

Mathematics

This document outlines assessment techniques and response conditions that could be used to achieve range and balance within an assessment program. Schools should consider the local context, and the age and capabilities of the students, when selecting appropriate assessment techniques, modes and response conditions.

		Techniques	
		Project	Examination
Description		focuses on responding to a problem, question, stimulus and/or series of focused tasks within a scenario or context. This may involve using a process to solve a problem, or to inform new actions and/or understandings.	focuses on responding independently to seen or unseen assessment item/s under supervised conditions and in a set time frame. Assessment item/s may include question/s, scenario/s, and/or problem/s.
Learning area advice		<p>Students demonstrate and apply mathematical proficiencies and/or mathematical process skills in order to make connections between concepts, skills, procedures and processes across strands.</p> <p>A project may require students to complete some or all relevant components of a mathematical process including:</p> <ul style="list-style-type: none"> • solving problems and finding solutions • acquiring, representing and analysing information and data to draw conclusions • applying mathematics in order to model situations • making mathematical decisions drawing on concepts, skills, procedures and processes • reflecting on and evaluating data, models, propositions, results and conclusions. 	<p>Students demonstrate and apply mathematical proficiencies and/or mathematical process skills when responding to simple familiar, complex familiar and complex unfamiliar questions, scenarios or problems.</p> <p>Note:</p> <ul style="list-style-type: none"> • Seen stimulus should be provided with sufficient time for students to adequately engage with the materials prior to the examination. • Unseen stimulus should not have been directly used in class.

Techniques		
	Project	Examination
Mode	written, spoken/signed, practical [^] or multimodal	written
Examples	<p>Examples may include:</p> <ul style="list-style-type: none"> • investigation folio • learning journal • proposal • problem–solution report • investigation report • mathematical proof • construction of two-dimensional representations or three-dimensional models • multimedia presentation. 	<p>Examples may include:</p> <ul style="list-style-type: none"> • short response items <ul style="list-style-type: none"> – single word, term, multiple choice, sentence or short paragraph responses – calculating using procedures and algorithms – drawing, labelling or interpreting graphs, tables or diagrams – justifying solutions using appropriate mathematical language – interpreting ideas and information • extended response items <ul style="list-style-type: none"> – constructing, using, interpreting or evaluating data, graphs, tables or diagrams – response to stimulus.
Conditions	<p>Suggested time:</p> <ul style="list-style-type: none"> • 3 weeks (including 3 hours of class time). <p>Suggested length:*</p> <ul style="list-style-type: none"> • written responses up to 800 words • spoken/signed responses 4–5 minutes. • practical as negotiated. 	<p>Suggested time:</p> <ul style="list-style-type: none"> • up to 90 minutes, plus 5 minutes perusal, under supervised conditions <ul style="list-style-type: none"> – the number of short response items should allow students to complete the response in the set time. <p>Suggested length:*</p> <ul style="list-style-type: none"> • up to 400 words, comprising <ul style="list-style-type: none"> – short responses up to 100 words per item.

*Length of student responses should be considered in the context of the assessment. Longer responses do not necessarily provide better quality evidence of achievement.

[^]All practical work must be organised with student safety in mind. Schools must ensure their practices meet current guidelines.

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