



SAMPLE ASSESSMENT TASKS

MATERIALS DESIGN AND TECHNOLOGY

GENERAL YEAR 11

Acknowledgement of Country

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Sample assessment task

Materials Design and Technology – General Year 11

Task 2 – Unit 1 and Unit 2

Context: (highlight)	Metal Textiles Wood
Assessment type	Production
Conditions	Period allowed for completion of the task: 2 weeks
Task weighting	10% of the school mark for the pair of units

Production skills and techniques

(19 marks)

Complete practical skills development activities to demonstrate work health and safety practices appropriate to the use of technology in the defined context. The completion of the activities may or may not result in the manufacture of a product.

What you need to do

- Take note of teacher demonstration/s of the processes involved in the skills development activities including the correct use of personal protective equipment (PPE) where applicable
- List appropriate tools, equipment, or machinery used to complete the skills development activities
- Record work health and safety practices appropriate to the skills development activities

Complete the skills development activities and/or manufacture a product

- Follow work health and safety practices when using appropriate tools, equipment or machinery
- Use personal protective equipment (PPE) correctly, where applicable
- Complete skills development activities and/or manufacture a product based on the following syllabus content from the defined context:

Metal	Textiles	Wood
<ul style="list-style-type: none"> • Read and correctly interpret plans/patterns/templates • Select and apply appropriate and accurate marking out tools and techniques • Apply skills in using a range of tools and machinery, including safe machine operation • Use permanent joining and non-permanent fixing of metals • Apply different metal finishes • Demonstrate workshop clean-up procedures 	<ul style="list-style-type: none"> • Use drawing skills • Demonstrate pattern skills • Demonstrate sewing machine skills • Demonstrate overlocker skills • Demonstrate construction techniques • Demonstrate workshop/studio clean-up procedures 	<ul style="list-style-type: none"> • Read and correctly interpret and/or modify plans/patterns/templates • Select and safely apply technical skills using a range of tools and machinery • Use hand tools and/or machines to fabricate joints • Apply a finish • Demonstrate workshop clean-up procedures

What needs to be submitted for assessment	Due date
<input type="checkbox"/> Application of production skills and techniques (teacher observation)	
<input type="checkbox"/> Finished activities or product	

Marking key for sample assessment task 2

Note: modify the marking key for the defined context

Description	Marks
Pattern/plan/template skills	
Demonstrates correct completion of marking out and/or pattern/plan/template skills	4
Demonstrates completion of marking out and/or pattern/plan/template skills	3
Demonstrates completion of marking out and/or pattern/plan/template skills but requires correction	2
Demonstrates inaccurate or incomplete marking out and/or pattern/plan/template skills with little regard for corrections required	1
Subtotal	/4
Tools/machinery skills	
Demonstrates independent use of context specific tools/machinery	4
Demonstrates use of context specific tools/machinery, requiring occasional direction	3
Demonstrates use of context specific tools/machinery, requiring regular direction	2
Demonstrates use of context specific tools/machinery, requiring assistance	1
Subtotal	/4
Joining/fixing/constructing including finishes, as required	
Demonstrates correct joining/fixing/constructing, with appearance that shows accurate finished detail, as required	7–8
Demonstrates correct joining/fixing/constructing, with an acceptable finished detail, as required	5–6
Demonstrates some correct joining/fixing/constructing, with appearance that shows minor detail flaws	3–4
Demonstrates joining/fixing/constructing that is, at times, inaccurate or incomplete	1–2
Subtotal	/8
Clean up procedures	
Demonstrates effective clean up procedures in the workroom/studio	3
Demonstrates clean up procedures in the workroom/studio when directed	2
Demonstrates clean up procedures in the workroom/studio with assistance	1
Subtotal	/3
Total	/19

Sample assessment task

Materials Design and Technology – General Year 11

Task 3 – Unit 1 and Unit 2

Context: (highlight)	Metal Textiles Wood
Assessment type	Design
Conditions	Period allowed for completion of the task: 7 weeks
Task weighting	10% of the school mark for the pair of units

Devise a design solution

(25 marks)

Use communication and documentation techniques to prepare drawings, patterns or templates, and then develop a production plan to devise a design solution in the defined context.

What you need to do

This task is the preceding research, investigation and planning for a manufactured, context-specific product. You should be working towards the production management and manufactured product goal when completing this design task.

- Identify and evaluate communication and documentation techniques, such as (but not limited to):
 - ICT, portfolio development, communication skills, annotation, sketching, drawings, photography and other development, templates, specifications and presentations.
- Identify and investigate design fundamentals and elements of design used in existing ideas and products by annotating and collating evidence that form sources of design inspiration for your design solution.
- Record and explain the design fundamentals you will consider and the elements of design you plan to incorporate in your design solution.
- Include rapid concept development sketches or other concept development techniques.
- Develop, document and communicate a design brief applicable to context that outlines the needs, values and beliefs of the client or other end user of the product you plan to manufacture.
- Prepare drawings, patterns or templates with relevant technical information such as measurements or dimensions applicable to context.
- Develop a production planning document that communicates a clear and detailed sequence of manufacture/production plan and includes a full materials list and full materials costing.

What needs to be submitted for assessment	Due date
<input type="checkbox"/> Research on existing ideas and products	
<input type="checkbox"/> Design brief	
<input type="checkbox"/> Annotated concept sketches showing concept development	
<input type="checkbox"/> Final drawing of proposed design solution	
<input type="checkbox"/> -Production-planning document	

Marking key for sample assessment task 3

Note: modify the marking key for the defined context

Description	Marks
Research	
Includes clear evidence of investigation into existing ideas and products Explains design fundamentals and design elements Identifies sources of design inspiration with suitable annotations	5
Includes clear evidence of investigation into existing ideas and products Identifies design fundamentals and design elements Identifies sources of design inspiration with annotations	4
Includes adequate evidence of investigation into existing ideas and products Identifies sources of design inspiration	3
Includes some evidence of investigation into existing ideas and products	2
Includes limited evidence of investigation into existing ideas or products	1
Subtotal	/5
Design brief	
Provides a clear design brief to outline the needs, values and beliefs of the client or other end user of the product to be manufactured Identifies how the product to be manufactured will fulfil the design brief	5
Provides a clear design brief to outline the needs, values and beliefs of the client or other end user of the product to be manufactured	4
Provides a design brief to outline the needs, values or beliefs of the client or other end user of the product to be manufactured	3
Provides information about the client or other end user of the product to be manufactured	2
Provides limited information about the client or other end user of the product to be manufactured	1
Subtotal	/5
Concept development	
Independently generates and devises original ideas Provides detailed, well-proportioned sketches that show a clearly identifiable progression from concept ideas to specific ideas Includes annotations that use appropriate terminology	7
Requires guidance to generate and devise individual ideas Provides well-proportioned sketches that show a progression from concept ideas to specific ideas Includes annotations that use suitable terminology	6
Requires guidance and some assistance to generate and devise ideas Provides some well-drawn sketches showing developing concept ideas Includes partial annotations using common technical terms	5
Requires guidance and assistance to generate and devise ideas Provides well-shaped sketches that show concept ideas Includes partial annotations using common technical terms	4

Description	Marks
Requires some scaffolded assistance to generate and devise ideas Provides sketches that show mainly single concept ideas Includes very few annotations with little use of common technical terms	3
Requires highly scaffolded assistance to generate and devise ideas Provides collection of dissimilar sketches that show limited design progression	2
Requires highly scaffolded assistance to generate and devise ideas Provides limited concept sketches or development of ideas	1
Subtotal	/7
Final drawing of proposed design solution	
Provides a fully developed, accurately dimensioned working drawing (2D or 3D as applicable to context)	4
Provides a developed, dimensioned working drawing (2D or 3D as applicable to context)	3
Provides a working drawing (2D or 3D as applicable to context)	2
Provides a poorly dimensioned or incomplete working drawing (2D or 3D as applicable to context)	1
Subtotal	/4
Production planning	
Provides a clear and detailed sequence of manufacture/production plan Provides a full materials list Provides full materials costing	4
Provides a sequence of manufacture/production plan Provides a mostly accurate materials list Provides mostly accurate materials costing	3
Provides a simple sequence of manufacture/production plan Provides an inaccurate or incomplete materials list Provides inaccurate or incomplete materials costing	2
Provides limited production planning documentation	1
Subtotal	/4
Total	/25

Sample assessment task

Materials Design and Technology – General Year 11

Task 6 – Unit 1 and Unit 2

Context: (highlight)	Metal Textiles Wood
Assessment type	Production
Conditions	Period allowed for completion of the task: 8 weeks
Task weighting	25% of the school mark for the pair of units

Production management and manufactured product

(34 marks)

Students apply safety and risk management in their use of tools, equipment, or machinery to manufacture a product. They follow the production plan they developed during the design phase and use ongoing evaluation techniques to record progress/decision changes made to the project.

Use the following procedures, complete the product

- Follow a production plan
 - using tools, equipment and machinery to complete production
 - adhere to sequential instructions
 - apply safety and risk management
 - record changes to materials lists or costing
- use ongoing evaluation techniques: record ongoing progress/decision changes made to the project

What needs to be submitted for assessment	Due date
<input type="checkbox"/> Production management (teacher observation)	
<input type="checkbox"/> Follow production plan	
<input type="checkbox"/> Record ongoing progress/decision changes	
<input type="checkbox"/> Completed manufactured product	

Marking key for sample assessment task 6

Note: modify the marking key for the defined context

Description	Marks
Documents progress and changes	
Provides well-recorded, detailed documentation of ongoing progress/decision changes including material lists or costing	5
Provides detailed documentation of ongoing progress/decision changes, material lists or costing	4
Provides documentation of ongoing progress/decision changes, material lists or costing	3
Provides some evidence of progress or changes	2
Provides minimal evidence of progress or changes	1
Subtotal	/5
Follows production plan	
Demonstrates correct completion of marking out and cuts all parts correct size and square Demonstrates independence and consistent adherence to sequential instructions	9–10
Demonstrates completion of marking out and cuts parts correct size Demonstrates consistent adherence to sequential instructions	7–8
Demonstrates completion of marking out with minor corrections, parts correct size Demonstrates adherence to sequential instructions	5–6
Demonstrates completion of marking out with assistance and cuts adjusted parts re-sized Demonstrates adherence to sequential instructions with assistance	3–4
Demonstrates completion of marking out with assistance and cuts replacement piece Demonstrates limited adherence to sequential instructions	1–2
Subtotal	/10
Production management and assembly of parts and joints	
Demonstrates assembly of all parts and joints with even and square fit Demonstrates independence when using tools, equipment and machinery	9–10
Demonstrates assembly of all parts and joints with minor corrected unevenness Demonstrates correct use of tools, equipment and machinery	7–8
Demonstrates assembly of all parts and joints with minor shape unevenness Demonstrates use of tools, equipment and machinery requiring occasional guidance	5–6
Demonstrates assembly of all parts and joints, but some required second attempt, some show poor fit Demonstrates use of tools, equipment and machinery requiring regular guidance	3–4
Demonstrates assembly of parts but joints show poor fit, and some require additional material for second attempt Demonstrates use of tools, equipment and machinery requiring sustained guidance	1–2
Subtotal	/10

Description	Marks
Safety and risk management	
Demonstrates independent application of safety and risk management during production showing concern for the safety of self and others	5
Demonstrates application of safety and risk management during production showing concern for the safety of self and others	4
Demonstrates, with assistance, the application of safety and risk management during production	3
Demonstrates, with regular assistance, the application of safety and risk management during production	2
Demonstrates limited application of safety and risk management	1
Subtotal	/5
Final completed and working product	
Presents a product that is correctly assembled and working, with an appearance that shows accurate finished detail, as per design proposal	4
Presents a competently assembled and working product, with an acceptable finished detail and easily identified from the design proposal	3
Presents a completed product with an appearance that shows minor detail flaws, needing further adjustment	2
Presents a product that is assembled, but has poorly fitting parts and an appearance that shows detail flaws, needing replacement parts	1
Subtotal	/4
Total	/34

Sample assessment task

Materials Design and Technology – General Year 11

Task 7 – Unit 1 and Unit 2

Context: (highlight)	Metal Textiles Wood
Assessment type	Response
Conditions	Period allowed for completion of the task: 1 week, completed by Week 17
Task weighting	10% of the school mark for the pair of units

Product report

(30 marks)

Complete a product evaluation report comparing the finished product against the design brief or initial design and evaluate product success against student-generated performance criteria.

What you need to do

Using report format and workroom/studio terminology appropriate to context, evaluate the success of your finished manufactured product from Task 6. You should use images and diagrams in your report to support the evaluation of your product and other key points raised.

Through participation in class-based activities, develop student-generated performance criteria that pinpoint qualities that should be observed in manufactured products that are considered successful.

Report on the following key points, using full sentences and additional student-generated performance criteria within the report:

- Heading 1: Original design brief or initial design
 - What did you set out to produce?
 - Who was your product designed for?
- Heading 2: Finished product
 - How well did the product meet the design brief?
 - How did context specific skills and techniques assist in achieving a successful, quality product?
- Heading 3: Aesthetics and function
 - Explain the appearance and form of your product
 - Explain the purpose and use of your product
 - What improvements could be made?
- Heading 4: Cost
 - How does the final cost of the product compare to the initial plan costings?
 - How does the final cost of the product compare to commercial products?
- Heading 5: Safety
 - What context-specific risk-management strategies were used in the workshop/studio?
 - How did safe design concepts influence the finished product?

What needs to be submitted for assessment	Due date
<input type="checkbox"/> Completed report	

Marking key for sample assessment task 7

Note: modify the marking key for the selected context

Description	Marks
Original design brief or initial design	
Provides comprehensive details of the original design brief or initial design and the requirements of client or end user	5
Provides some comments to outline the original design brief or initial design requirements with some reference to client or end user needs	4
Provides general statements linked to the original design brief or initial design expressing personal likes and dislikes about the project with little mention of client or end user	3
Provides a simple list of aspects of the original design brief or initial design with unclear link to client or end user	2
Provides limited relevant information relating to the original design brief or initial design or the client or end user	1
Subtotal	/5
Finished product evaluation	
Provides comprehensive details for the use of context-specific skills and techniques to achieve finished product Provides clear evaluation of the success achieved in meeting the design brief and the success of the finished product	5
Provides some comments for the use of context-specific skills and techniques to manufacture product Provides some evaluation of the success achieved in meeting the design brief or the success of the finished product	4
Provides general statements about context-specific skills and techniques with little mention of how these were used to manufacture the product Provides general information about meeting the design brief or the success of the finished product	3
Provides basic comments with minimal reference to context-specific skills and techniques, meeting the design brief or the finished product	2
Provides limited relevant information relating to context-specific skills and techniques, meeting the design brief or the finished product	1
Subtotal	/5
Aesthetics and function	
Provides comprehensive details of aesthetics and function with clear explanation of appearance, form, purpose and use Provides justified suggestions for improvement	5
Provides some details of aesthetics and function referring to appearance, form, purpose and use Provides an outline of suggestions for improvement	4
Provides little mention of aesthetics or function with general comments on appearance, form, purpose or use Provides general information about improvements	3

Description	Marks
Provides basic comments with minimal reference to aesthetics, function, form, purpose or use	2
Provides unclear information about improvements	
Provides limited or irrelevant notes on aesthetics, function, or improvements	1
Subtotal	/5
Cost	
Provides accurate details of initial costing, final costing, and commercial costing	5
Provides some details of initial costing, final costing, and commercial costing	4
Provides general information relating to initial costing, final costing, or commercial costing	3
Provides basic comments relating to costing	2
Provides limited or irrelevant notes on costing	1
Subtotal	/5
Safety	
Provides comprehensive details of the application of context specific risk management strategies in the workshop/studio Provides comprehensive details of the impact of safe design concepts of the finished product	5
Provides some details of context specific risk management strategies in the workshop/studio Provides some details of safe design concepts of the finished product	4
Provides general information about risk management strategies or safe design concepts	3
Provides basic comments relating to safety or safe design concepts	2
Provides limited or irrelevant notes on safety	1
Subtotal	/5
Terminology and format	
Provides clear information using appropriate terminology in a suitable format including text, diagrams, and images with references where applicable	5
Provides information using appropriate terminology including text, diagrams, and images with some references where applicable	4
Includes technical language and terminology when presenting information Provides little evidence of referencing	3
Includes basic technical language and terminology	2
Includes limited or inaccurate technical language and terminology	1
Subtotal	/5
Total	/30