The Australian National Assessment Program – Literacy and Numeracy (NAPLAN) assessment framework



Acknowledgement of Country

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Contact details

Australian Curriculum, Assessment and Reporting Authority Level 13, Tower B, Centennial Plaza, 280 Elizabeth Street Sydney NSW 2000 T 1300 895 563 | | www.acara.edu.au

Contents

1	Introduction	.1
	1.1 Overview	. 1
	1.2 NAPLAN delivery mode	. 1
	1.3 NAPLAN, the National Assessment Program and ACARA	2
	1.4 The purpose of NAPLAN	. 2
	1.5 Principles for the development of NAPLAN tests	3
	1.6 What NAPLAN assesses	4
	1.7 NAPLAN test constructs	. 5
2	NAPLAN test designs	.6
	2.1 Multistage tailored test design	
	2.2 Writing	. 9
	2.3 Reading	12
	2.4 Conventions of language	16
	2.5 Numeracy	17
	2.6 Accessibility	20
~		
3	Item development and test construction	22
3	Item development and test construction 3.1 Item development	
3	•	22
	3.1 Item development	22 26
	3.1 Item development	22 26 26
	 3.1 Item development	22 26 26 26
4	 3.1 Item development	22 26 26 26 28
4	 3.1 Item development	22 26 26 26 28 28
4	 3.1 Item development Item trial and main study 4.1 Item trial. 4.2 Main study Reporting. 5.1 Proficiency levels and NAPLAN measurement scales. 	22 26 26 28 28 28
4	 3.1 Item development	22 26 26 28 28 28 28 28
4	 3.1 Item development Item trial and main study 4.1 Item trial. 4.2 Main study Reporting. 5.1 Proficiency levels and NAPLAN measurement scales. 5.2 NAPLAN national results. 5.3 NAPLAN results for schools 	22 26 26 28 28 28 28 28 28 28
4	 3.1 Item development Item trial and main study 4.1 Item trial 4.2 Main study Reporting 5.1 Proficiency levels and NAPLAN measurement scales 5.2 NAPLAN national results 5.3 NAPLAN results for schools 5.4 NAPLAN results for students, parents and carers 	22 26 26 28 28 28 28 28 28 28 28 29
4 5 Ind	 3.1 Item development Item trial and main study 4.1 Item trial 4.2 Main study Reporting 5.1 Proficiency levels and NAPLAN measurement scales 5.2 NAPLAN national results 5.3 NAPLAN results for schools 5.4 NAPLAN results for students, parents and carers 5.5 NAPLAN results on My School 	22 26 26 28 28 28 28 28 28 28 28 29 30

1 Introduction

1.1 Overview

Australia's <u>National Assessment Program</u> (NAP) is run at the direction of the <u>Education Ministers</u> <u>Meeting</u> (previously known as the Education Council). The NAP includes a range of national and international school tests that are undertaken so governments, education authorities, schools and the community can determine whether or not young Australians are meeting important educational outcomes.

The National Assessment Program – Literacy and Numeracy (NAPLAN) is a full cohort assessment of students in Years 3, 5, 7 and 9 that tests fundamental literacy and numeracy skills.

NAPLAN provides governments, education authorities, schools and the community with nationally comparable data about how young Australians are meeting educational outcomes in the key areas of literacy and numeracy.

The NAPLAN assessment framework describes the purposes and principles that guide the development of NAPLAN tests. It also gives an overview of what is tested and how the tests are designed.

The NAPLAN assessment framework is one of a suite of documents that inform the development of NAPLAN tests. Other key documents that complement the assessment framework are:

- the <u>Australian Curriculum</u>, which is the reference for the knowledge, understandings and skills assessed
- the item development guidelines for reading, conventions of language and numeracy that provide specific details about each test
- the Guidelines for the development of accessible NAPLAN items
- the NAP Indigenous Cultural and Intellectual Property (ICIP) Protocols
- the annual NAPLAN technical report.

Taken together, the documents describe the:

- content basis of NAPLAN assessments within and across domains (Australian Curriculum)
- purposes, principles and procedures that guide assessment development (NAPLAN assessment framework)
- specifications (balance of content strands and percentages of items assessed in each) that define a test form (item development guidelines).

The Australian Curriculum, Assessment and Reporting Authority (ACARA) is committed to the continual improvement of the NAPLAN tests. Minor changes to the assessment framework may be approved by the Executive Director, Assessment and Reporting, ACARA.

1.2 NAPLAN delivery mode

NAPLAN transitioned from a paper-based to an online assessment from 2018 to 2022. Since 2023, all students complete NAPLAN online, with the exception of a small number of students with disability, and students from schools with an approved alternative curriculum. These students complete Alternative Format (special print and paper) tests. Year 3 students complete their writing tests only on paper.

NAPLAN tests are delivered via the online national assessment platform, which is managed by Education Services Australia (ESA). Most students access the tests via a locked down browser app that ensures security of the test items and facilitates a standardised test experience by restricting access to external

programs and tools. Training and practice activities are available throughout the year via the <u>Public</u> <u>Demonstration site</u> and in a schools-only Training and Practice environment.

1.3 NAPLAN, the National Assessment Program and ACARA

NAPLAN is part of Australia's National Assessment Program (NAP). The NAP also includes national <u>sample</u> and <u>opt-in</u> assessments in civics and citizenship, science literacy, and information and communication technology literacy. International assessments in the NAP are managed by the Australian Government Department of Education and include: <u>Programme for International Student Assessment</u> (PISA), <u>Trends in International Mathematics and Science Study (TIMSS)</u> and <u>Progress in International Reading Literacy Study (PIRLS)</u>.

ACARA is an independent statutory authority responsible for developing the Australian Curriculum and the NAP, and reporting on key education indicators in Australia.

1.4 The purpose of NAPLAN

1.4.1 Nationally comparable data

NAPLAN provides nationally comparable data about how young Australians are meeting educational outcomes in the key areas of literacy and numeracy. This is used by governments, education authorities, schools and the community to improve education for all students in Australia.

The Measurement Framework for Schooling in Australia specifies the agreed national key performance measures (KPMs) for schooling. The measurement framework includes KPMs on NAPLAN participation and student performance.

NAPLAN data is a key component for Australian education ministers' reporting to the community on progress towards literacy and numeracy KPMs.

It is important that there are consistent and well understood measures of student achievement around the country. The outcomes of these assessments are used to inform future policy development, resource allocation, curriculum planning and, where necessary, intervention programs. NAPLAN provides useful nationally comparable evidence about student achievement and growth.

1.4.2 Educational goals

NAPLAN is designed and developed by ACARA in accordance with the <u>Alice Springs (Mparntwe)</u> <u>Education Declaration</u> made by the Education Council in December 2019. The goals of the Alice Springs (Mparntwe) Education Declaration are:

- The Australian education system promotes excellence and equity.
- All young Australians become:
 - o confident and creative individuals
 - successful lifelong learners
 - active and informed members of the community¹.

¹ Alice Springs (Mparntwe) Education Declaration, p. 4

Education ministers confirmed their expectation that every student must develop strong literacy and numeracy skills in their earlier years of schooling and go on to develop broad and deep knowledge across a range of curriculum areas².

Australian governments are committed to continuing to provide public reporting that:

- focuses on improving performance, student growth and outcomes for all students
- provides parents/carers with information on their child's performance, progress and outcomes
- is locally, nationally and internationally relevant
- is accessible, timely, consistent and comparable³.

NAPLAN tests are aligned to the Australian Curriculum and informed by Australian and international content and psychometric research. The NAPLAN results for all year levels are placed on a single scale for each test domain. These scales are constructed to allow achievement within each domain to be compared across year levels and across calendar years. This means that performance trends can be monitored and used to guide instruction. In 2023, the NAPLAN scales were reset and proficiency standards were introduced. The national results allow for meaningful comparisons between jurisdictions and sub-groups of students.

1.5 Principles for the development of NAPLAN tests

NAPLAN tests are designed to be valid, fair, reliable, educative and accessible to all students.

The following characteristics define the tests overall, as well as each test item and the reports that summarise student, school and jurisdiction performance.

The NAPLAN tests:

- align with key literacy and numeracy aspects of the Australian Curriculum: English and Mathematics
- are administered under standardised conditions, as defined in the <u>NAPLAN national protocols for test</u> <u>administration</u>
- are developed according to universal design principles to optimise student participation.

The NAPLAN items:

- have clear assessment criteria
- give students clear and definite instructions
- allow students to demonstrate their understanding and skills
- are written in Standard Australian English⁴
- draw on different learning areas of the Australian Curriculum to supply contexts for testing; however, they do not align with the content of learning areas other than English and Mathematics

² Alice Springs (Mparntwe) Education Declaration, p. 3

³ Alice Springs (Mparntwe) Education Declaration, p. 19

⁴ Standard Australian English is the variety of spoken and written English language in Australia used in more formal settings. While it is always dynamic and evolving, it is recognised as the "common language" of Australians (refer: <u>Australian Curriculum: English Glossary</u>).

- use contexts that are age-appropriate and engaging
- reflect the diversity of Australian society including a reflection of the diversity of Aboriginal and Torres Strait Islander communities
- follow universal design principles, and are clearly and accessibly presented through appropriate choice of layout, cues, visual design format and choice of words
- allow equity of access for students with disabilities including supporting students with visual disability by conforming to Web Content Accessibility Guidelines (WCAG) Level 2.0 AA⁵.

1.6 What NAPLAN assesses

1.6.1 Literacy and numeracy

NAPLAN assesses students' demonstrated abilities in key literacy and numeracy aspects of the Australian Curriculum. The assessments align with all strands of the English and Mathematics learning areas.

In the Australian Curriculum, general capabilities refer to a set of knowledge, skills, behaviours and dispositions that are developed through the context of learning areas and applied across the curriculum.

The Australian Curriculum describes literacy in the following way:

In the Australian educational context, literacy involves students listening to, reading, viewing, speaking, writing and creating oral, print, visual and digital texts, and using and modifying language for different purposes⁶.

The Australian Curriculum: English is built around 3 interrelated strands: *Language, Literature* and *Literacy*. Together, the NAPLAN reading, conventions of language and writing tests assess students' developing knowledge, understandings and skills across these 3 interrelated strands. The tests use a range of everyday text types that are authentic, self-contained and similar to those that are encountered in the classroom.

The Australian Curriculum describes numeracy in the following way:

... students become numerate as they develop the knowledge and skills to use mathematics confidently across all learning areas at school and in their lives more broadly. Numeracy ... involves students recognising and understanding the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully ⁷.

The study of mathematics is central to the learning, development and prospects of all young Australians. Mathematics provides students with essential mathematical knowledge, skills, procedures and processes in number, algebra, measurement, space, statistics and probability. It develops the numeracy capabilities that all students need in their personal, work and civic lives, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

By explicitly teaching English and Mathematics content and providing learning opportunities for the development of skills and proficiencies, teachers enable students to strengthen their literacy and numeracy capabilities. Students will then be able to apply what they know to real-world contexts across and beyond the curriculum.

⁷ ACARA, <u>Understand this general capability: Numeracy | Version 9.0 Australian Curriculum</u>

⁵ https://www.w3.org/WAI/standards-guidelines/wcag/

⁶ ACARA, <u>Understand this general capability: Literacy | Version 9.0 Australian Curriculum</u>

1.6.2 Student achievement

NAPLAN tests are designed to assess a wide range of student performance. They are also designed to be sensitive enough to provide robust and valid measures of growth in student achievement against the NAPLAN assessment scales and proficiency standards. Consequently, the tests are constructed so that they assess an overlap of curriculum content and skills development across Years 3, 5, 7 and 9: the year levels tested in NAPLAN.

To cater for this full range of achievement, items for each year level assess content that is at, above and below year level expectations for literacy and numeracy in line with the Australian Curriculum. As the test is conducted early in the academic year, the majority of items are drawn from curriculum content taught in preceding year levels of the curriculum.

The small number of more complex items that assess content from the year of testing and the following year are designed so they can be solved with logical reasoning (for numeracy) or textual evidence (for reading). They are not dependent on curriculum coverage of new concepts or metalanguage.

NAPLAN is best used by schools as part of a comprehensive balanced assessment system where it complements information gained from formative and summative assessments and the professional judgements of educators at the classroom level.

Given the constraints of a full-cohort test and the limitations on time and resources, some literacy and numeracy skills and knowledge are not assessed by NAPLAN for a number of reasons, such as an incompatible mode (for example, the speaking mode) or task (for example, constructing a 3D shape).

1.7 NAPLAN test constructs

NAPLAN tests are designed to provide a summative, nationally comparable understanding of student performance in writing, reading, conventions of language and numeracy. The test constructs for each domain are outlined in Table 1.

Domain	Test construct			
Writing	The NAPLAN writing test assesses a student's ability to convey thoughts, ideas information, and use appropriate conventions, through the independent construction of a text in written Standard Australian English.			
Reading	The NAPLAN reading test assesses a student's ability to independently make meaning from written Standard Australian English texts, including those with some visual elements.			
Conventions of language	The NAPLAN conventions of language test assesses a student's ability to independently recognise and use correct Standard Australian English spelling, grammar and punctuation in written contexts. The spelling assessment includes audio dictation and proofreading sections.			
Numeracy	The NAPLAN numeracy test assesses a student's knowledge of mathematics, their ability to independently apply that knowledge in context, and their ability to independently reason mathematically. The Years 7 and 9 assessments include calculator-allowed and non-calculator sections.			

Table 1: NAPLAN test constructs by domain

2 NAPLAN test designs

The introduction of online testing provided the opportunity to administer tests that are better targeted to students' achievement levels and response styles. The NAPLAN tests (with the exception of writing) are based on a multistage computerised adaptive test design that provides more efficient and precise estimates of students' achievements than the fixed form design in which all students attempt the same set of items (alternative format special print and paper tests).

ACARA continues to produce alternative format tests for use by a small number of students with disability and students from schools with approved alternative curriculums.

2.1 Multistage tailored test design

The NAPLAN reading, numeracy and conventions of language assessments use a multistage tailored test design. A multistage tailored test is a type of computerised adaptive test (CAT) with adaptivity taking place at the testlet level. A testlet is a small set of items that are administered together. Multistage tailored tests are considered a balanced compromise between non-adaptive paper-and-pencil tests and item-level adaptive tests (Hendrickson 2007⁸).

Some benefits of tailored testing are:

- Reporting of results on tailored tests gives schools access to more targeted and detailed information on overall school performance in online assessment.
- A wider breadth of curriculum can be tested. While each student answers approximately the same number of items as they did previously in the paper tests, the overall number of items presented to students is larger.
- Student performance is measured more precisely. This allows for greater differentiation of students by using a wider range of items at targeted difficulty, without adding to the length of the test for each individual student.
- There is more student engagement. Students who experience difficulty early in the test are given items of lower complexity, more suited to their performance. These students are less likely to become discouraged as they progress through the tests. Students who are performing well are given more challenging items.

NAPLAN results for each student are based on both the number of items the student answers correctly and the average difficulty of the items that were assigned to the student. A student who completes a more complex set of items is likely to achieve a higher scale score. A student who answers the same number of items correctly, but follows a less complex pathway, is likely to achieve a lower scale score.

2.1.1 Reading, numeracy, and grammar and punctuation

The multistage tailored test design for reading, numeracy, and the grammar and punctuation section of the conventions of language test is illustrated in Figure 1. This figure shows a design with 3 stages and 8 nodes with one testlet in each: A, B, B(late), C, C(early), D, E and F. In the NAPLAN main study, each node contains multiple testlets (for example, A1, A2, A3), one of which is randomly allocated to students as they start each stage. Each student completes 3 testlets in one of the following ordered combinations: ABC, ABE, ABF, ADC, ADE, ADF or A,C(early),B(late).

⁸ <u>An NCME Instructional Module on Multistage Testing - Hendrickson - 2007 - Educational Measurement:</u> <u>Issues and Practice - Wiley Online Library</u>



The testlets within each node are designed with comparable item difficulties, curriculum coverage and skills assessed.

Figure 1: Multistage tailored test design for reading, numeracy, and grammar and punctuation

Students at each year level start in stage 1 with a testlet from node A. Each student's answers to items in the first testlet determine which node they are branched to in stage 2, and therefore the complexity of the items that they see. These may be less complex (B) or more complex (D). The student's combined answers in the first and second testlets determine branching to the final node in stage 3: highest complexity (F), average complexity (E) or lowest complexity (C). Students who receive a very low score in stage 1 are branched directly to node C (early) in stage 2 and then node B (late) in stage 3.

2.1.2 Conventions of language

The conventions of language test has a spelling section and a grammar and punctuation section, each with 2 branching points. The spelling section is locked once a student moves to the grammar and punctuation section.

As noted above, the grammar and punctuation section of the conventions of language test has the same multistage adaptive test design as numeracy and reading. The spelling test has a similar design, but with only 2 testlets in the second and third stages (SD and SB, and PD and PB respectively). The conventions of language test design is illustrated in Figure 2.



Figure 2: Multistage tailored test design for conventions of language

2.1.3 Test structure and duration

Tables 2 to 5 outline the test lengths for each domain. The grammar and punctuation and spelling sections of the conventions of language tests are not delineated by year level as there are no differences in the specifications for each.

Reading	Items per testlet	Testlets per pathway	Total test items	Time available
Year 3	13	3	39	45 minutes
Year 5	13	3	39	50 minutes
Year 7	16	3	48	65 minutes
Year 9	16	3	48	65 minutes

Conventions of language	Items per testlet	Items/testlets per section	Total test items	Time available
Spelling	7 items per stage 1 testlet (audio dictation) 9 items per stage 2 testlet (audio dictation)	25/3	52	45 minutes
	9 items per stage 3 testlet (proofreading)			
Grammar and punctuation	9	27/3	52	45 minutes

Table 3: NAPLAN conventions of language test: number of items, testlets and time available

Table 4: NAPLAN numeracy test: number of items, testlets and time available

Numeracy	Items per testlet	Testlets per pathway	Total test items	Time available
Year 3	12	3	36	45 minutes
Year 5	14	3	42	50 minutes
Year 7 NC ⁹	8 NC and 8 CA items per stage 1 testlet	3	48	65 minutes
Year 7 CA ¹⁰	16 items per stage 2 and 3 testlets	3	48	65 minutes
Year 9 NC	16 items × 1/2 testlet (8 items)	3	48	65 minutes
Year 9 CA	16 items × 21/2 testlets (40 items)	3	48	65 minutes

2.2 Writing

The NAPLAN writing test assesses the accurate, fluent and purposeful writing of either a narrative or persuasive text in Standard Australian English.

The writing test complements the NAPLAN conventions of language test, where students are tested on a range of knowledge and skills presented to them in test items. The writing test assesses spelling, grammar and punctuation within the context of constructing a written text. Students use words, grammatical structures and punctuation of their choice in their text to demonstrate these skills.

Year 3 students complete the writing test on paper, as they are not yet expected to have the digital skills to complete their writing assessment online.

⁹ non-calculator

¹⁰ calculator-allowed

2.2.1 Text types

Narrative texts typically use time order to relate events and have a broad purpose of entertaining and emotionally engaging an audience. Other social purposes of narrative writing may be to inform, to persuade and to socialise. For a NAPLAN writing test, a narrative prompt requires students to write a story that is centred around a specified idea and has tension or conflict. The text should use a structure that has an orientation, a complication and a resolution.

Persuasive texts typically put forward a point of view and aim to persuade a reader to that point of view. They may appeal to the reader to take some sort of action. They form a significant part of modern communication in both print and digital environments. For the NAPLAN writing test, students are required to write a continuous persuasive text. Continuous persuasive texts include arguments, debates, discussions, polemics, and influential essays and articles. Not all persuasive texts are continuous; for example, an advertising poster is a persuasive text that is not continuous.

Crafting persuasive texts requires a writer to consider their own views as well as those of others, and to develop ideas within sentences and across the text. A NAPLAN persuasive writing prompt requires students to write a text with an introduction, a body and a conclusion. The text should express an opinion and aim to convince the reader to adopt a given point of view and/or urge the reader towards a specific action.

Narrative and persuasive texts can be constructed by drawing on a writer's own imagination and ideas or opinions. They do not require factual information or specific knowledge. These longer, continuous text types allow a writer to develop their ideas. The writer can demonstrate a wide range of writing skills, from word and sentence-level skills to whole-text structure and cross-text coherency.

2.2.2 Writing prompts

Students' writing in the NAPLAN writing test is elicited through the use of writing prompts. A prompt contains a task that requires students to write about a specified idea or topic, in a nominated text type – either persuasive or narrative. A prompt may also contain images that support the development of ideas on the topic.

Students in Years 3 and 5 respond to one of a small number of prompts for the same text type. Students in Years 7 and 9 also respond to one prompt from a different small group of prompts. The prompts within each group are of similar difficulty. Different prompts may be used both within a year level and across year levels.

Writing prompts are trialled to ensure they are comparable in difficulty, are accessible to all students and allow the most capable students to demonstrate their full range of skills.

	Day 1	Day 2	Days 3–9	Time available
Year 3	Prompt 1	N/A	N/A	40 minutes
Year 5	Prompt 1	Prompt 3	Prompt 1 or 3 (rotational distribution)	42 minutes
Years 7 & 9	Prompt 2	Prompt 4	Prompt 2 or 4 (rotational distribution)	42 minutes

Table 5: Allocation of NAPLAN writing prompts across the 9-day test window, and time available

Students do not choose a prompt. Prompts remain secure until they are allocated to students on a particular day of the writing test window. As per Table 5, the writing prompt changes each day of the writing test window. Students who do catch-up tests after the writing test window are randomly allocated one of the prompts used during the test window.

2.2.3 Skills assessed

The NAPLAN writing test assesses a range of skills in the English learning area and the Literacy general capability of the Australian Curriculum. These skills are assessed using a marking rubric with 10 separate, independent criteria, as shown in Table 6 and Table 7. Each criterion has its own skill focus. Each skill focus is described by varying numbers of category descriptors. Each set of category descriptors describes the skill focus as it is demonstrated by a beginning writer through to a competent writer.

The marking rubric is accompanied by a set of annotated exemplar scripts that illustrate how the category descriptors are to be applied. The rubric together with the exemplar scripts is referred to as the marking guide.

Narrative criterion	Score categories	Skill focus
Audience	0-6	The writer's capacity to orient, engage and affect the reader
Text structure	0-4	The organisation of narrative features including orientation, complication and resolution into an appropriate and effective text structure
Ideas	0-5	The creation, selection and crafting of ideas for a narrative
Character and setting	0-4	Character: The portrayal and development of character Setting: The development of a sense of place, time and atmosphere
Vocabulary	0-5	The range and precision of contextually appropriate language choices
Cohesion	0-4	The control of multiple threads and relationships across the text, achieved through the use of grammatical elements (referring words, text connectives, conjunctions) and lexical elements (substitutions, repetitions, word associations)
Paragraphing	0-2	The segmenting of text into paragraphs that assist the reader to negotiate the narrative
Sentence structure	0-6	The production of grammatically correct, structurally sound and meaningful sentences
Punctuation	0-5	The use of correct and appropriate punctuation to aid the reading of the text
Spelling	0-6	The accuracy of spelling and the difficulty of the words used

Table 6: NAPLAN narrative marking criteria and score categories

Table 7: NAPLAN persuasive marking criteria and score categories

Persuasive criterion	Score categories	Skill focus
Audience	0-6	The writer's capacity to orient, engage and persuade the reader
Text structure	0-4	The organisation of the structural components of a persuasive text (introduction, body and conclusion) into an appropriate and effective text structure
Ideas	0-5	The selection, relevance and elaboration of ideas for a persuasive argument
Persuasive devices	0-4	The use and range of persuasive devices to enhance the writer's position and persuade the reader
Vocabulary	0-5	The range and precision of contextually appropriate language choices
Cohesion	0-4	The control of multiple threads and relationships across the text, achieved through the use of referring words, ellipses, text connectives, substitutions and word associations
Paragraphing	0-3	The segmenting of text into paragraphs that assist the reader to follow the line of argument
Sentence structure	0-6	The production of grammatically correct, structurally sound and meaningful sentences
Punctuation	0-5	The use of correct and appropriate punctuation to aid the reading of the text
Spelling	0-6	The accuracy of spelling and the difficulty of the words used

The criteria in the narrative and persuasive marking rubrics appear mostly the same. However, separate rubrics are needed, as the way these skills are demonstrated in student writing varies between the 2 text types. The most obvious difference in the 2 rubrics is the paragraphing criterion, which has a score range of 0-2 for narrative writing and a score range of 0-3 for persuasive writing. This is because the style of paragraphs used for persuasive texts is more structured than that used in narrative texts and the development of the skill can be more readily defined across 3 criteria.

The full narrative and persuasive marking guides are available under Resources on the <u>ACARA NAP</u> <u>website</u>.

2.3 Reading

The NAPLAN reading test assesses students' ability to read and view texts to locate, analyse and evaluate information and ideas. As set out in the Australian Curriculum: English, students read texts for different purposes: personal interest and pleasure, to participate in society, and to learn. The construct of reading as described in the Australian Curriculum is:

To decode and process words, symbols or actions to derive or construct meaning. It includes interpreting, critically analysing and reflecting on the meaning of written and visual, print and non-print texts (Australian Curriculum: English Glossary).

The Australian Curriculum: English describes texts in the following way:

Texts can be written, spoken, visual, multimodal, and in print or digital/online forms. Multimodal texts combine language with other means of communication such as visual images, soundtrack or spoken words, as in film or digital media. Texts include all forms of augmentative and alternative communication; for example, gesture, signing, real objects, photographs, pictographs, pictograms and Braille. Texts provide important opportunities for learning about aspects of human experience and about aesthetic value. Many tasks that students undertake in and out of school involve understanding and producing texts in everyday and workplace contexts. The purposes of these texts may be aesthetic, imaginative, reflective, informative, persuasive, analytical and/or critical, or any combination of these. (Australian Curriculum: Understand this learning area: English)

2.3.1 Text types

Many types of texts are easy to recognise based on their subject matter, forms and structures; however, the distinctions between different types of texts are not sharply defined or formulaic. The selection of texts and items for the NAPLAN reading assessment focuses on texts that have characteristic features that students become increasingly familiar with as they progress through their schooling. These include imaginative, informative and persuasive texts.

Imaginative texts

These are texts for which the primary purpose is to entertain through their imaginative use of literary elements. These texts are recognised for their form, style and artistic or aesthetic value. These texts include fiction for young adults and children, fairytales, poems, short stories, drama scripts, multimodal texts and extracts from novels.

Informative texts

These are texts for which the primary purpose is to provide information. These texts include explanations and descriptions of natural phenomena, recounts of events, instructions, directions and news reports.

Persuasive texts

These are texts for which the primary purpose is to put forward a point of view or persuade. These texts include advertising, debates, arguments, discussions, essays and articles.

2.3.2 Text context and complexity

The appropriateness of a stimulus text for a target year group is determined by both the text context and the text complexity. Judgements are guided by curriculum expectations (as described in the level descriptions, achievement standards and content descriptions from the Australian Curriculum: English), national expert review of testing materials and psychometric evidence.

Text context

Reading texts are selected to be of interest to students nationwide, represent high-quality material and be free of discrimination. The subject matter of each reading stimulus text is chosen to be accessible, relevant and appropriate for students in the year level being assessed. The content and presentation of each text supports the inclusion of different item types assessing a range of skills and understandings appropriate for the year level.

NAPLAN assesses literacy in Standard Australian English; however, in keeping with the principles for the development of NAPLAN tests, the word choices and content of test items remain culturally accessible.

Text complexity

Text complexity is a composite of factors, some easily quantifiable (such as word, sentence and text length), and others requiring professional judgement (such as assumed background knowledge, structure and clarity). The tailored test design caters for the wide range of ability levels within each year level. It allows for presenting short, simple texts with visual support to lower ability students and more lexically dense and structurally complex texts to higher ability students.

2.3.3 Skills assessed

Students are assessed on their ability to locate textual information; make inferences; interpret and integrate ideas and information; and examine and evaluate content, language and textual elements. The extent to which individual skills are assessed is influenced by the structure, content and complexity of the stimulus texts presented to students. It varies across year levels and for students displaying differing skills and understanding. The cognitive processes underlying these skills are detailed next.

Locating and identifying

This cognitive process involves retrieving details and facts from a text, requiring the reader to scan, search for, locate and select relevant information. The difficulty of the item is affected by the location of details within the text, the complexity of the text itself, and whether or not the information is explicitly stated. The student may have to categorise information, discriminate between 2 similar pieces of information or discard competing information.

Integrating and interpreting

Integrating focuses on demonstrating an understanding of the coherence of the text. It can range from recognising local coherence between adjacent sentences to understanding the relationship between several paragraphs across a text. Interpreting refers to the process of making meaning from something not explicitly stated. Interpretation items require the reader to identify the underlying assumptions or implications of all or part of the text. The difficulty of the item depends, among other factors, on the difficulty of the text and the degree to which the interpretation can be supported by the context.

Analysing and evaluating

This cognitive process involves drawing on knowledge, ideas and attitudes both within and beyond a text, and across multiple texts. These items require readers to draw on their own knowledge and experiences to compare, contrast or hypothesise. The difficulty and complexity of the item is limited by the range of item formats, marking and scoring options available at this point in time.

2.3.4 Reading test content

The reading tests primarily assess the *Literacy* strand of the Australian Curriculum: English, with a smaller focus on the *Language* and *Literature* strands. The complexity of cognitive processes required to answer items increases from Year 3 to Year 9.

Each test pathway is comprised of a number of units; a unit being a stimulus text with 5–8 associated items. The Years 3 and 5 test pathways contain 6–7 units, and the Years 7 and 9 pathways contain 9 units. The more complex test pathways contain, on average, longer stimulus texts. In some instances, to ensure content and psychometric test balance, a single item focusing on a very short text, often functional in nature, may be included in a test pathway.

The test content proportions for reading are shown in Table 8 and Table 9. Target ranges refer to the overall test. Proportions vary depending on the pathway undertaken by each student; for example, whether it includes lower complexity items such as in an ABC pathway or higher complexity items such as in an ADF pathway.

Table 8: NAPLAN reading Years 3 and 5 test content

Text types	Target range
Imaginative	30-60% (2-4 texts)
Informative	30-50% (2-3 texts)
Persuasive	15-35% (1-2 texts)
Strand	Target range
Language	15–25%
Literature	5–15%
Literacy	60–80%
Cognitive process	Target range
Locating and identifying	30–60%
Integrating and interpreting	35–60%
Analysing and evaluating	0–15%

Table 9: NAPLAN reading Years 7 and 9 test content

Text types	Target range
Imaginative	20-45% (2-4 texts)
Informative	20-45% (2-4 texts)
Persuasive	20-45% (2-4 texts)
Strand	Target range
Language	15–25%
Literature	10–20%
Literacy	55–75%
Cognitive process	Target range
Locating and identifying	15–45%
Integrating and interpreting	40–65%
Analysing and evaluating	5–30%

2.4 Conventions of language

The conventions of language test assesses accurate knowledge and use of the spelling, grammar and punctuation conventions of Standard Australian English. This complements both the writing and reading tests, which assess a student's ability to use these conventions to construct a text (writing) and identify and respond to meaning in texts (reading).

Through the Australian Curriculum: English, students discover the patterns and purposes of English use. These include spelling, grammar and punctuation at the levels of the word, sentence and extended text. By developing a body of knowledge about these patterns and their connections, students learn to communicate effectively through coherent, well-structured sentences and texts. They gain a consistent way of understanding and talking about language, language in use and language as a system.

The NAPLAN conventions of language tests are made up of 2 sections: a spelling section followed by a grammar and punctuation section. The first section is locked once a student moves to the second section.

2.4.1 Spelling

The spelling section of the conventions of language test focuses on the accurate spelling of written words and consists of an audio component and a proofreading component. Spelling items are predominantly aligned with the *Literacy* strand of the Australian Curriculum: English, in particular the *Phonic and word knowledge*, and *Word knowledge* sub-strands.

Spelling words are selected to assess a broad range of spelling features in Standard Australian English. The level of difficulty as appropriate to year level is verified through trialling. The spelling section of the conventions of language test provides information about students' capacity to correctly spell a range of words. All spelling words are presented in a context sentence that has been constructed to trigger the most likely association of the word. Context sentences are designed to be inclusive and accessible. They are presented in the form of a full sentence with a reading difficulty level appropriate to the difficulty of the item.

Spelling words are presented to students as either audio dictation or proofreading items.

Audio dictation

In the audio dictation component of the test, a context sentence is presented to students with a blank space in place of the spelling word. The spelling word, along with the context sentence, is provided to students via an audio file. Students type their responses into an answer box. Students with hearing impairment complete a (proofreading) mistake identified version of each audio dictation item (see description below).

Proofreading

The proofreading component of each spelling test requires students to correctly spell an incorrectly spelled word. There are 2 types of proofreading items:

- Mistake identified: the spelling word is presented incorrectly in a context sentence. The incorrect word is highlighted. Students attempt to write the correct spelling of this word.
- Mistake not identified: the spelling word is presented incorrectly in a context sentence with at least 3
 other correctly spelled words of comparable difficulty. The task is to first identify the word that is
 incorrectly spelled and then correctly spell this word.

All spelling items are automatically machine scored.

2.4.2 Grammar and punctuation

Approximately two-thirds of items in this section of the test consist of grammar items, with the punctuation items making up the remaining third. The grammar items focus on accurate knowledge and

use of grammar at a sentence, clause and word level. The punctuation items focus on accurate use of punctuation conventions.

Grammar and punctuation items are predominantly aligned with the *Language* strand of the Australian Curriculum: English, in particular the *Language for expressing and developing ideas* sub-strand. Grammar and punctuation items are presented to students through a range of item types. The level of difficulty as appropriate to year level is verified through trialling. Complexity and sophistication of sentence structures play a significant role in item difficulty. All items in this section of the test are automatically machine scored.

The test content proportions for conventions of language are shown in Table 10. Target ranges refer to the overall test. Proportions vary depending on the pathway undertaken by each student; for example, whether it includes lower complexity items such as in an ABC pathway or higher complexity items such as in an ADF pathway.

Table 10: NAPLAN conventions of language test content - Years 3, 5, 7 a	and 9
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Spelling item type	Target range
Audio dictation	55–65%
Mistake identified	15–25%
Mistake not identified	15–25%
Subdomain	Target range
Grammar	65–75%
Punctuation	25–35%

2.5 Numeracy

The NAPLAN numeracy test assesses students' application of mathematics knowledge and skills within applied contexts. Students develop the underpinning skills and knowledge for numeracy in the Mathematics learning area. Then they apply and refine these skills, and deepen their knowledge, as they progress through school and interact with others within their daily lives.

The Australian Curriculum: Mathematics provides students with essential mathematical knowledge, skills, procedures and processes in number, algebra, measurement, space, statistics and probability. It develops the numeracy capabilities that all students need in their personal, work and civic lives. It provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

2.5.1 Content strands

The content strands of *Number and algebra, Measurement and geometry*, and *Statistics and probability* comprise the mathematics concepts, knowledge, skills and understandings to be taught and learnt at each year level within the Australian Curriculum: Mathematics. The NAPLAN numeracy test assesses students' contextualised use of their mathematics knowledge, skills and understanding from these strands.

The test content proportions for numeracy are shown in

Table 11. Target ranges refer to the overall test. Proportions vary depending on the pathway undertaken by each student; for example, whether it includes lower complexity items such as in an ABC pathway or higher complexity items such as in an ADF pathway.

Table 11: NAPLAN numeracy test content - Years 3, 5, 7 and 9

Strand	Target range
Number and algebra	50–60%
Measurement and geometry	25–35%
Statistics and probability	10–20%
Proficiency	Target range
Fluency	15–25%
Understanding	25–35%
Problem-solving	25–35%
Reasoning	15–25%

2.5.2 Item complexity

The Australian Curriculum: Mathematics emphasises the importance of providing opportunities for students to develop proficiency in mathematics. It focuses on the development of increasingly sophisticated knowledge and understanding of mathematical concepts, fluency in representations and procedures, and sound mathematical reasoning and problem-solving skills.

Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical processes to solve problems efficiently and to make informed decisions. Proficiency in mathematics also enables students to reflect on and evaluate approaches, and verify that answers and results are reasonable in the context.

A particular challenge in devising a test that assesses a specified curriculum is the relationship between the depth of understanding and complexity of skills described in that curriculum, and other factors that contribute to item difficulty. These factors include but are not limited to:

- the difficulty of the computation required
- whether students have had opportunity to learn the content
- whether the item requires students to complete one step or several steps to arrive at a correct answer
- the familiarity of the context used in the item.

These factors are continually considered during the review and trialling processes.

Typically, the proportion of items assessing problem-solving and reasoning will be higher for the more complex test pathways than for the test as a whole. The less complex test pathways will have higher proportions of items assessing fluency and understanding.

2.5.3 Context

NAPLAN numeracy aims to assess mathematics situated in contexts that are relevant and engaging for students. Careful consideration is taken in balancing both the literacy demand introduced when setting up the context required for an item and the numeracy skills being assessed. Contextual information includes problem scenarios, explanations, instructions and background information. It may be presented in words, in a graphical format or a combination of both.

The contexts used are accessible, realistic and appropriate for students in the year level being assessed. They are also meaningful to the mathematics being assessed and succinct enough to set up the problem without any unnecessary cognitive load. Care is taken to make sure that contextual information does not interfere with the mathematics being assessed or the students' ability to demonstrate their mathematical understanding. The online tests allow students to hear numeracy items read aloud. Graphics such as pictures, photographs, charts and diagrams are frequently incorporated in NAPLAN numeracy items. They are used where the key skill or understanding assessed by the item requires that information be presented in a visual format. Graphics are also used to increase the accessibility of items by reducing the reading load for students, or for illustrating mathematical concepts in the text.

2.5.4 Stationery tools and use of calculators

There are 3 digital stationery tools that can be used in items in the NAPLAN numeracy tests:

- calculator
- ruler
- protractor.

These tools are enabled by ACARA at the testlet level. When enabled, the stationery tools are available for all items within the testlet.

The Australian Curriculum: Mathematics assumes that calculators and computers are computational tools used when working mathematically within a technologically rich environment. Therefore, the general premise is that calculators can be used at all year levels in the NAPLAN numeracy tests.

Since NAPLAN testing started in 2008, Years 7 and 9 students have completed 2 test sections: noncalculator and calculator allowed. Years 3 and 5 students, however, have been assessed on their ability to independently calculate without access to a calculator. This may change in future assessment frameworks.

The Year 7 and 9 numeracy tests start with a small number of non-calculator items designed with a specific focus on mental calculation to highlight the importance of these basic skills.

The calculation demand of an item is determined by whether there is a calculation involved and if so, whether or not a student has access to a calculator.

Items are categorised by their calculation demands as shown in

Table 12 below.

Table 12: Calculation demand of NAPLAN numeracy items

Calculation demand	Description	Test location
Calculation fluency	The item primarily assesses students' ability to perform calculation without a calculator.	Years 3 and 5 tests; non-calculator sections of Years 7 and 9 tests
Calculator inactive	Some calculation without a calculator is required to answer the item.	Years 3 and 5 tests
Calculator active	Some calculation is required to answer the item. The student has access to a calculator.	Calculator-allowed sections of Years 7 and 9 tests
Calculation neutral	The availability of a calculator is immaterial to the skill assessed.	Any test or test section

The non-calculator section of the numeracy test is locked once students progress to the calculatorallowed section.

2.6 Accessibility

NAPLAN assessments include a range of features to enhance the test experience for students with and without disability. These include, for example, zoom functionality, keyboard shortcuts and audio support for the numeracy and writing tests. In addition, all screen elements are designed to meet the <u>Web Content</u> <u>Accessibility Guidelines</u> (WCAG) version 2.0 level AA.

As every student with disability has individual needs, experiences and functional abilities, no typical or uniform testing experience applies to all students with disability. A student's requirements need to be established prior to NAPLAN testing and should be documented as part of the student's personalised learning plan.

Teachers and schools, in consultation with students and their parents/carers, are in the best position to determine the needs of individual students and to decide if these needs can be met with the standard online tests or whether additional adjustments are required. For NAPLAN, some adjustments and assistive technologies must be approved by the local test administration authority (TAA).

Adjustments are designed to enable access to NAPLAN on an equivalent basis to students without disability. The adjustments allow the test to measure the student's literacy or numeracy performance, rather than measuring the impact of the student's disability or disabilities on their test experience.

Table 13 outlines the available adjustments and who is responsible for approving them. Further information, including the terms under which the adjustments must be applied, can found in the <u>NAPLAN</u> <u>national protocols for test administration</u>.

Table 13 Adjustments available for students with disability

Adjustment	Approval by
Adjustments requiring alternative format (special print) tests	
Braille	ТАА
Large print	ТАА
Black and white	ТАА
Electronic PDF test	ТАА
Adjustments providing additional support	
Scribe	ТАА
NAPLAN support person	School
Oral/sign support	School
Rest break	School
Adjustments providing extra time	
Extra time – one minute for every 2/3/6 minutes of test time	School
Extra time – double total test time (for online schools)	ТАА
Assistive technology	
Assistive technology (unsecured browser)	ТАА
Assistive technology (compatible with locked-down browser)	School
Use of computer for Year 3 writing test	ТАА
Adjustments providing alternative items	
Alternative items – audio	School
Alternative items – visual	School
Adjustments providing alternative contrast or colours	
Colour contract modification	ТАА
Black text with different colour backgrounds: white, blue, lilac, green or yellow	School
White text with black background	ТАА

Students with significant intellectual disability and/or students with significant comorbidity that severely limits their capacity to participate in the tests may be exempt from taking NAPLAN. This is decided after the principal, student and the parent/carer have consulted with each other and agreed that the student is not able to access the tests even with adjustments.

3 Item development and test construction

3.1 Item development

3.1.1 Item writing for reading, conventions of language and numeracy

All NAPLAN items are developed in accordance with explicit item and test specifications. Item development guidelines for reading, conventions of language and numeracy contain testlet and test specifications for design and curriculum coverage. For example, the specifications include:

- the number and types of items in each test
- the range of content as determined by the Australian Curriculum
- psychometric requirements, such as the range of item difficulty within each testlet and across each test pathway that is necessary for reliable and valid measurement.

Item descriptors

An important part of the item development process is describing the knowledge, skills and understandings that are assessed by each item through the writing of item descriptors. Item descriptors articulate specific aspects of the knowledge, skills and understandings assessed in an item. They make explicit links to the content descriptions in the curriculum.

As the majority of items remain secure after each testing window, teachers rely on the information in the item descriptors and the alignment of items to the content descriptions to provide important information about the areas of the curriculum that their students have or have not mastered, and for the monitoring of teaching programs.

Equity of access

Standard Australian English is used in NAPLAN. Every attempt is made to ensure that the language of the test items is accessible to all students, including students for whom English is an additional language or dialect (EAL/D). Care is taken to ensure that the language demand of the items does not exceed the level of difficulty of the understanding or skill being tested and that it does not impose additional literacy demands on students.

Item writers work to ensure equity of access for all students, including Aboriginal and Torres Strait Islander students and students from different cultures and language backgrounds. They ensure that there is a diversity of representation in the visual images, names, family situations, contexts and locations used to frame items. Clear guidelines for the selection of subject matter and context are given to item writers to ensure that they do not include material that may be biased, sensitive or culturally unsafe.

3.1.2 Review of test items

All NAPLAN test materials undergo an iterative quality assurance process during item development, prior to being trialled, and again prior to administration in a main study (see chapter 4: Item trial and main study).

All items and stimulus materials are reviewed by curriculum and measurement experts in the ACARA assessment team, by representatives from the TAAs and by independent curriculum experts to ensure curriculum alignment, relevance and fairness. TAA review panels include specialists who can provide feedback regarding the suitability of potential test materials from equity perspectives. This includes the appropriateness of the materials for Aboriginal and Torres Strait Islander students, students for whom English is an additional dialect (EAL/D) and students with disabilities.

The quality assurance process includes:

- 1. mapping of the concepts, skills and contexts being assessed to the assessment framework, NAPLAN item development guidelines and the Australian Curriculum
- 2. internal review and proofreading by item developers before items are delivered to ACARA (or National Testing Working Group review for items developed in-house)
- 3. external National Testing Working Group reviews
- 4. independent expert curriculum review
- 5. internal assessment, curriculum and psychometric review as individual items and in relation to other items in a test
- 6. external proofreading prior to the field trial and again prior to the main study (see chapter 4: Item trial and main study)
- 7. internal display and item functionality checks across all supported devices.

3.1.3 Writing prompt development and review

Development

The writing test assesses students' ability to write (with a keyboard in Years 5, 7 and 9, and in handwriting in Year 3) either a narrative or a persuasive text. The role of the prompt in a writing test is to inform students what type of writing is required, and on what topic. The prompt allows students the opportunity to best demonstrate their skills.

ACARA, in collaboration with education experts from all jurisdictions, develops a pool of writing tasks to engage students in Years 3 and 5, and Years 7 and 9. Each jurisdiction convenes panels of experts with significant experience in writing assessment, and educators representing key special needs groups.

The following may be considered when developing prompts for the writing tests:

- student familiarity with the subject matter associated with the topic
- · age-appropriate tasks aligned to the Australian Curriculum: English
- the use of same or different text types in the same test
- the potential for choice within a topic to allow students maximum opportunity to demonstrate their best writing
- the rubric that is used to assess the written responses
- equating methodologies associated with a multi-prompt test model.

Review

Expert panels undertake 4 stages of review of all writing tasks in the pool to ensure that they are accessible for students from a range of backgrounds. Panels consider what students might write about and whether the task is fair for all students. In early stages of the review, the panels make overall judgements of which writing tasks might be prioritised for administration in NAPLAN, providing feedback where necessary. In later stages of the review, they distil the suitable tasks and suggest changes to wording and images. Approximately 10 topics are shortlisted and refined for administration at trial.

3.1.4 Audio

The literacy demands of the tests are reduced when students can listen to the items being read aloud via the audio files in the test player. This functionality is available for all numeracy items, the audio dictation items in conventions of language and the writing prompts.

Audio is scripted and recorded prior to trialling according to ACARA's Audio Scripting Guidelines. These guidelines include instructions for which elements of an item are part of the numeracy context so can be read aloud, and which elements are part of the mathematical capability being assessed and therefore must be read independently by the student.

3.1.5 Item types

A range of assessment item types is used, as appropriate, to capture student achievement data.

There are 2 broad types of response formats suitable to assess the understandings and abilities identified in the framework. These response formats are selected response and constructed response. Within each, there are multiple item types.

Selected response

Selected response item types provide limits on student response options with a predefined range of choices. Students respond to an item by selecting, from a given set of options, the answer/s they believe is/are most justifiable.

Constructed response

Constructed response item types, conversely, allow students greater freedom, with students prompted to generate a response (rather than selecting a response from a given set of alternatives). Constructed responses vary from short responses, such as numerals, a word or a phrase, to extended responses, as used in the writing assessment.

3.1.6 Item formats

A range of simple, text-based and graphical 1EdTech (formerly IMS Global) Question & Test Interoperability (QTI[™]) formats are available for use in NAPLAN (see Table 14 below). Item developers select the best item formats to match the skills, knowledge and understandings being assessed. Test developers ensure a variety of formats are included across the testlet pathways. The formats used in each test vary from year to year.

Branching of students from one testlet to the next within the multistage adaptive test design is dependent on immediate, automatic scoring of student responses. This limits the possibility of assessing certain capabilities that generally require human scoring, such as mathematical reasoning. Until the reliability of automatic marking of short constructed response items improves, this will remain the case.

Table 14: QTI item formats currently available for use in NAPLAN

QTI item format	Description
Multiple-choice	Select one option. Options may be words, graphical or pictorial. Whenever possible, there are 4 options in each multiple-choice item.
Multiple-choices	Select more than one option (including "all that apply").
Interactive match (drag and drop)	Select missing text, images or both, and drag and drop them into predefined areas.
Interactive match (draw lines)	Connect options from 2 columns of options by drawing a line from an option in one column to an option in the second column. Options for this item type may be images, numbers, words or descriptions.
Interactive match (checkbox)	Select a checkbox from columns within a table. Multiple responses are required, generally using a dichotomous scale; for example, odd/even or yes/no. Interactive match can also be used for items comparing aspects or properties of 2 or more concepts against 2 or more criteria, such as a list of outcomes that can be classified as certain, likely, even chance, unlikely or impossible.
Interactive gap match	Select from a source list to fill gaps at various points within the text.
Interactive graphic gap match	Select from a range of options (either text or image) that can be placed into one or more destinations on an image.
Hot spot	Select one or more predefined areas on an image or diagram. All selectable areas are visible to the student.
Hot text	Select one or more predefined areas of text. All selectable areas are visible to the student.
Composite (inline choice)	Select an answer from a drop-down menu. Options in the drop-down menu are usually numbers, single words or short sentence fragments of 2 to 3 words. An item may contain several inline choices where multiple responses are required.
Text entry	Enter a short response of numerals, one or 2 words, or a phrase. Input restrictions can be applied to constrain the response to numerals, letters or words, and/or by number of characters. Short constructed response items that could instead be completed with multiple-choice format are avoided.
Extended text	Enter an extended piece of writing in response to a given prompt or stimulus.

Students are expected to become familiar with the range of item formats before participating in NAPLAN. Familiarisation tests are available on the public demonstration site via <u>nap.edu.au</u>.

4 Item trial and main study

4.1 Item trial

Each year, an assessment event is conducted to trial the performance of test items and writing prompts. The item trial process produces critical item performance data used to identify items and prompts appropriate for use in future NAPLAN tests. This data is also used to decide where in the multistage test design each item is to be used.

Students who participate in the item trial sit 2 tests. Domain pair combinations are determined by ACARA to meet item response targets, preserve sample stratification structures, and enable the rotation of writing prompts across first and second test sessions.

Selected schools from all states and territories participate in the trial across 3 weeks in May and June. The trial is supported by trained invigilators in all schools.

4.1.1 Item trial design: numeracy, reading and conventions of language

To support the placement of items on the NAPLAN scale, the trial tests are administered to a nationally representative, stratified sample of schools and students. The trial tests include items from the previous year's NAPLAN tests so that the trial results can be equated to the NAPLAN scale using a common-item equating methodology.

As items presented at the end of a test could perform differently from those presented at the beginning (due to accumulated cognitive load or time pressure), the trial tests are designed so that items are presented at differing positions within the tests.

Items are incorporated into testlets, which are then rotationally allocated to students within each cohort, using functionality inbuilt within the national assessment platform. This ensures that items are administered to a set of students that are representative of the trial sample as a whole.

A number of items are included in adjacent NAPLAN year levels (for example, Year 3 and Year 5.) This enables review of the psychometric properties of the items at both year levels. Depending on these properties, the items can be used for the main study in only one year level or can be used in both year levels.

4.1.2 Item trial design: writing

Approximately 440 primary and secondary schools in total across all states and territories participate in the writing trial. To gather robust performance data and judge age appropriateness, all prompts are administered at each year level. Position effects are minimised by ensuring prompts are rotated across schools' first and second test sessions. Both narrative and persuasive writing prompts are trialled each year.

4.1.3 Marking of item trial writing responses

Experienced NAPLAN markers are engaged by an external marking contractor to mark the writing responses. Writing responses are extracted from the platform and, if being collected, sent along with the paper responses to the marking contractor. ACARA's writing test development team supports the training of the markers and oversees the marking process. Qualitative feedback on the marking of each prompt is gathered to be used alongside the quantitative data when selecting prompts for the main study.

4.2 Main study

4.2.1 Main study test construction

Items for inclusion in the NAPLAN test are selected from the "test ready" bank of trialled items. The selected items meet the detailed test specifications, such that the tests enable the accurate placement of

students on the NAPLAN scales. The tests also include an appropriate range of knowledge, understandings and complexity of skills in the identified literacy and numeracy aspects of the Australian Curriculum: English and Mathematics.

There is an iterative process of developing tests that meet the conditions that enable accurate branching of students through the multistage tailored test design. The tests are built to the agreed test specifications, subject to constraints of content and item availability. Their performance is then verified by multiple rounds of simulations using NAPLAN population parameters.

4.2.2 Main study administration

ACARA works with a wide range of partners to oversee the delivery of NAPLAN.

Consistent test administration across Australia

<u>Test administration authorities</u> (TAAs) are the government departments or agencies responsible for the implementation and administration of the NAPLAN tests in their state or territory. ACARA works with the TAA in each state and territory to ensure the administration of NAPLAN is nationally consistent.

ACARA provides a range of handbooks and guidelines, including <u>NAPLAN national protocols for test</u> <u>administration</u>, to ensure consistency in test administration. These provide a national framework, which is supplemented by support material and advice that TAAs provide to schools. More information about what ACARA provides to schools is available under "For schools" and "Results and reporting" on <u>nap.edu.au</u>.

Participation and scheduling

Each year approximately 1.3 million students across Years 3, 5, 7 and 9 complete approximately 4.9 million tests.

The NAPLAN main study is conducted over a 9-day test window in March. Writing has a shortened 2-day window across days 1 and 2, with catch-up tests allowed for individual students from days 3–9. Tests are scheduled with writing first, then reading, then conventions of language and then numeracy.

Year 3 writing is done on paper by all students and scheduled for day 1. Years 5, 7 and 9 writing is also scheduled on day 1, with day 2 only used where there are technical/logistical limitations. Tests are scheduled as soon as possible within the test window. There are opportunities for catch-up tests where students are absent on the scheduled test days. For more information about the NAPLAN test schedule see <u>nap.edu.au</u>.

4.2.3 Main study marking

Test administration authorities (TAAs) in each state and territory are responsible for marking the scripts written by the students within their jurisdiction. For some TAAs, this includes running their own marking centre and for others this means sub-contracting their marking to another jurisdiction. Markers are located in marking centres or at home, depending on the operational needs of their local marking operation.

To ensure national consistency across all marking operations, national marking protocols and common training resources are delivered to each jurisdiction prior to marking. Quality assurance measures are implemented during the marking period. All markers across Australia use the same marking guide, which consists of a scoring rubric and a set of exemplar scripts with annotations to demonstrate how the rubric is interpreted. All markers are trained using the same resources and are subject to comparable quality assurance measures, including the daily completion of a nationally common quality assurance script. The results from these common "control" scripts are monitored by ACARA and by marking centre leaders.

4.2.4 Analysis

For detailed information about NAPLAN analysis, see the NAPLAN technical report published each year at <u>nap.edu.au</u>.

5 Reporting

5.1 Proficiency levels and NAPLAN measurement scales

The NAPLAN results for all year levels in each test domain are placed on a scale. These scales are constructed to allow achievement within each domain to be compared across year levels and across calendar years so that performance trends can be monitored and used to guide instruction. The measurement scales were reset in 2023 following the transition to online testing, taking into account the extra precision offered by the online adaptive tests.

Since 2023, student achievement in NAPLAN has been reported using proficiency standards for each assessment area at each year level. The standards are set at a challenging but reasonable expectation of what students know and can do at the time of testing. There are 4 proficiency levels:

- Exceeding: the student's result exceeds expectations at the time of testing.
- Strong: the student's result meets challenging but reasonable expectations at the time of testing.
- **Developing**: the student's result indicates that they are working towards expectations at the time of testing.
- **Needs additional support**: the student's result indicates that they are not achieving the learning outcomes expected at the time of testing. They are likely to need additional support to progress satisfactorily.

All NAPLAN reports make use of the proficiency levels as a key organising feature.

5.2 NAPLAN national results

NAPLAN national results are provided in an interactive online report that includes results at each year level and domain by state or territory and nationally, by gender, Indigeneity, language background other than English status, parental occupation, parental education, and remoteness.

ACARA works with states and territories to analyse this unique data set – providing nationally comparable data to help governments evaluate how education programs are working and whether students are meeting important literacy and numeracy standards.

The latest national report can be found here: NAPLAN national results (acara.edu.au).

5.3 NAPLAN results for schools

Results for schools and students who completed NAPLAN are provided to schools in the student and school summary report (SSSR), or other reporting provided by the state or territory <u>test administration</u> <u>authority (TAA)</u>. See <u>How to interpret the SSSR (PDF 2.8 MB)</u> for more information.

NAPLAN school reports help:

- teachers to better identify students who need greater challenges or extra support
- schools to identify strengths and areas of need in teaching programs
- schools to set goals in literacy and numeracy.

5.4 NAPLAN results for students, parents and carers

All students who participate in NAPLAN receive an individual report of their results. NAPLAN individual student reports (ISRs) are provided to schools, with timing determined by the state or territory TAA. Schools are responsible for delivering ISRs to parents and carers.

The Australian National Assessment Program Literacy and Numeracy (NAPLAN) assessment framework

The ISRs provide parents and carers with information that complements and extends the information provided by schools' assessment and reporting programs about their child's demonstrated performance.

By categorising student results against the proficiency levels, these reports provide clear and meaningful information about student achievement in each testing area. Parents/carers can also see how their child has performed relative to other students in the same year group.

The front page of the student report provides general information about the tests and an explanation of how to read the report. ACARA provides further support for parents/carers, including a <u>video on reading</u> <u>NAPLAN ISRs</u> and a brochure with 20 language translations available on <u>NAPLAN results and reports</u>.

5.5 NAPLAN results on My School

ACARA's <u>My School</u> website provides information that helps parents/carers and the community understand the performance of schools over time.

My School contains data on every school in Australia. NAPLAN performance is shown, as well as information on a school's student profile, funding, enrolment numbers and attendance rates.

A key feature of My School is that it shows student progress information for NAPLAN. This provides a measure of a school's impact on its students' literacy and numeracy outcomes – the difference schools have made to their students' learning between one NAPLAN test and the next, 2 years later.

My School enables a school's NAPLAN results to be compared with results of students who have a similar background. A school's student background takes account of parental education levels and employment types, the school's geographic location and the Indigenous status of its students.

Index of tables

Table 1: NAPLAN test constructs by domain	5
Table 2: NAPLAN reading test: number of items, testlets and time available	8
Table 3: NAPLAN conventions of language test: number of items, testlets and time available	9
Table 4: NAPLAN numeracy test: number of items, testlets and time available	9
Table 5: Allocation of NAPLAN writing prompts across the 9-day test window, and time available	10
Table 6: NAPLAN narrative marking criteria and score categories	11
Table 7: NAPLAN persuasive marking criteria and score categories	12
Table 8: NAPLAN reading Years 3 and 5 test content	15
Table 9: NAPLAN reading Years 7 and 9 test content	15
Table 10: NAPLAN conventions of language test content - Years 3, 5, 7 and 9	
Table 11: NAPLAN numeracy test content - Years 3, 5, 7 and 9	17
Table 12: Calculation demand of NAPLAN numeracy items	19
Table 13 Adjustments available for students with disability	21
Table 14: QTI item formats currently available for use in NAPLAN	25

Index of figures

Figure 1: Multistage tailored test design for reading, numeracy, and grammar and punctuation	7
Figure 2: Multistage tailored test design for conventions of language	8