

* **Bold** indicates knowledge

DT - End Points				
	Design	Make		Evaluate EYFS
		Structures/Textiles	Food	
Nursery	Suggest own ideas and decide which materials to use to express them.	<p><u>Nursery</u></p> <p>Know how to make imaginative and complex 'small worlds' with blocks and construction kits</p> <p>Name materials such as cardboard boxes, wall paper, cardboard, sequins, paper, tissue paper, felt</p> <p>Name different tools for cutting and joining e.g. scissors, masking tape, sellotape, pva glue, pritt stick. and use these in their work.</p> <p>Explore scale when making.</p> <p>Know how to use tools safely e.g. scissors, hole punch, pencil.</p>	<p>Know that it is important to wash their hands and be able to do this independently</p> <p>Know some healthy foods.</p> <p>Know how to use tools safely e.g. knives and forks</p>	Suggest own ideas and decide on how to make their creations better.
Reception		<p>Name materials such as cardboard boxes, wall paper, cardboard, sequins, paper, tissue paper and decide which ones to use in their work.</p> <p>Know different techniques for joining materials and use them in their work e.g. adhesive tape, different types of glue.</p> <p>Know how to use a range of tools with increasing care and precision e.g. scissors, hole punches, glue sticks, sellotape.</p> <p>Know what crafts people do e.g. potter or bushcraft and use ideas from what they have learnt in their work</p> <p>Know why tools need to be used safely and how to transport and store them.</p> <p>Create collaboratively, sharing ideas, resources and skills.</p>	<p>Know reasons for variety in food choices.</p> <p>Know vocabulary associated with textures of food e.g. lumpy, smooth, crunchy</p> <p>Know changes that happen to food when it is exposed to hot and cold temperatures.</p> <p>Know how to use, transport and store tools safely e.g. knives and forks and demonstrates this.</p>	Return to and build on their previous learning, refining ideas and developing their ability to represent them.

	Design	Structures	Food	Mechanisms	Evaluate KS1
		<u>PROJECT PURPOSE</u> Make a freestanding structure	<u>PROJECT PURPOSE</u> Make a fruit smoothie	<u>PROJECT PURPOSE</u> Make a card	
Year 1 Tools: Hole Punch Scissors	<p>Know what a user, purpose and product is</p> <p>Know what a design criteria is and use it to inform their design</p> <p>Be able to draw their design.</p> <p>Know what a mock up is and create one for their design where appropriate</p> <p>Know what appealing means.</p> <p>Know that a product has to be appealing and why</p>	<p>Know what a structure is.</p> <p>Know how to make structures stronger, stiffer and more stable and demonstrate this in their work.</p> <p>Know how to join materials purposefully using a variety of temporary methods e.g. masking tape, glue, sello tape, staples</p> <p>Know how to apply their knowledge of structures to make a freestanding structure</p>	<p>Know simple preparation techniques e.g. bridge and claw grip to cut and demonstrate them in your work.</p> <p>Know where a range of fruit and vegetables come from e.g. farmed or grown at home.</p> <p>Know that fruit is part of a healthy diet.</p> <p>Know ways to work hygienically when preparing food.</p> <p>Know how to apply their knowledge of food preparation and healthy eating to make a fruit smoothie.</p>	<p>Know that mechanisms produce different types of movement.</p> <p>Know that sliders and levers are mechanisms.</p> <p>Know the movement of a slider and a lever and demonstrate how one is constructed.</p> <p>Know how to follow their design to make a card with a lever and/or slider mechanism.</p>	<p>Know what an evaluation is.</p> <p>Explore and evaluate a range of existing products.</p> <p>Evaluate their product against the design criteria.</p> <p>Be able to discuss how well their product works in relation to the purpose and the user.</p>
	Design	Textiles	Food	Mechanisms	
		<u>PROJECT PURPOSE</u> Make a finger/hand puppet	<u>PROJECT PURPOSE</u> Make a vegetable kebab	<u>PROJECT PURPOSE</u> Make a wheeled toy	

<p>Year 2</p>	<p>Know what a user is and design appealing products for that user.</p> <p>Know what functional means.</p> <p>Know that a product has to be functional and explain how their design works.</p> <p>Know the term purposeful and to create a purposeful product.</p> <p>Know the purpose of a template and to use templates in their making.</p>	<p>Know how simple 3-D textile products are made.</p> <p>Know what a template is and use templates to create two identical shapes.</p> <p>Know how to join fabrics using different techniques e.g. running stitch, glue and stapling and demonstrate this.</p> <p>Know how to do running stitch</p> <p>Know different finishing techniques that can be used e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons and demonstrate in their work.</p> <p>Know how to apply their knowledge of stitches and finishing techniques to make a puppet.</p>	<p>Know and select appropriate simple preparation techniques e.g. claw and bridge grip to cut and peeling and demonstrate them in your work.</p> <p>Know that fruit and vegetables can be farmed or grown at home.</p> <p>Know that fruit and vegetables are part of a healthy diet.</p> <p>Know that everyone should eat at least five portions of fruit and vegetables every day.</p> <p>Know what a varied diet is.</p> <p>Know how to apply their knowledge of food preparation and healthy eating to make a vegetable kebab.</p>	<p>Know the terms wheel, axle and axle holder.</p> <p>Know the purpose of a wheel, axle and axle holder and demonstrate how these are used.</p> <p>Know the difference between fixed and freely moving axles.</p> <p>Know how to apply their knowledge of wheels and axels to make a wheeled toy.</p>	
	<p>Design</p>	<p>Textiles</p> <p><u>PROJECT PURPOSE</u> Make a pencil case/purse</p>	<p>Food</p> <p><u>PROJECT PURPOSE</u> Make sandwiches</p>	<p>Mechanisms</p> <p><u>PROJECT PURPOSE</u> Make a moving picture</p>	<p>Evaluate KS2</p>
<p>Year 3</p>	<p>Know how to annotate a sketch and to produce annotated sketches of their design</p> <p>Know what a prototype is, what its purpose is and to</p>	<p>Know how to securely join two pieces of fabric together.</p> <p>Know what a seam allowance is.</p> <p>Know how to do running</p>	<p>Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'</p>	<p>Know the purpose of a lever and a linkage and demonstrate how they are used to create movement in their design</p>	<p>Know how to investigate and analyse a range of different products.</p> <p>Know the purpose of testing their product.</p> <p>Test their product against</p>

	<p>create a prototype for their design.</p> <p>Know that products have to have a purpose and be fit for purpose.</p> <p>Know about who the intended user is and the purpose of their design</p> <p>Know that products need to be functional and appealing.</p>	<p>stitch and whip stitch.</p> <p>Know the need for patterns and seam allowances.</p> <p>Know what a pattern piece is and use them in the making of the final product.</p> <p>Know different ways to fasten e.g. button and button hole, velcro and zip</p> <p>Know how to apply their knowledge of stitches, patterns and finishing techniques to make a pencil case</p>	<p>Know how to use a range of techniques such as chopping (claw & bridge) peeling, grating and spreading</p> <p>Know that food can be grown, reared, caught and processed.</p> <p>Know where the ingredients come from (e.g. ham from a pig)</p> <p>Know how to apply their knowledge of food preparation and healthy eating to make a sandwich.</p>	<p>Know the difference between fixed and loose pivots.</p> <p>Know how to apply their knowledge of levers, linkages and pivots to make a moving picture.</p>	<p>the original design criteria and with the intended user.</p> <p>Know how to gather the views of others.</p> <p>Know how to identify strengths and areas for improvement.</p> <p>Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.</p> <p>Continually evaluate and modify the working features of the product to match the initial design specification.</p> <p>Test the system to demonstrate its effectiveness for the intended user and purpose.</p>
	Design	Structures PROJECT PURPOSE: Make a gift box	Food PROJECT PURPOSE: Healthy Pizzas	Electronics PROJECT PURPOSE: Make a torch	
Year 4	<p>Know what an exploded diagram is and demonstrate in the drawing of their design</p> <p>Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.</p>	<p>Know what a shell structure is.</p> <p>Know what a net is and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.</p> <p>Know how to construct strong, stiff shell structures.</p> <p>Know how to manufacture a shell structure based on their generated design.</p>	<p>Know how to use a range of techniques such as chopping (claw & bridge) peeling, grating and spreading. Use sharp knives.</p> <p>know that to be active and healthy, food and drink are needed to provide energy for the body</p> <p>Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'</p> <p>Know that food can be grown, reared, caught and processed.</p>	<p>Know how electrical systems are used in their products.</p> <p>Know what a series circuit is and demonstrate how to make a successful circuit</p> <p>Know the press to make the switch, press to break switch, toggle switch.</p> <p>Know what a buzzer is.</p> <p>Know what a bulb is.</p> <p>Apply their understanding of computing to program and control their products.</p>	<p>Know how key events and individuals in design and technology have helped shape the world</p>

			Know where the ingredients come from (e.g. cheese from dairy)		
	Design	Structures <u>PROJECT PURPOSE:</u> Make a bird box	Food <u>PROJECT PURPOSE:</u> Make bread	Electronics <u>PROJECT PURPOSE:</u> Make a doorbell	
Year 5	<p>Know what innovative means and generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.</p> <p>Know the purpose of research.</p> <p>Know how to use research to develop a design criteria to inform the design of products fit for purpose and aimed at individuals or groups.</p>	<p>Know how to strengthen, stiffen and reinforce 3-D frameworks.</p> <p>Know how to use a junior hack saw, g clamp and bench hook to accurately cut wood.</p> <p>Know how to join 2 pieces of wood e.g. with wood glue, PVA glue, glue gun, hammers and nails</p> <p>Know how triangulation strengthens structures</p> <p>Know how to make a bird box based on their generated design.</p>	<p>Know how to use and select appropriate equipment and utensils to prepare and combine food.</p> <p>Know the origins of the ingredients needed e.g. flour</p> <p>Know the term seasonality and demonstrate through their ingredient choices.</p> <p>Know how make bread, based on their design following a recipe.</p>	<p>Know how to program, monitor and control a product through computing.</p> <p>Apply their understanding of computing to program, monitor and control their products.</p> <p>Know how to draw an electrical circuit.</p> <p>Know how to draw a circuit diagram.</p> <p>Know how environment change can be an input</p>	
	Design	Textiles <u>PROJECT PURPOSE:</u> Make a phone case	Food <u>PROJECT PURPOSE:</u> Make fruit crumble	Mechanisms <u>PROJECT PURPOSE:</u> Make a toy vehicle	
Year 6	<p>Know different methods of research e.g. survey, interview, questionnaire.</p> <p>Know how research informs a design criteria.</p> <p>Know what functional means and design functional products</p> <p>Generate innovative ideas by carrying out research including surveys, interviews and questionnaires.</p> <p>Know what Computer Aided Design (CAD) is and</p>	<p>Know that a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.</p> <p>Know how fabrics can be strengthened, stiffened and reinforced.</p> <p>Know how to use blanket stitch and back stitch.</p> <p>Know how to make a phone case based on their generated design.</p>	<p>Know how to use and select appropriate equipment and utensils to prepare and combine food.</p> <p>Know how to research the origins of the ingredients needed.</p> <p>Know the term seasonality and demonstrate through their ingredient choices.</p> <p>Know how to adapt a recipe and measure</p>	<p>Know that mechanical systems have an input, process and an output.</p> <p>Know what a cam and follower is and demonstrate their use in their design</p> <p>Know how different shaped cams produce different movement</p> <p>Know how to use cams to make a moving toy.</p>	

	<p>demonstrate how to use CAD to draw their design.</p> <p>Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer aided design.</p> <p>Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.</p>		<p>ingredients to make a seasonal crumble..</p>		
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