DT : Progression of Skills

	Design	Make	Evaluate	Technical Knowledge
Nursery	• Show an interest in existing items within their environments. • Explore what design means by talking about what they want to make and who or what it is for. • Contribute simple ideas through discussion or drawings. • Explore examples of products and talk about their features. • Make choices about materials and colours when choosing what to create.	• Show an interest and curiosity in constructing basic structures and mechanisms. • Explore a range of materials (fabric, paper, card, construction blocks) and learn how to join them in simple ways using glue, tape, or stitching with adult support. • Develop fine motor control through cutting, sticking, threading, and building activities. • Use simple tools safely with adult support. • Understand safety rules	• Talk about what they have made and describe what they like best about it. • Begin to comment on how well their creation works (e.g. “my bridge didn’t fall down”). • Suggest simple improvements or changes for next time (e.g. “I can add more blocks to make it stronger”).	• Know that materials have differences. (e.g. soft, hard, bendy, strong). • Begin to understand how materials can be joined or shaped to make something move or stand up. • Explore how simple structures or mechanisms work. • Use imagination and storytelling to give meaning to their creations.

DT : Progression of Skills

	Design	Make	Evaluate	Technical Knowledge
Year R	• Look at existing products and discuss what they do and who they are for. • Use discussions and drawings to show ideas with growing clarity. • Choose materials and tools with support. • Respond to stories and themes to inspire their designs. • Use what they have learnt about media and materials in original ways, thinking about uses and purposes.	• Show understanding of the need for safety when tackling new challenges and consider and manage some risks. • Construct with a purpose in mind, using a variety of resources. • Learn basic techniques such as cutting, rolling, mixing, joining, threading, weaving. • Develop fine motor control by using a range of tools (including one-handed) safely with growing independence, understanding what tool is best for a task.	• Identify what they like and dislike about a product they've made, beginning to provide reasons why. • Have more complex conversations about what they could change to a product to improve it. • Make simple comparisons between their designs and existing products.	• Begin to understand that materials have different properties and purposes. • Make decisions on materials based on their properties being best fit for their product (hard = strong for structures etc.) • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

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	Design	Make	Evaluate	Technical Knowledge
KS1	• Work confidently within a range of contexts, such as imaginary, story-based, home, school, playgrounds, local community, industry and the wider environment. • Generate and communicate ideas through discussion, labelled drawings, simple plans, templates and mock-ups. • Design appealing products for a given purpose based on a simple criteria using knowledge of existing products to help come up with ideas. • State what products they are designing and making and say whether their products are for themselves or other users. • Begin to set design criteria with peers and adults.	• Ensure they follow safety procedures set out to them by adults when using materials and tools. • Select appropriate materials, tools and equipment for a task based on its characteristics with some adult support. • Use basic joining techniques (tape, glue, split pins, folding, simple sewing). • Further develop fine motor control to cut, shape and assemble safely.	• Understand and express: - What products are - Who products are for - How products work and are used - Materials products are made from - What they like and dislike • Make simple judgements about their products and ideas against design criteria. • Suggest how their products can be improved. • Evaluate using brief annotations and notes.	• Explore mechanisms (wheels, axles) and structures (strong, stiff, stable). • Recognise that materials have different properties suited to specific purposes. • Understand the simple working characteristics of materials and components.

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	Design	Make	Evaluate	Technical Knowledge
LKS2	• Use research by gathering information about the needs and wants of particular individuals and groups to inform ideas on what is required for a specific product. • Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. • Generate, develop, and model realistic ideas and criteria through annotated sketches and basic prototypes. • Plan a sequence of steps to produce a product. • Consider design specifications and user needs to ensure product is fit for purpose. • Make design decisions that take into account the availability of resources.	• Follow recognised safety procedures relevant to the products they are making and tools used. • Order the main stages of making. • Select tools and equipment explaining their choices in relation to the skills and techniques they will be using. • Accurately measure, mark out, cut, and join materials with increasing independence. • Apply practical skills such as stitching to their work with increasing accuracy. • Explain their choice of materials according to functional properties and aesthetic qualities. •	• Investigate and analyse: - How well the product has been designed and made - Why materials have been chosen - Methods which have been used - How well products work, achieve their purpose and meet user needs - Who/where/when in relation to the making of the product • Test and evaluate their products against the original design criteria identifying strengths and areas for development. • Suggest improvements based on testing, function, and user feedback. • Refer to their design criteria as they design and make.	• Recognise how mechanical systems (levers, linkages, pneumatics) create movement. • Know that different materials and joining techniques are suited to different purposes. • Be influenced by inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products. • How simple electrical circuits and components can be used to create functional products. • That mechanical and electrical systems have an input, process and output. • That a single fabric shape can be used to make a 3D textiles product.

DT : Progression of Skills

	Design	Make	Evaluate	Technical Knowledge
UKS2	• Design purposeful, functional products for specific users. • Use research and market analysis to inform designs. • Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. • Carry out research, using surveys, interviews, questionnaires and web-based resources. • Identify the needs, wants, preferences and values of particular individuals and groups. • Generate innovative ideas, drawing on research. • Develop and communicate design ideas through detailed sketches, annotated diagrams and complete prototypes. • Make design decisions, taking account of constraints such as time, resources and cost.	• Produce a list of and use a wider range of tools, materials, and components with accuracy. • Formulate step-by-step plans as a guide to making. • Construct and test more complex mechanisms and electrical systems. • Manage time, resources, and teamwork effectively in larger-scale projects. • Combine components creatively (e.g. structures + circuits + decoration). • Accurately measure, mark out, cut and shape materials and components • Accurately assemble, join and combine materials and components using techniques that involve a number of steps. • Demonstrate resourcefulness when tackling practical problems	• Investigate and analyse: - How well the product has been designed and made - Why materials have been chosen - Methods which have been used - How well products work, achieve their purpose and meet user needs -How much products cost to make, how innovative they are and their sustainability - The impact of a product beyond its intended use • Critically evaluate products against design criteria, considering aesthetics, quality, function, and user experience. • Reflect on how well the final outcome meets the brief and propose realistic improvements.	• Understand and apply principles of electrical systems and circuits (bulbs, switches, buzzers). • Explain how pneumatic and mechanical systems use air or force to create movement. • Be influenced by inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products. • How more complex electrical circuits and components can be used to create functional products. • How to program a computer to monitor changes in the environment and control their products. • How to reinforce and strengthen a 3D framework to support a mechanism.