will see on their decorations using a range of sewing techniques learnt.	Children will use the blanket stitch to join the appendages to the main body of the stuffed toy.	Refer back to the original design and annotate the final outcome to evaluate their stuffed toy. Identify what went well and what needs improving.

Year 5	Spring 1 – Cooking and Nutrition (What could be healthier)
National Curriculum	
<p><u>National Curriculum objectives</u></p> <ul style="list-style-type: none"> • Understand and apply the principles of a healthy and varied diet • 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 • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Apply their understanding of computing to program, monitor and control their products. 	
Cross-Curricular Links:	
<ul style="list-style-type: none"> • British Values: Mutual respect, tolerance of those with different faiths and beliefs. • Computing: Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 	
Prior Learning	Future Learning
<p>EYFS</p> <ul style="list-style-type: none"> • Know the names of different types of fruit and vegetables. • Know how to safely use a knife to cut up foods into smaller pieces. • Know that different ingredients can be put together to make meal. • Know it is important to wash hands before preparing food. • Know different equipment can be used to cook equipment. <p>Year 1</p> <ul style="list-style-type: none"> • Understand the difference between fruit and vegetables. • Know a blender mixes ingredients together into a liquid. • Know vegetables grow either above or below the ground. • Know some foods typically known as vegetables are actually fruits (e.g., cucumber) • Know fruits grow on trees or vines. • Know fruits have seeds and vegetables do not. • Know vegetables can come from different parts of a plant. <p>Year 2</p> <ul style="list-style-type: none"> • Know what ‘hidden sugars’ are. • Know where to find the nutritional information on a drinks container, • Know that there are five food groups. • Know roughly how much of each food group I should eat each day. • Know that the most ideal ingredient combinations for my wrap will contain foods from more than one food group. • Know how to prepare food safely using the correct tools. 	<p>Year 6</p> <ul style="list-style-type: none"> • Know that many countries have national dishes which are recipes associated with that country. • Know that processed food means food that has been put through multiple changes in a factory. • Know it’s important to wash fruit and vegetables before eating to remove any dirt or insecticides.

Year 3 <ul style="list-style-type: none"> Know that not all fruits and vegetables can be grown in the UK. Know that climate affects food growth. Know that vegetables and fruit grow in certain seasons. Know that cooking instructions are known as a 'recipe'. Know that imported food is food that has been brought into the country. 			
Design	Make	Evaluate	Technical Knowledge
<ul style="list-style-type: none"> Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients Writing an amended method for a recipe to incorporate the relevant changes to ingredients Designing appealing packaging to reflect a recipe 	<ul style="list-style-type: none"> Cutting and preparing vegetables safely Using equipment safely, including knives, hot pans and hobs Knowing how to avoid cross-contamination Following a step by step method carefully to make a recipe 	<ul style="list-style-type: none"> Identifying the nutritional differences between different products and recipes Identifying and describing healthy benefits of food groups 	<ul style="list-style-type: none"> Understanding where food comes from - learning that beef is from cattle and how beef is reared and processed Understanding what constitutes a balanced diet Learning to adapt a recipe to make it healthier Comparing two adapted recipes using a nutritional calculator and then identifying the healthier option
Substantive Knowledge Acquired in the Unit			
<ul style="list-style-type: none"> Know where meat comes from. Know that I can adapt a recipe to make it healthier by substituting ingredients. Know that I can use a nutritional calculator Know that cross-contamination means that bacteria and germs have been passed onto ready to eat foods. 			
Disciplinary Knowledge Acquired in the Unit			
Finishing, including food hygiene <ul style="list-style-type: none"> Accurate measuring and weighing skills, understanding the properties and quantities of ingredients will affect the final products. Increased awareness of food safety and hygiene, including use of ovens. Exploring the functions and properties of ingredients. 			
Key Skills Acquired in the Unit			
<ul style="list-style-type: none"> Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. Writing an amended method for a recipe to incorporate the relevant changes to ingredients. Designing appealing packaging to reflect a recipe. Cutting and preparing recipes safely. Using equipment safely, including knives, hot pans and hobs. Knowing how to avoid cross-contamination. Following a step-by-step method carefully to make a recipe. Identifying the nutritional differences between different products and recipes. Identifying and describing healthy benefits of food groups. 			
Misconceptions			
Some children may think:			

- Lots of vegetables and fruit is healthy and other food is unhealthy.
- Mixing any food will give cross-contamination.
- Healthy meals must have lots of vegetables.
- How to safely prepare a variety of food.
- That certain food groups are healthy and others are not.

By the end of this unit pupils will:

- Understand how beef gets from the farm to our plates.
- Present a subject as a poster with clear information in an easy to read format.
- Contribute ideas as to what a 'healthy meal' means.
- Notice the nutritional differences between different products and recipes.
- Recognise nutritional differences between two similar recipes and give some justification as to why this is.
- Work as a team to amend a bolognese recipe with healthy adaptations.
- Follow a recipe to produce a healthy bolognese sauce.
- Design packaging that promotes the ingredients of the bolognese.

Medium Term Planning

	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Retrieval	Flashback 4 Question 1: Where do fruits grow? (above or below the ground, on trees or vines) Question 2: Where do vegetables grow? (above or below the ground , on trees or vines) Question 3: Which food group does milk belong to? (carbohydrates, dairy , protein, fruits) Question 4: Which climate are bananas grown in? (Polar, Tropical , Mediterranean, Dry)	Flashback 4 Question 1: What meat comes from cows? Beef, lamb, chicken, pork Question 2: Which food group does rice belong to? (protein, fruit, dairy, carbohydrates) Question 3: Which word describes foods being brought into the country? (climate, seasonal, import , exports) Question 4: A _____ diet consists of measured amounts of different food. (healthy, unhealthy, balanced , protein)	Flashback 4 Question 1: What do we call the process of food being grown or reared on a farm to then be turned into food? Farm to fork, decomposing, food chain, exportation Question 2: Some plants are crushed for their juice. This is called _____ (evaporation, crystal, harvested, extraction) Question 3: How many calories should a women consume per day? (1,500, 2,000 , 2,500, 3,000) Question 4: How many calories should a man consume per day? (1,500, 2,000, 2,500 , 3,000)	Flashback 4 Question 1: In a recipe, what is the method? Question 2: Why is it important to eat fruit and vegetables? (help us grow, heal when your skin hurts, keeps your skin healthy, gives you energy) Question 3: What is the name for caring for the health and happiness of a person or animal? (farming, cross-contamination, processing, welfare) Question 4: Which food group does milk belong to? (carbohydrates, dairy , protein, fruits)	Flashback 4 Question 1: What is it called when bacteria and germs is passed onto ready to eat food? (welfare, waste, processing, cross-contamination) Question 2: Which word describes foods being sent to other countries? (climate, seasonal, import, exports) Question 3: When does cross-contamination occur? Food decomposes and rots, savoury and sweet foods mix, the best before date expires on food, ready to eat foods mix with raw or unclean foods Question 4: Which food group does rice belong to? (protein, fruit, dairy, carbohydrates)
Learning Objective:	To understand where food comes from.	To understand the term 'healthy'.	To adapt a traditional recipe.	To complete a food product.	To evaluate a food produce and make suggestions on improvements.
Key vocabulary	Tier 2 Processed Reared	Tier 2 Processed Reared	Tier 2 Adapt Nutritious	Tier 2 Adapt Nutritious	Tier 2 Adapt Nutritious

	Ethical Research Tier 3 Diet Beef Supermarket Farm Welfare Packaging	Ethical Balanced Research Tier 3 Diet Beef Supermarket Farm Packaging	Alternative Method Additional Tier 3 Diet Beef Cross-contamination	Alternative Method Additional Tier 3 Diet Beef Cross-contamination	Alternative Method Additional Tier 3 Diet Beef Farm
Possible outcome	Children will research where beef comes from and the journey it takes from the farm to the shop.	Children will understand and research a healthy recipe.	Children will recognise nutritional differences in 2 similar recipes and work in a pair to adapt a traditional Bolognese recipe to make it healthier.	Children will cook a healthier Bolognese by following a recipe.	Children will evaluate their own recipe, as well as gathering ideas from others, and make suggestions how this recipe could be improved.

Year 5	Summer 1 - Woodcraft (Stools)
National Curriculum	
National Curriculum objectives: <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 group. 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 	
Cross-Curricular Links:	
<ul style="list-style-type: none"> Maths: estimate, compare and calculate different measures. 	
Prior Learning	Future Learning
EYFS Year 2 <ul style="list-style-type: none"> know the purpose of a structure. know wood can be changed in different ways. know how to spilt wood into small fractions. know some wood can be flexible and some wood can be rigid. 	

Design	Make	Evaluate	Technical Knowledge
<ul style="list-style-type: none"> Carry out research into user needs and existing products, using surveys, interviews, questionnaires, and web-based resources. Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches. 	<ul style="list-style-type: none"> Formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used. Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. Use finishing and decorative techniques suitable for the product they are designing and making. 	<ul style="list-style-type: none"> Investigate and evaluate a range of existing products. Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. Research key events and individuals relevant to the product. 	<ul style="list-style-type: none"> Understand how to strengthen, stiffen and reinforce frameworks. Know and use technical vocabulary relevant to the project.
Substantive Knowledge Acquired in the Unit			
<ul style="list-style-type: none"> Know a drill is a machine with a rotating cutting tip used for making holes. Know a crook knife is a woodworking knife with a curved end. Know that the fore hand grip can be used to remove any sharp bits from the wood. Know how to use a tape measure to measure in centimeters. Know where to place the legs to make the stool secure. Know how to safely use tools such as knife and drill. 			
Disciplinary Knowledge Acquired in the Unit			
<p>Marking and cutting out</p> <ul style="list-style-type: none"> Measuring accurately, marking out, cutting, drilling. Using a range of sharp tools safely. <p>Fixing and joining</p> <ul style="list-style-type: none"> Understanding how materials can be reinforced for different purposes. 			
Key skills Acquired in the Unit			
<ul style="list-style-type: none"> Use a drill safely to make holes. Use a crook knife safely to cut wood. Use a tape measure to measure wood to cut. Use a fore hand grip to remove sharp bits. 			
Misconceptions			
<p>Some children may think:</p> <ul style="list-style-type: none"> Knives are only used to cut objects. Thick objects cannot be cut. Any tools are suitable for any material. 			

- There must always be two people to accurately cut objects.

By the end of this unit pupils will:

- Use a range of tools such as a crook knife and loppers to change the appearance of sticks.
- Use a drill safely.
- Design a product which meets a target audience, ensuring that the specification is accurate.
- Assemble and fix parts of wood together to create an end product.
- Evaluate a product based on the design specification.

Medium Term Planning

	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Retrieval	Flashback 4 Which word best describes something that doesn't break easily. (Weak, strong , smooth, rough) Question 2: Which word best describes something that does break easily? (Weak , strong, smooth, rigid) Question 3: Which tool can you see in the picture? (Scissors, peeler , stapler) Question 4: Which tool would you use to cut this piece of wood in the picture? Loppers, secateurs , children's scissors, knife)	Flashback 4 Question 1: Which word is used to describe when we put something together? (Structure, rigid, manipulate, assemble) Question 2: Which word is used to describe when a material is changed? Structure, rigid, manipulate , assemble) Question 3: Look at the picture. Which words would you use to describe this piece of wood? (Rigid, weak , flexible , strong) Question 4: Look at the picture. Which words would you use to describe this piece of wood? (Rigid , weak, flexible, strong)	Flashback 4 Question 1: What should you do before making a product to see what an idea will look like? (Design , label, manipulate, assemble) Question 2: Which technique is being used in the picture to manipulate the wood? (peeling, whittling , cutting, chopping) Question 3: Look at the picture. Which of these tools would you use to Question 4: What is the name of notes added to a design to explain your plan? (detail, template, annotation , design)	Flashback 4 Question 1: What should you do before making a product to see what an idea will look like? (Design , label, manipulate, assemble) Question 2: Which technique is being used in the picture to manipulate the wood? (peeling, whittling , cutting, chopping) Question 3: Look at the picture. Which of these tools would you use to Question 4: What is the name of notes added to a design to explain your plan? (detail, template, annotation , design)	
Learning Objective:	To explore ways to change the appearance of sticks.	To use a drill.	To design a product for a purpose.	To make a bird box.	To evaluate a product.
Key vocabulary	Tier 2 <ul style="list-style-type: none"> • Manipulate • Whittling • Secure • Diameter Tier 3 <ul style="list-style-type: none"> • Fore hand grip • Crook knife • Loppers • Tape measure 	Tier 2 <ul style="list-style-type: none"> • Pressure • Accurate • Balance • Rotating • Clamping Tier 3 <ul style="list-style-type: none"> • Drill • Screw • Hole • Drill bit 	Tier 2 Purpose Specification Appropriate Precise Tier 3	Tier 2 <ul style="list-style-type: none"> • Rigid • Measure • Assemble • Secure • Elements/component s Tier 3 <ul style="list-style-type: none"> • Fore hand grip • Crook knife • Loppers 	Tier 2 Accurate Annotate Specification Adjustments Tier 3

				<ul style="list-style-type: none"> • Tape measure • Drill • Screw 	
Possible outcome	Children will find a stick, measure it, cut it then whittle it with a crook knife.	Children will use a tape measure to measure and cut different size pieces of wood. Children will measure, mark and drill holes in their wood.	Children will think about the purpose of their birdbox and design a product with an appropriate specification, thinking about both the materials and skills the children will need.	Children will assemble the different components of their bird box in line with their design or make changes if necessary.	Children will refer to their original design and evaluate their final product. They will reflect on what went well, as any changes they made and why, and what they would do differently next time.