

DT Year 7	Emerging	Developing	Securing	Mastering
Design	Attempts to use text and graphics to communicate the contents of the product inside the box. Work is simplistic and may contain technical and/or aesthetic mistakes.	Uses text and graphics with some success to represent the product inside the box. Partial clarity is achieved, though elements may be underdeveloped or lack cohesion. Some design choices may not effectively support the intended message.	Uses text and graphics effectively to communicate the contents of the product. Design is mostly clear, visually organized, and appropriate for the purpose. Technical accuracy and aesthetic appeal are evident, with only minor issues.	Uses text and graphic elements very effectively and creatively to create an attractive lid for the tangram puzzle. Work is complex and refined, with a fully developed design and product.
Make	Correctly identifies one or two tools or materials used to manufacture the puzzle and box in the workshop. Description of the manufacturing process is simplistic and lacks important detail. May not identify aspects to improve in the work.	Identifies some key tools and materials used to manufacture the puzzle and box. Provides a basic explanation of the manufacturing process with some relevant detail. Begins to recognize areas for improvement, offering simple reflections on how these might be addressed.	Identifies most key tools and materials used in the manufacturing of the puzzle and box. Explanation of the manufacturing process includes relevant steps and demonstrates a developing understanding. At least one area for improvement is identified, with some reflection on how it could be addressed.	Accurately identifies all key tools and materials used in manufacturing the puzzle and box. Provides a detailed, clear explanation of the manufacturing process, showing a strong understanding of each step. Thoughtfully reflects on the work, identifying specific aspects for improvement and suggesting practical ways to enhance the outcome.
Evaluate	Requires extensive support to use ACCESS FM key words and question prompts to evaluate the product. Writing is simplistic and lacks depth.	Uses ACCESS FM key words and question prompts with some guidance to evaluate the product. Writing demonstrates a developing understanding of several aspects, including some relevant detail and explanation. Evaluations show basic structure but may be inconsistent or lack clarity in places.	Uses ACCESS FM key words and question prompts with some independence to evaluate the product. Writing shows a reasonable understanding of most aspects, with some detail and explanation. Evaluations are structured but may lack depth in places.	Independently and effectively uses ACCESS FM key words and question prompts to evaluate the product. Written comments are detailed and provide meaningful observations about the product, along with thoughtful suggestions for development.
Exploring Ideas	Requires extensive support to produce an attempt at mapping out the lifecycle of the product. Key information about material provenance or relevant processes may be missing or contain errors.	Produces a lifecycle map with some support, including several key stages such as material sourcing, manufacturing, use, and disposal. Some relevant information may be incomplete or contain minor inaccuracies, but the overall structure shows a basic developing understanding of lifecycle thinking.	Maps out the lifecycle of the product with some independence, including most key stages such as material sourcing, manufacturing, use, and disposal. Minor gaps or inaccuracies may be present, but the overall structure demonstrates a developing understanding of lifecycle thinking.	Successfully and independently maps out the product lifecycle of the tangram puzzle, demonstrating critical thinking and the ability to apply knowledge about materials and technical processes in analyzing environmental impact.

DT Year 8	Emerging	Developing	Securing	Mastering
Design	Embeds peer and teacher feedback into final sketches in a limited or unobservable way. Consideration of shape and technical constraints of the mould may be lacking.	Embeds peer and teacher feedback into final sketches in a limited or unobservable way. Consideration of shape and technical constraints of the mould may be lacking or misunderstood. The design may not be feasible or well thought through.	Makes some effort to respond to peer and teacher feedback in final sketches. Shows partial consideration of shape and technical constraints, though some aspects may remain impractical or underdeveloped. Design choices reflect a growing awareness but may require further refinement.	Successfully embeds feedback from peers and teacher, presenting an improved set of mould and keyring designs with full consideration of technical constraints.
Make	Correctly identifies one or two tools or materials used to manufacture the pewter keyring in the workshop. Description of the manufacturing process is simplistic and lacks important detail. May not identify aspects to improve in the work.	Identifies some tools and materials used in the pewter casting process and attempts to describe key steps. Explanation shows a basic understanding but may include gaps or inaccuracies. Makes a limited attempt to reflect on how the work could be improved.	Identifies most tools and materials used to manufacture the pewter keyring. Description of the manufacturing process is mostly clear and accurate, demonstrating a solid understanding. Reflects on the work by identifying at least one area for improvement with a reasonable suggestion.	Correctly identifies all tools, machines, and materials used to manufacture the pewter keyring in the workshop. Describes the manufacturing process accurately and in detail. Successfully identifies aspects to improve upon in future lessons.
Evaluate	Attempts to compare and contrast the process of manufacturing pewter casting moulds using hand-operated tools versus CAD/CAM. Writing lacks detail and accuracy and may have required extensive scaffolding.	Identifies some differences between hand-operated tools and CAD/CAM in the mould-making process. Comparison includes basic ideas but may be surface-level or partially inaccurate. Some guidance was required to structure the response and explain key points.	Provides a clear and mostly accurate comparison between using hand tools and CAD/CAM to manufacture pewter casting moulds. Writing includes relevant details about time, precision, and ease of use. Demonstrates a sound understanding of the advantages and limitations of both methods, working with some independence.	Compares and contrasts the process of manufacturing pewter casting moulds using hand-operated tools and CAD/CAM in great detail and with full accuracy. Writing includes highly relevant and well-chosen details about time, precision, ease of use, and other factors such as scalability, cost, and repeatability. Demonstrates a confident and comprehensive understanding of the advantages and limitations of both hand-operated tools and CAD/CAM methods.
Exploring Ideas	Attempts to embed technical knowledge of materials into an answer, though detail and accuracy may be lacking.	Shows a developing understanding of materials with some technical knowledge included in the answer. Terminology is sometimes used correctly, though explanations may lack depth or contain minor inaccuracies. Demonstrates basic application of material knowledge in context.	Demonstrates a sound understanding of materials, embedding relevant technical knowledge into the answer with accuracy. Appropriate terminology is used correctly, and the explanation is clear and mostly detailed. Shows a good connection between material properties and their application.	Confidently applies detailed and accurate technical knowledge of materials within the answer. Uses subject-specific terminology fluently and appropriately, demonstrating a deep understanding of material properties, functions, and suitability. Response is insightful, well-structured, and clearly linked to the context of the task.

DT Year 9	Emerging	Developing	Securing	Mastering
Design	Attempts to use text and graphics to communicate the contents of the product inside the box. The work is simplistic or contains technical and/or aesthetic mistakes.	Uses text and graphics with some success to represent the product inside the box. There is partial clarity, but elements may be underdeveloped or lack cohesion. Some design choices may not effectively support the intended message.	Uses text and graphics effectively to communicate the contents of the product. The design is mostly clear, visually organized, and appropriate for the purpose. Technical accuracy and aesthetic appeal are evident with only minor issues.	Uses text and graphic elements very effectively and creatively to create an attractive lid for the tangram puzzle. The work is complex and refined with fully developed design and product.
Make	Correctly identifies one or two of the tools/materials they have used to manufacture the puzzle and the box in the workshop. Their description of the manufacturing process is simplistic and lacks important detail. The student might not have succeeded in identifying aspects to improve about their work.	Identifies several key tools and materials used in the manufacturing of the puzzle and box. Explanation of the manufacturing process includes some relevant steps with a basic level of detail and understanding. At least one area for improvement is identified, with a simple suggestion for how it could be addressed.	Identifies most key tools and materials used in the manufacturing of the puzzle and box. Explanation of the manufacturing process includes relevant steps and demonstrates a developing understanding. At least one area for improvement is identified, with some reflection on how it could be addressed.	Accurately identifies all key tools and materials used in manufacturing the puzzle and box. Provides a detailed, clear explanation of the manufacturing process, demonstrating a strong understanding of each step. Thoughtfully reflects on the work, identifying specific aspects for improvement and suggesting practical ways to enhance the outcome.
Evaluate	Requires extensive support to use ACCESS FM key words and question prompts to evaluate the product. Writing is simplistic and lacks detail.	Uses ACCESS FM key words and question prompts with some guidance to evaluate the product. Writing shows a developing understanding of several aspects, with occasional detail and explanation. Evaluations show some structure but	Uses ACCESS FM key words and question prompts with some independence to evaluate the product. Writing shows a reasonable understanding of most aspects, with some detail and explanation. Evaluations are structured	Independently and effectively uses ACCESS FM key words and question prompts to evaluate the product. Written comments are detailed and provide meaningful observations about the product, as well as

		may be inconsistent or lack clarity in places.	but may lack depth in places.	thoughtful suggestions for development.
Exploring Ideas	Requires extensive support to produce an attempt at mapping out the lifecycle of the product. Key information about material provenance or relevant processes may be missing or contain errors.	Maps out the lifecycle of the product with some support, including several key stages such as material sourcing, manufacturing, use, and disposal. Some relevant information may be missing or contain minor inaccuracies, but a basic structure shows a developing awareness of lifecycle thinking.	Maps out the lifecycle of the product with some independence, including most key stages such as material sourcing, manufacturing, use, and disposal. Minor gaps or inaccuracies may be present, but the overall structure demonstrates a developing understanding of lifecycle thinking.	Successfully and independently maps out the product lifecycle of the tangram puzzle, demonstrating critical thinking and the ability to apply knowledge about materials and technical processes in analysing environmental impact.