

Assessment Schedule – 2025

Materials and Processing Technology: Demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design (92014)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<p><i>Demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design involves:</i></p> <ul style="list-style-type: none"> using sustainable practices in the development of a design for a person, whānau, or community. 	<p><i>Examine sustainable practices in the development of a Materials and Processing Technology design involves:</i></p> <ul style="list-style-type: none"> refining the use of sustainable practices in the development of the design for a person, whānau, or community applying stakeholder feedback to make decisions about sustainable practices. 	<p><i>Evaluate sustainable practices in the development of a Materials and Processing Technology design involves:</i></p> <ul style="list-style-type: none"> evaluating decisions about sustainable practices in the development of the design for a person, whānau, or community evaluating how stakeholder feedback informs decisions about sustainable practices.

Sufficiency Statement

N1	N2	A3	A4	M5	M6	E7	E8
The response shows limited understanding of sustainable practices in the design development.	The response shows some attempt of understanding of sustainable practices in the design development.	The response shows understanding of sustainable practices in the design development, although some aspects may be partial or weak.	The response clearly shows understanding of sustainable practices in the design development.	The response explains refined sustainable practices in the design development, although some parts of the explanation may be partial or weak.	The response clearly explains refined sustainable practices in the design development.	The response evaluates the sustainable practices in the design development, although some parts of the discussion may be partial or weak.	The response clearly evaluates the sustainable practices in the design development.

N0 = No response; no relevant evidence.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0–2	3–4	5–6	7–8

Evidence Statement

Part	Achievement	Achievement with Merit	Achievement with Excellence
(a) and (b)	<p>The candidate uses a design process to develop a design for a specified person, whānau, or community.</p> <p>Evidence could include, but is not limited to:</p> <ul style="list-style-type: none"> • a design, and its intended environment and specifications • designing for a person / whānau / community • identifying and describing materials / resources for use in the design • research into sustainable practices • feedback from relevant stakeholders (experts or end users). 	<p>The candidate examines and applies stakeholder feedback in the development of the design for a person, whānau, or community.</p> <p>Evidence could include, but is not limited to:</p> <ul style="list-style-type: none"> • how material / resource choices were made • how research into sustainable practices influenced material / resource choices • describing how feedback from relevant stakeholders (experts or end users) was considered in the development of the design. 	<p>The candidate evaluates decisions that informed the improvement of the design for a person, whānau, or community.</p> <p>Evidence could include, but is not limited to:</p> <ul style="list-style-type: none"> • evaluating material / resources choices • explaining, in detail, relevant improvements to the design for an end user (person / whānau / community) • explaining how feedback from relevant stakeholders (experts or end users) was considered in the development of the design.
(c) and (d)	<p>The candidate uses and provides evidence of sustainable practices in the development of the design.</p> <p>This could include, but is not limited to:</p> <ul style="list-style-type: none"> • consideration of kaitiakitanga (people, land) • consideration of sustainable practices when selecting and disposing materials / resources • using materials / resources economically. 	<p>The candidate explains decisions to improve sustainable practices used in the development of the design.</p> <p>This could include, but is not limited to:</p> <ul style="list-style-type: none"> • how decisions were guided by the consideration of kaitiakitanga in relation to environmental responsibilities • how sustainable practices impacted their material / resource selection • how materials / resources were used economically • how waste materials / resources were disposed. 	<p>The candidate evaluates decisions to improve sustainable practices used in the development of the design.</p> <p>This could include, but is not limited to:</p> <ul style="list-style-type: none"> • how decisions were guided by the consideration of kaitiakitanga in relation to environmental responsibilities • the sustainable practices followed • the disposal of the waste materials / resources.

Sample Evidence

Achievement	Achievement with Merit	Achievement with Excellence
<p>My grandmother asked me to make a dessert for an upcoming family celebration. I chose locally grown feijoas because they were free and didn't need to be transported from another country. This made my feijoa tart sustainable. The skins were composted in the school's compost bin.</p>	<p>My grandmother asked me to make a dessert for an upcoming family celebration. I chose locally grown feijoas because they were free. This means I had money left in my budget to buy more expensive organic flour. Because they are locally grown, the feijoas also didn't need to be transported far, which cut down on the carbon footprint.</p> <p>I composted the feijoa skins at school. The compost is used to fertilise the school's kitchen garden. This is a good way to dispose of the skins and fruit waste, and makes sure the waste is useful.</p>	<p>My grandmother asked me to make a dessert for an upcoming family celebration. I originally planned to make a strawberry tart because my grandmother loves strawberries, but when I researched them, I found out that strawberries require a lot of water and are out of season, so they would need to be imported from overseas. This increases the carbon footprint.</p> <p>My grandmother said she also loves feijoas, and I was able to get them for free from my neighbour, so I decided on a feijoa tart instead. Because I didn't need to buy the fruit, I could choose from different flour options and still be within budget. I chose to buy more expensive organic flour as my grandmother uses this when she can.</p> <p>I have also been exploring different ways of disposing of the feijoa skins. I looked at composting, pickling for eating with cheese, and educating people about the eating of the skins.</p>

NB: This standard does **not** require the design to be developed into a physical outcome.

Appendix: Authenticity of candidate work

To assess whether a candidate's evidence is genuine, the marker uses their professional judgement, considering all the evidence provided. Where the marker believes there is a possibility the work is inauthentic, they must raise a 'malpractice exception', flagging the issue for further review.

Evidence might be considered inauthentic if:

- large portions of the text are identical to other candidates' work
- the evidence does not match the assessment prompt or task
- the response shows evidence of someone else's input other than the candidate's (e.g., teacher feedback)
- the style or voice of the writing is inconsistent with the rest of the candidate's work
- complex pieces of evidence are copied from other sources but are presented as the candidate's own work, or the evidence is deemed significantly unnatural.

Properly referenced, relevant, and integrated information is acceptable. Uncertainty about the authenticity of evidence should be resolved in favour of the candidate.