



Northwood Park Primary School

Design and Technology - Knowledge and Skills Progression

Strand	By the end of EYFS	By the end of Y1	By end of Y2	By end of Y3	BY end of Y4	By end of Y5	By end of Y6
Food Technology Cooking Hygiene	I know why it is important to have a healthy, balanced diet. I know how to describe the taste of foods using a variety of key vocabulary – e.g. sweet, sour, crunchy, chewy. I know how fruit grows and where we can buy fruit and vegetables from. I know how to make a simple drawing of my product	I know why it is important to draw on my own experiences to help generate ideas before creating my product. I know why it is important to suggest ideas and explain what I will be doing prior to creating my product. I know how to make my design using appropriate equipment and materials/ingredients. I know how to select and use appropriate	I know why it is important to generate ideas for an item, considering its purpose and the users. I know why it is important to explore, develop and communicate design proposals by modelling ideas, observing, discussing and drawing. I know how to make drawings	I know why it's important to generate ideas, considering the purposes for which I am designing. I know why it is important to plan the order of my work before starting. I know why it is important to work safely and accurately with a range of simple tools. I know how to select	I know why it's important to generate ideas, considering the purposes for which they are designing. I know how to make labelled drawings from different views showing specific features. I know why it's important to have a clear idea of what has to be done, planning how to use	I know why it is important to generate ideas, considering the purposes for which they are designing. I know how to make labelled drawings from different views showing specific features. I know why it is important to develop a clear idea of what has to be done, planning how to use materials,	I know why it's important to generate ideas, considering the purposes for which I am designing. I know how to make labelled drawings from different views showing specific features. I know why it's important to have a clear idea of what has to be done, planning how to use materials, equipment and



	considering what it would look like. I know how to transport and store equipment safely such as carrying the blades of the scissors in the palm of their hand and not running. I know how to use tools safely.	fruit and vegetables, processes and tools. I know why it is important to follow basic food handling, hygienic practices and personal hygiene when creating my product. I know how to evaluate my product, identifying strengths and possible changes for future products. I know why it is important to talk about my ideas, saying what I like and dislike about my product.	with labels when designing. I know why it is important to follow safe procedures for food safety and hygiene when creating my product. I know how to select tools and materials; use vocabulary to name and describe them. I know how to use hand tools safely and appropriately. I know why it is important to work safely and accurately with	appropriate tools and utensils and develop techniques for making my product, preparing and combing foods. I know why it is important to think about my ideas as I make progress with my product and be willing change things if this helps me to improve my work. I know how to evaluate my product against the original design criteria carrying out appropriate tests <i>e.g. how</i>	materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail. know why it is important to generate ideas, considering the purposes for which I am designing. I know how to make labelled drawings from different views showing specific features. I know how to select appropriate tools and	equipment and processes, and suggesting alternative methods of making, if the first attempts fail. I know how to safely store food and ingredients by chilling in the fridge to avoid harmful bacteria growing. I know why it is important to have a healthy, nutritious diet and knowledge of appropriate food alternatives. I know how to select	processes, and suggesting alternative methods of making, if the first attempts fail. I know how to select appropriate tools and techniques for making my product. I know why it is important to understand food hygiene methods. I know why it is important to evaluate my work both during and at the end of the assignment, and that I can use
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			a range of simple tools. I know how to evaluate my product, identifying strengths and possible changes for future products. I know why it is important to talk about my ideas, saying what I like and dislike about my product	<i>well it meets its intended purpose.</i> I know why it is important to generate ideas, considering the purposes for which they are designing. I know how to identify a purpose and establish criteria for a successful product, planning the order of my work before starting. I know why it is important to explore, develop and communicate	techniques for making my product and how to safely use utensils and equipment including heat sources to prepare and cook food. I know how to prepare ingredients safely and hygienically, with knowledge of the 'Eatwell plate'. I know why it is important to understand food hygiene methods when creating my product.	appropriate tools and techniques for making their product. I know how to use utensils and equipment including heat sources to prepare and cook food. I know why it is important to understand food hygiene methods. I know why it is important to evaluate my work both during and at the end of the assignment, and that I can use the data	the data collected to collate within bar and pie charts to analyse. I know how to evaluate my product by carrying out appropriate tests.
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				design proposals by modelling ideas. I know how to make drawings with labels when designing my product. I know why certain steps are needed to make a light up picture and the equipment needed to support me in doing so. I know how to measure, mark out, cut, score and assemble components with more accuracy.	I know why it is important to evaluate my work both during and at the end of the assignment. I know how to evaluate my product carrying out appropriate tests.	collected to collate within bar and pie charts to analyse. I know how to evaluate my product by carrying out appropriate tests.	
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				I know how to work safely and accurately with a range of simple tools. I know how to evaluate products against my original design criteria and identify criteria that can be used for my own design and future products.			
Strand	By the end of EYFS	By the end of Y1	By end of Y2	By end of Y3	BY end of Y4	By end of Y5	By end of Y6



Construction Mechanical Electrical	I know why different materials are used for a variety of structures and purposes based on their properties.	I know why it's important to generate ideas, considering the purposes for which I am designing.	I know why it's important to generate ideas, considering the purposes for which I am designing.	I know why it is important to generate ideas, considering the purposes for which they are designing.	I know why it's important to generate ideas, considering the purposes for which I am designing.	I know why it's important to generate ideas, considering the purposes for which I am designing.	I know why it is important to generate ideas, considering the purposes for which they are designing.
	I know how to build a sturdy structure using blocks and bricks.	I know why it is important to identify a target group for who I intend to design and make a product for.	I know why it's important to identify a target group for what they intend to design and make.	I know how to identify a purpose and establish criteria for a successful product, planning the order of my work before starting.	I know how inventors have created products that have paved the path to develop into the products we have today.	I know why it is important to evaluate products and identify criteria that can be used for my own design.	I know why it is important to evaluate products and identify criteria that can be used for my own designs.
	I know how to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.	I know how to model my ideas on card or paper.	I know why it is important to generate ideas for an item, considering its purpose and the user/s.	I know why it is important to explore, develop and communicate design proposals by modelling ideas.	I know why it is important to evaluate products and identify criteria that can be used for my own designs.	I know how inventors have created products that have paved the path to develop into the products we have today.	I know how to evaluate products and identify criteria that can be used for their own designs.
	I know how to make simple	I know how to make my design using appropriate techniques.	I know how to measure, mark out, cut and shape a range of materials with adult support.	I know how to mark out and measure materials correctly, with support.	I know why it is important to	I know how to make labelled	I know how to make labelled drawings from different views



	drawings of my product. I know why insects and animals need certain conditions to live.	I know how to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. I know why it is important to talk about my ideas, saying what I like and dislike about my product.	To use tools safely and appropriately, with support I know how to make simple drawings and label parts of a diagram.	I know how to identify a purpose and establish criteria for a successful product, planning the order of my work before starting. I know why it is important to generate ideas, considering the purposes for which they are designing. I know how to make drawings with labels when designing my product. I know how to select tools and develop	develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods. I know why I need to select appropriate tools and develop techniques for making my product. I know how to join and combine materials and components accurately in temporary and permanent way.	drawings from different views showing specific features. I know why it's important to develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods. I know why it is important that my product will need to follow a design criteria, which incorporates the precise goals that a project must	showing specific features. I know how to ensure fixed axles allow the wheels to rotate freely and continuously when a pulley is attached. I know how to apply my understanding of computing to program, monitor and control their products. I know why it is important that my product will need to follow a design criteria, which
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				techniques for making my product. I know how to evaluate products against my original design criteria and identify criteria that can be used for my own design and future products.	I know why it is important to evaluate my work both during and at the end of the assignment, and that I can use the data collected to collate within bar and pie charts to analyse.	achieve in order to be successful. e.g. a circuit to power the buzzer and light, a switch to safely control the input and output. I know why a wider range of materials and components should be carefully chosen, including construction materials, textiles, according to their functional properties and aesthetic qualities.	incorporates the precise goals that a project must achieve in order to be successful. e.g. a circuit to power the buzzer and light, a switch to safely control the input and output. I know why it is important to develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods.
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						I know how to label my design using the correct symbols for each component of my circuit e.g. battery, LED's, bulb, wire, buzzer. I know why it is important to select appropriate tools and techniques for making my product. I know how to join and combine materials and components accurately in temporary and permanent way.	I know how to label my design using the correct symbols for each component of my circuit e.g. battery, LED's, bulb, wire, buzzer. I know how to select appropriate tools and techniques for making my product. I know how to join and combine materials and components accurately in temporary and permanent way. I know why it is important to
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						I know why it is important to evaluate my work both during and at the end of the assignment and I can use the data collected to collate within bar charts. I know how to evaluate my product carrying out appropriate tests.	complete a process of review for each construction phase to ensure that each part works and is secure to achieve a fully effective end product. I know why it is important to evaluate their work both during and at the end of the assignment. I know how to evaluate my product carrying out appropriate tests.
Strand	By the end of EYFS	By the end of Y1	By end of Y2	By end of Y3	BY end of Y4	By end of Y5	By end of Y6



Textiles Sewing	I know how to use tools safely – scissors when cutting.	I know why it is important to suggest ideas and explain what I am doing prior to creating my product.	I know why it is important to generate ideas by drawing on my own and other people's experiences.	I know why it is important to generate ideas for an item, considering its purpose and the users.	I know why it is important to generate ideas, considering the purposes for which I am designing.	I know why it is important to generate ideas, considering the purposes for which they are designing.	I know why it is important to evaluate their work both during and at the end of the assignment.
	I know why I need to use hand tools safely and appropriately	I know how to identify a target group for what I intend to design and make	I know why it is important to generate ideas by drawing on my own and other people's experiences.	I know how to identify a purpose and establish criteria for a successful product.	I know why it is important to develop knowledge of different stitches and key sewing skills to support the creation of my product.	I know why it is important to develop knowledge of different stitches to support the creation of my tapestry telling a story.	I know how to combine materials securely.
	I know how to talk about my ideas, saying what I like and dislike about my product to evaluate its effectiveness.	I know how to use tools safely <i>eg scissors and a hole punch</i> safely	I know why it is important to explore, develop and communicate design proposals by modelling ideas, observing, discussing and drawing.	I know how to disassemble and evaluate familiar products.	I know how to make labelled drawings from different views showing specific features.	I know how to develop key sewing skills using a needle, thread and materials to combine materials securely.	I know why it is important to develop knowledge of different stitches and key sewing skills to support the creation of my product.
		I know how to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.		I know why it is important to plan the order of my work before starting.			I know how to hand sew embellishments, the thread should be doubled and
		I know how to make simple drawings and		I know why it is important to	I know why it is important to		



		label parts of a diagram. I know how to to measure, mark out, cut and shape a range of materials with adult support. I know how to use a variety of stitches to assemble my chosen material. I know how to measure, cut and score with some accuracy. I know how to securely join two pieces of fabric together using a range of glue and stitch techniques – basting and running stitch.	I know how to identify the purpose for what I intend to design and make, following a simple design criterion. I know how to make simple drawings and label parts of a diagram. I know how to measure, cut and score with some accuracy. I know why I need to use hand tools safely and appropriately. I know how to assemble, join	explore, develop and communicate design proposals by modelling ideas. I know how to make drawings with labels when designing. I know why it important that my product follows a design criteria and how it can be used to create a product. I know how to measure, mark out, cut and shape a range of materials, using appropriate tools,	develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail. I know why it is important to select appropriate tools and techniques for making their product. I know how to measure, mark out, cut and shape a range of materials, using	I know how to make labelled drawings from different views showing specific features. I know why it is important to develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail. I know why appropriate materials, tools and techniques should be chosen for the	kept short to prevent twisting and knotting. I know how to make labelled drawings from different views showing specific features. I know why it is important to develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail. I know how to design purposeful,
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			and combine materials in order to make a product. I know how to evaluate my product against the design criteria and suggest improvements. I know how to talk about my ideas, saying what I like and dislike about my product to evaluate its effectiveness.	equipment and techniques. I know how to join and combine materials and components accurately in temporary and permanent ways. I know how to successfully use scissors to cut and use a ruler to measure accurately to make templates. I know how to make drawings with labels when designing. I know why it is important to work safely and	appropriate tools, equipment and techniques. I know how to join and combine materials and components accurately in temporary and permanent ways. I know why it is important to evaluate my work both during and at the end of the assignment. I know how to evaluate my product and identify criteria that can be used for their	product. E.g. cutting, shaping, joining and finishing, accurately. I know how to join and combine materials and components accurately in temporary and permanent ways. I know how to sew using a range of different stitches, weave and knit. I know how to use a variety of stitches to assemble my chosen material – running,	functional, appealing products for the intended user that are fit for purpose based on a simple design specification. I know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques. I know how to join and combine materials and components accurately in temporary and permanent ways.
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				accurately with a range of simple tools. I know why it is important to think about my ideas as I make progress with my product and be willing change things if this helps them improve their work. I know how to evaluate my product against the design criteria and suggest improvements.	own designs for next time.	basting and overlay stitch. I know why it is important to evaluate my work both during and at the end of the assignment to check the effectiveness of my tapestry story – Is the stitching secure? Does my tapestry show a clear image? I know why it is important to evaluate my work both during and at the end of the assignment and I can use the data collected	I know how to sew using a range of stitches, weave and knit. I know why it is important to evaluate my work both during and at the end of the assignment. I know how to evaluate the effectiveness of my clothing – is the stitching secure? Does my clothing promote individuality? Can it be worn? I know how to evaluate my product and identify criteria
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						to collate within bar charts.	that can be used for my own design for next time.
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