

Years 3–4 assessment techniques and conditions

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	Supervised assessment
Description	focuses on responding to a problem, issue or scenario using a process in a relevant context to demonstrate learning. Students may be supported to expand on their thinking through question prompts given by the teacher.	focuses on independently responding to a set of provided questions, scenarios and/or problems, under supervised conditions and within a set time frame.
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. 	<p>Students demonstrate and apply mathematical proficiencies and/or mathematical process skills when responding to simple familiar, complex familiar and unfamiliar questions, scenarios or problems.</p> <p>It requires students respond to one or more assessment items at a point in time under supervised conditions.</p>



Techniques		
	Project	Supervised assessment
Mode	written, spoken/signed, practical^ or multimodal	written, spoken/signed or practical^
Examples	<p>Examples may include:</p> <ul style="list-style-type: none"> • learning journal <ul style="list-style-type: none"> – collection of annotated work samples and/or photographs – reflections • investigation folio <ul style="list-style-type: none"> – collection of student work samples reflecting a problem-based learning experience • construction of two-dimensional representations or three-dimensional models • investigation report • multimedia presentation • proposal • problem–solution report. 	<p>Examples may include:</p> <ul style="list-style-type: none"> • multiple choice items • short response items <ul style="list-style-type: none"> – calculating using algorithms – drawing, labelling or interpreting graphs, tables, two-dimensional representations or diagrams – single word, term, sentence or short paragraph responses – finding unknown elements in number sentences, equations or expressions – justifying solutions using appropriate mathematical language – interpreting ideas and information – using scaled instruments and metric units to measure attributes of objects – manipulating physical and virtual materials to demonstrate understanding and skills • extended response items <ul style="list-style-type: none"> – constructing, using, interpreting or evaluating data, graphs, tables or diagrams – response to stimulus.
<p>Additional evidence can be gathered within an assessment task through teacher observation. The teacher observes (views, listens, interprets and records) students' ability to demonstrate the application of their knowledge, understanding and skills when responding to the task. The teacher is required to document evidence of learning against relevant aspects of the achievement standard.</p>		

Techniques		
	Project	Supervised assessment
Conditions	<p>Suggested time:</p> <ul style="list-style-type: none"> • may be completed over multiple lessons or broken into components. <p>Suggested length:*</p> <ul style="list-style-type: none"> • written responses up to 200 words • spoken/signed responses up to 1 minute • practical as negotiated. 	<p>Suggested time:</p> <ul style="list-style-type: none"> • up to 40 minutes, plus 5 minutes perusal, planning and/or teacher instruction time • may be completed over multiple lessons or broken into components. <p>Suggested length:*</p> <ul style="list-style-type: none"> • up to 200 words (in total) <ul style="list-style-type: none"> – short responses up to 50 words per item • practical as negotiated.
	<p>Other:</p> <p>Responses can be recorded or live and may be presented digitally.</p> <p>Questions or instructions can be read to students in whole class, group or individual situations.</p>	

*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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