

MPS DESIGN TECHNOLOGY SKILLS PROGRESSION	KS1			LKS2		UKS2	
	ASPECT	End of EYFS	End of Year 1	End of Year 2	End of Year 3	End of Year 4	End of Year 5
Tools & materials	Explore a variety of materials, tools and techniques looking at colour, design, texture and form.	Select and explain why they have chosen a particular tool for a task. Select and explain their choice of materials, sometimes with help.	Use tools safely for cutting and joining materials and components. Choose appropriate materials and suggest ways of manipulating them to achieve a desired effect.	Select the appropriate tools and explain choices. Plan which materials will be needed for a task and explain why this is.	Analyse the potential of a range of tools and use them with accuracy. Choose from a range of materials, showing an understanding of their different characteristics.	Name and select appropriate tools for a task and use them with precision. Select and combine materials with precision	Use more complex tools with increasing accuracy. Choose the best materials for a task, showing an understanding of their working characteristics.
Health & safety		Explain how to keep safe during a practical task.	Work safely and hygienically in construction and cooking activities.	Follow healthy and safety rules for all Technology lessons.	Follow all health and safety rules for all Technology lessons.	Select and name appropriate tools for specific jobs and demonstrate how to use them safely.	Demonstrate how their products consider the safety of the user.
Repair & maintenance		Explain how they would fix simple products.	Cut, measure, form and shape materials to fix or repair something.	Try an alternative way of fixing something if the first way isn't successful.	Describe how a product could be made better, stronger or more sustainable.	Recycle, repair and mend old clothes/tools and explain why this is a good idea.	Paint, glue, nail and sand to rejuvenate a damaged, faulty or old object.
Textiles		Cut out shapes from a range of fabrics and papers. Join fabrics using stitch, glue, staples and tape.	Join fabrics using running stitch, glue, staples and tape.	Create a simple pattern for a design. Eg. Design a sports day flag.	Use a simple pattern to create a piece of clothing. Eg t-shirt for Olympics.	Create a 3D product using a range of materials and sewing techniques.	Combine fabrics to create more useful objects, making a product of quality, checking for glitches and snags too.
Cutting & joining		Cut accurately and safely with scissors. Join appropriately using glue/tape.	Cut wood/dowel using a bench hook and hacksaw. Attach features to a vehicle e.g. an axle and wheels or sail and rudder. Join appropriately with glue and/or tape, for different materials.	Measure and mark wood/dowel. Join fabrics using a running stitch.	Cut internal shapes. Use a glue gun under close (1:1) supervision.	Cut safely and accurately to a marked line. Use a glue gun safely under supervision.	Use a craft knife, cutting mat and safety ruler with one to one supervision where necessary. Join materials using the most appropriate method for the materials or purpose.
Structures		Build simple structures.	Improve structures by making them stronger, stiffer and more stable.	Create a shell or frame structure using diagonal struts to strengthen. eg. Story frame in Forest Schools and bee hotels.	Prototype and build frame and shell structures, showing awareness of how to strengthen, stiffen and reinforce. Eg. Bee hotels.	Build a framework using a range of materials (e.g. wood, card and corrugated plastic) to support mechanisms.	Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.
Mechanisms		Use wheels, axles, levers and sliders.	Create and use wheels and axles, levers and sliders.	Create and use simple gears, pulleys, cams, levers and linkages. Eg. Catapults.	Use pulleys, levers and linkages in their products. Eg. Catapults.	Use cams or gears in their product.	Design products incorporating the most appropriate mechanical system for a particular purpose/product.
Electricity					Build models incorporating motors.	Build models, incorporating switches to turn components on/off.	Design products incorporating the most appropriate electrical systems.
ICT		Input random control instructions to simple devices for an unplanned outcome e.g. the Beebot.	Input a sequence of instructions to a device for a planned outcome e.g. the Beebot.	Evaluate their own programme, refine and improve it. Eg. scratch	Create a solution to a problem using a control output device that has a sequence of events that activates it. Eg. Probot drawing shapes.	Monitor and control more than one output, in response to changes.	Develop, try out and refine sequences of instructions to effectively monitor, measure and control events.
Food Technology		Measure and weigh food items using non-standard measures e.g. spoons/cups. Identify the source for common foods.	Cut, peel, grate and chop a range of ingredients to make dishes. Recognise the need for a variety of foods in a diet. Explain where the food they eat comes from e.g. referring to specific countries/counties/regions.	Combine a variety of ingredients using a range of cooking techniques. Describe what a balanced diet is. Identify food which comes from the UK and what comes from other countries of the world.	Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes. Make healthy eating choices and explain why. Explain some of the processes that food goes through to preserve them/improve them.	Combine good ingredients appropriately using a range of techniques e.g. kneading, rubbing in and mixing. Evaluate meals and consider whether they contribute towards a healthy, balanced diet. Explain what times of year particular foods are in season (seasonality).	Use appropriate tools and equipment, weighing and measuring with scales in both metric and imperial quantities. Plan how they can have a healthy/affordable diet. Explain how ingredients were grown, reared, caught and processed.
Designing		Draw a simple picture of an intended design with basic labelling.	Produce labelled drawings or models of products based on design criteria.	Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs including being fit for purpose.	Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind the user and the product.	Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams and modelling, recognising that ideas have to meet a range of needs.	Develop detailed criteria for designs for products aimed at particular individuals or groups, sharing ideas through cross-sectional and exploded diagrams, prototypes and pattern pieces.
Working from plans		With help, put ideas into practice.	Think of ideas and plan what to do next, based on their experience of working with materials and components.	Make realistic plans, identifying processes, equipment and materials needed.	Make realistic, step by step plans, reflecting on designs as the product develops.	Work from own detailed plans, modifying them where appropriate.	Check work as it develops and modify their approach in their light of progress.

Evaluating existing products	<i>Share their creations and explain processes used.</i>	<i>Describe how an existing product works e.g. the toy moves when I turn the handle.</i>	<i>Investigate a range of existing products and say if they do what they are supposed to do.</i>	<i>Investigate the design features (including identifying components or ingredients) of familiar existing products. Eg. Why do we use self raising flour in cakes?</i>	<i>Explain how an existing product is useful to the user.</i>	<i>Investigate the design features (including identifying components and ingredients) of a familiar existing product in the context of the culture or society in which it was designed or made.</i>	<i>Explain the form and function of familiar existing products.</i>
Evaluation		<i>Talk about their own work and others' work, identifying strengths and weaknesses.</i>	<i>Explain how closely, finished products, meet their design criteria and say what they could do better in the future.</i>	<i>Suggest improvements to products made and describe how to implement them taking the view of others into account.</i>	<i>Identify what has worked well and what could be improved, evidencing and explaining the result of research.</i>	<i>Test and evaluate products against a detailed design specification and make adaptations as they develop the product.</i>	<i>Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others.</i>