KS3 GRADE DESCRIPTORS

Target Grade: .....

DT

	Design	Make	Evaluate	Technical Knowledge
Pre -Foundational	Needs direct help to understand a brief. Copies ideas rather than creating own. Communicates via unlabelled shapes	Needs constant 1:1 help to use tools. Assembles pre-cut parts with assistance.	Evaluates based purely on personal like/dislike. Cannot match product back to brief.	Recognises tools but cannot name them. Names broad material groups only.
Foundational	Identifies user needs from a given list. Designs 1–2 simple ideas with little change. Uses basic 2D drawings for rough outlines.	Selects from a small, given choice of tools. Follows steps only with step-by-step help.	Tests against one basic factor (e.g. colour). Identifies big visual flaws when prompted.	Knows differences between wood, plastic, metal. Identifies basic push/pull movements.
Emerging	Names target user from basic research. Makes small visual tweaks to a simple design. Adds basic labels to identify major parts.	Follows templates to mark and cut safely. Uses hand tools safely with regular support. Completes a rough assembly of parts.	Checks product against a few brief points. Suggests basic changes without explanation.	Distinguishes common specific woods (e.g. soft/hard). Identifies simple levers, structures, or linkages.
Developing	Lists design criteria using provided research. Explores a few realistic ideas for the brief. Uses 2D sketching with simple material labels.	Marks out and cuts with reasonable accuracy. Works through tasks with basic independence. Uses lightweight machinery under supervision.	Tests product against performance specs. Details specific strengths and flaws. Proposes fixes using simple technical words.	Justifies material choices using explicit properties. Successfully applies mechanisms or microcontrollers.
Secure	Gathers research to write a full specification. Explores a wide range of shapes and materials. Uses detailed 2D/3D annotated sketches.	Measures, marks, and cuts accurately to plan. Manufactures independently with a clean finish. Uses workshop tools and machines competently.	Assesses product lifecycle and commercial viability. Critically analyses how materials performed. Justifies engineering updates for mass production.	Evaluates materials and components under stress. Integrates smart multi-sensor circuits and gear trains.
Advanced	Synthesises complex data into strict specs. Iterates innovative ideas using user feedback. Uses advanced CAD to model moving systems.	Manufactures to high precision and tight tolerances. Fixes unexpected practical issues independently. Uses complex tools with total control and safety.	Assesses product lifecycle and commercial viability. Critically analyses how materials performed. Justifies engineering updates for mass production.	Evaluates materials and components under stress. Integrates smart multi-sensor circuits and gear trains.