

Design Technology

	Strand 1 – Research	Strand 2 – Designing	Strand 3 – Making	Strand 4 – Evaluating	Strand 5 – Knowledge & Understanding
9	All the steps below, and I can also... - conduct independent, self-directed research beyond the brief. - critically evaluate sources and context. - use research to justify complex design decisions.	All the steps below, and I can also... - produce innovative and well-justified design solutions and refine designs independently to optimise outcomes. - communicate designs with precision, including CAD.	All the steps below, and I can also... - produce high-quality outcomes with precision and consistency. - adapt techniques independently to achieve outcomes. - apply advanced techniques confidently, including CAD/CAM.	All the steps below, and I can also... - critically evaluate outcomes in context (user, function, sustainability). - justify decisions using evidence and feedback. - propose sophisticated and realistic improvements.	All the steps below, and I can also... - demonstrate comprehensive understanding of materials, systems and processes. - apply knowledge to justify decisions. - use technical vocabulary accurately and fluently.
8	All the steps below, and I can also... - select and use research critically. - analyse environmental, user and contextual factors. - write a design specification and explain why each requirement is important.	All the steps below, and I can also... - refine through repeated testing designs based on testing. - produce designs that optimise function. - use precise annotation (dimensions, materials, processes).	All the steps below, and I can also... - produce outcomes with high accuracy and quality control. - select and adapt tools effectively. - work independently with efficiency.	All the steps below, and I can also... - evaluate outcomes critically (function, user, sustainability). - justify decisions using technical knowledge. - propose detailed improvements.	All the steps below, and I can also... - apply detailed technical knowledge. - analyse trade-offs (what is gained and lost) between cost, performance and manufacture. - use accurate technical vocabulary.
7	All the steps below, and I can also... - analyse research to inform decisions. - link research to user needs. - use primary and secondary sources.	All the steps below, and I can also... - develop and refine designs based on research. - link ideas to specification. - produce a range of developed ideas.	All the steps below, and I can also... - produce outcomes with consistent accuracy. - use tools confidently and safely. - refine work during making.	All the steps below, and I can also... - analyse outcomes in terms of function and user. - justify improvements using evidence. - use testing to inform development.	All the steps below, and I can also... - apply knowledge to design decisions. - explain manufacturing processes. - explain clearly how systems or mechanisms work.
6	All the steps below, and I can also... - analyse existing products clearly. - use research to inform design. - write a design specification linked to the user’s needs.	All the steps below, and I can also... - develop designs that meet requirements. - use annotation to justify decisions. - evaluate designs against specification.	All the steps below, and I can also... - produce outcomes with good accuracy. - select tools independently. - apply techniques effectively.	All the steps below, and I can also... - evaluate outcomes against specification. - explain strengths and improvements. - show understanding of iteration.	All the steps below, and I can also... - apply knowledge to solve problems. - explain decisions with reasoning. - understand the environmental effects of design decisions.
5	All the steps below, and I can also... - conduct relevant research. - identify user needs. - write a basic design specification.	All the steps below, and I can also... - produce designs that meet a design specification. - use annotation to explain ideas. - generate more than one idea.	All the steps below, and I can also... - produce outcomes mostly accurate. - select tools following demonstration. - apply techniques with some control.	All the steps below, and I can also... - evaluate against specification. - identify strengths and weaknesses. - suggest simple improvements.	All the steps below, and I can also... - explain materials and processes. - use technical vocabulary appropriately. - identify improvements.
4	All the steps below, and I can also... - identify features of products. - complete simple product analysis. - write a simple design specification.	All the steps below, and I can also... - produce simple design ideas. - communicate ideas with some detail. - use basic drawing methods.	All the steps below, and I can also... - complete practical work with some accuracy. - select tools with guidance. - apply basic techniques.	All the steps below, and I can also... - describe what went well. - identify simple improvements.	All the steps below, and I can also... - explain basic material properties. - understand simple design considerations. - use some technical vocabulary.
3	All the steps below, and I can also... - describe products and users. - make simple links between research and design.	All the steps below, and I can also... - produce simple ideas. - attempt to communicate visually.	All the steps below, and I can also... - use tools with support. - follow processes with guidance.	All the steps below, and I can also... - identify simple strengths or weaknesses. - give basic explanations.	All the steps below, and I can also... - describe materials and processes. - show awareness of safety.
2	All the steps below, and I can also... identify simple product features and gathers basic research.	All the steps below, and I can also... - produce simple and repetitive ideas. - use basic drawing.	All the steps below, and I can also... - use tools with significant support. - show limited control.	All the steps below, and I can also... - state what worked. - give limited improvements.	All the steps below, and I can also... - name materials and tools. - recognise simple processes.
1	I can... - recognise simple products. - understand the brief.	I can... - produce simple ideas with support. - communicate basic designs.	I can... - use tools with full support. - follow instructions.	I can... - give simple opinions. - identify what is good.	I can... - recognise materials and tools. - recall simple facts.