

# Design marking guide and response

External assessment 2021

## Examination — Design challenge (36 marks)

### Assessment objectives

This assessment instrument is used to determine student achievement in the following objectives:

2. represent ideas, and a sustainable design concept using schematic sketching and/or ideation sketching in the develop phase
4. devise ideas using divergent thinking strategies in response to a redesign problem in the develop phase
5. synthesise ideas and sustainability information to propose a sustainable design concept in the develop phase
6. evaluate the strengths, limitations and implications of ideas against design criteria and make refinements.

**Note:** Objectives 1, 3 and 7 are not covered in this assessment.

## Purpose

This document consists of a marking guide and a sample response.

The marking guide:

- provides a tool for calibrating external assessment markers to ensure reliability of results
- indicates the correlation, for each question, between mark allocation and qualities at each level of the mark range
- informs schools and students about how marks are matched to qualities in student responses.

The sample response:

- demonstrates the qualities of a high-level response
- has been annotated using the marking guide.

## Mark allocation

Where a response does not meet any of the descriptors for a question or a criterion, a mark of '0' will be recorded.

Where no response to a question has been made, a mark of 'N' will be recorded.

# Marking guide

## Criterion: Devising ideas

The response:	M	The response:	M
<ul style="list-style-type: none"><li>· shows a wide range of ideas from divergent points of view, perceptively devised</li></ul>	5	<ul style="list-style-type: none"><li>· shows unique, credible and detailed attributes in response to the problem</li></ul>	5
<ul style="list-style-type: none"><li>· shows a range of ideas from divergent points of view, purposefully devised</li></ul>	4	<ul style="list-style-type: none"><li>· shows credible and detailed attributes in response to the problem</li></ul>	4
<ul style="list-style-type: none"><li>· shows a range of ideas from divergent points of view, appropriately devised</li></ul>	3	<ul style="list-style-type: none"><li>· shows credible attributes in response to the problem</li></ul>	3
<ul style="list-style-type: none"><li>· shows a range of ideas from divergent points of view, superficially devised</li></ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"><li>· shows ideas appropriately devised</li></ul>	2	<ul style="list-style-type: none"><li>· shows credible attributes in response to aspects of the problem</li></ul>	2
<ul style="list-style-type: none"><li>· shows ideas superficially devised</li></ul>	1	<ul style="list-style-type: none"><li>· shows a response to aspects of the problem</li></ul>	1
<ul style="list-style-type: none"><li>· does not satisfy any of the descriptors above.</li></ul>	0	<ul style="list-style-type: none"><li>· does not satisfy any of the descriptors above.</li></ul>	0

## Criterion: Evaluating and refining


The response:	M	The response:	M
<ul style="list-style-type: none"> <li>provides a critical evaluation of the strengths, limitations and implications of ideas against all design criteria</li> </ul>	5	<ul style="list-style-type: none"> <li>shows discerning refinement of ideas based on judgments</li> </ul>	5
<ul style="list-style-type: none"> <li>provides a reasoned evaluation of the strengths and limitations of ideas against at least two design criteria</li> </ul>	4	<ul style="list-style-type: none"> <li>shows effective refinement of ideas based on judgments</li> </ul>	4
<ul style="list-style-type: none"> <li>provides a feasible evaluation of the strengths and limitations of ideas against at least one design criterion</li> </ul>	3	<ul style="list-style-type: none"> <li>shows adequate refinements of ideas based on judgments</li> </ul>	3
<ul style="list-style-type: none"> <li>provides a superficial evaluation of the strengths or limitations of ideas against at least one design criterion</li> </ul>	2	<ul style="list-style-type: none"> <li>shows superficial refinement of ideas based on judgments</li> </ul>	2
<ul style="list-style-type: none"> <li>provides statements about ideas</li> </ul>	1	<ul style="list-style-type: none"> <li>shows changes to ideas related to some design criteria</li> </ul>	1
<ul style="list-style-type: none"> <li>does not satisfy any of the descriptors above.</li> </ul>	0	<ul style="list-style-type: none"> <li>does not satisfy any of the descriptors above.</li> </ul>	0

## Criterion: Synthesising a design concept

The response:	M
<ul style="list-style-type: none"> <li>• proposes an innovative design concept that               <ul style="list-style-type: none"> <li>– includes a coherent and logical combination of attributes of multiple ideas and stimulus information</li> <li>– satisfies all design criteria</li> </ul> </li> </ul>	7
<ul style="list-style-type: none"> <li>• proposes an innovative design concept that               <ul style="list-style-type: none"> <li>– includes a logical combination of attributes of ideas and stimulus information</li> <li>– satisfies all design criteria</li> </ul> </li> </ul>	6
<ul style="list-style-type: none"> <li>• proposes a credible design concept that               <ul style="list-style-type: none"> <li>– includes a logical combination of attributes of ideas and stimulus information</li> <li>– satisfies most design criteria</li> </ul> </li> </ul>	5
<ul style="list-style-type: none"> <li>• proposes a credible design concept that               <ul style="list-style-type: none"> <li>– includes a combination of ideas and stimulus information</li> <li>– satisfies most design criteria</li> </ul> </li> </ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>• proposes an innovative design concept that               <ul style="list-style-type: none"> <li>– includes a combination of ideas and stimulus information</li> <li>– satisfies some design criteria</li> </ul> </li> </ul>	4
<ul style="list-style-type: none"> <li>• proposes a simple design concept that               <ul style="list-style-type: none"> <li>– includes a combination of an idea and stimulus information</li> <li>– satisfies some design criteria</li> </ul> </li> </ul>	3
<ul style="list-style-type: none"> <li>• proposes a rudimentary design concept that               <ul style="list-style-type: none"> <li>– reproduces a single idea</li> <li>– satisfies some design criteria</li> </ul> </li> </ul>	2
<ul style="list-style-type: none"> <li>• shows a partial design concept</li> </ul>	1
<ul style="list-style-type: none"> <li>• does not satisfy any of the descriptors above.</li> </ul>	0

## Criterion: Representing

The response:	M	The response:	M
<ul style="list-style-type: none"> <li>shows sophisticated use of               <ul style="list-style-type: none"> <li>elements and principles of visual communication to differentiate between critical and non-critical attributes in ideation and schematic sketching of ideas</li> <li>fluent sequences of related sketches to easily and readily show the progression of understanding of ideas</li> </ul> </li> </ul>	5	<ul style="list-style-type: none"> <li>shows sophisticated sketching of a design concept using elements and principles of visual communication to differentiate between critical and non-critical attributes</li> </ul>	4
<ul style="list-style-type: none"> <li>shows considered use of               <ul style="list-style-type: none"> <li>elements and principles of visual communication to differentiate between attributes in ideation and schematic sketching of ideas</li> <li>proficient sequences of related sketches to show the progression of understanding of ideas.</li> </ul> </li> </ul>	4	<ul style="list-style-type: none"> <li>shows considered sketching of a design concept using elements and principles of visual communication to differentiate between attributes</li> </ul>	3
<ul style="list-style-type: none"> <li>shows appropriate use of               <ul style="list-style-type: none"> <li>elements and principles of visual communication in ideation and schematic sketching of ideas</li> <li>sketches that show the progression of understanding of ideas.</li> </ul> </li> </ul>	3	<ul style="list-style-type: none"> <li>shows appropriate sketching of a design concept using elements and principles of visual communication</li> </ul>	2
<ul style="list-style-type: none"> <li>shows cursory use of sketching to show understanding of ideas</li> </ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>shows text descriptions of ideas supported by simple sketches</li> </ul>	2	<ul style="list-style-type: none"> <li>shows cursory sketching of a design concept</li> </ul>	1
<ul style="list-style-type: none"> <li>shows illogical use of sketching to represent ideas</li> </ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>shows text descriptions of ideas with unclear sketches</li> </ul>	1	<ul style="list-style-type: none"> <li>does not satisfy any of the descriptors above.</li> </ul>	0
<ul style="list-style-type: none"> <li>does not satisfy any of the descriptors above.</li> </ul>	0		

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