NAPLAN

2013 Test Reporting Handbook

Queensland Government

Queensland Studies Authority

Queensland Studies Authority

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Preface

Who should use this handbook?

This handbook reports the performance of Queensland students in Years 3, 5, 7 and 9 who sat the 2013 National Assessment Program — Literacy and Numeracy (NAPLAN) tests. It will help teachers, principals and other school personnel understand, interpret and use the student performance information contained in the test reports. Individual student reports are distributed with this handbook. Class and school reports are supplied electronically on the secure section of the Queensland Studies Authority (QSA) website: www.qsa.qld.edu.au/qsa.secure/QSAlogin.do

These reports are accessible only with the school's Brief Identification Code (BIC) login and password.

Principals

Principals can use this handbook to help interpret their school reports and to provide information to the school community on aspects of the tests. It provides information on how to access and interpret the online reports located on the QSA's website.

Curriculum leaders, Heads of Department and Heads of Special Education Services

Curriculum leaders can use the handbook to interpret the class reports and use the tables of information to compare results with their own school data. Information about how Queensland performed in each year level is also provided in the Literacy and Numeracy sections of this handbook. Schools and teachers should look at this information as a reference to interpret their own results.

Classroom teachers

Classroom teachers can use information such as item descriptors, state and national results and the commentaries provided in this handbook to interpret the class reports of their students. Teachers can compare the performance of their students on a particular item with Australian results. For example, an item that was answered correctly by 30% of students overall and by 30% of their class, could provide reassurance as to the effectiveness of the teaching and learning program.

Parents/carers

Parents can use the information in the handbook to interpret the results on their child's report. They are also able to judge how their child performed when compared with the whole population of students. The item descriptors provide useful information about the scope of the tests.

Pre-service teachers

Pre-service teachers will find the information in the commentaries on overall student performance useful in gaining an understanding of what students know and can do in some areas of Literacy and Numeracy at Years 3, 5, 7 and 9.

Understanding and using the reports

The NAPLAN tests were developed using the nationally agreed *Statements of Learning for English* and *Statements of Learning for Mathematics, 2005,* referred to as the *Statements of Learning* (SoLs). These statements describe essential skills, knowledge, understandings and capabilities that all young Australians should have the opportunity to acquire by the end of Years 3, 5, 7 and 9. The SunLANDA item analysis links the questions and the SoLs.
It is important that principals and teachers note the scope of the tests and how they were scored. Students were assessed in four areas: Language conventions, Writing, Reading and Numeracy.

The NAPLAN tests are designed to provide a nationally comparable indication of student performance in Language conventions, Writing, Reading and Numeracy. The tests are not designed as formative tools. The tests are designed to assess a student's ability to demonstrate the following skills:

- **Language conventions:** The test assesses the ability of students to independently recognise and use correct Standard Australian English grammar, punctuation and spelling in written contexts.
- **Writing:** The test assesses the ability of students to convey thoughts, ideas and information through the independent construction of a written text in Standard Australian English.
- **Reading:** The test assesses the ability of students to independently make meaning from written Standard Australian English texts including those with some visual elements.
- **Numeracy:** The test assesses students' knowledge of mathematics, their ability to independently apply that knowledge in context, and their ability to independently reason mathematically.

Marking and scoring the tests

Calculating raw scores

The simplest calculation made in scoring the tests is the raw score — the number of questions answered correctly.

All of the questions for the Language conventions, Writing, Reading and Numeracy tests were marked as either correct or incorrect.

Number of items in each test

Year	Spelling	Grammar	Reading	Numeracy
3	25	26	36	35
5	25	26	37	40
7	30	28	50	32 Calculator Allowed (CA)
				32 Non-Calculator (NC)
9	30	28	49	32 Calculator Allowed (CA)
				32 Non-Calculator (NC)

The Writing test was marked on the following 10 criteria with score points allocated as listed:

Criteria	Score points	Criteria	Score points
Audience	(0–6)	Cohesion	(0–4)
Text structure	(0–4)	Paragraphing	(0–3)
Ideas	(0–5)	Sentence structure	(0–6)
Persuasive devices	(0–4)	Punctuation	(0–5)
Vocabulary	(0–5)	Spelling	(0–6)

Constructing scale scores

Raw scores have limited use. They enable the performance of students who have all completed the same test at the same time to be placed in a rank order, but they do not provide information about the level of difficulty of the test nor the relative differences between students.

To achieve this, raw scores are transferred to a common scale that reflects how difficult it was to achieve each score. The scale is comparable between Year levels for each assessment area. An equating process is also carried out on each year's test to enable scores to be compared between years of testing. This might mean, for example, that a raw score of 20 on the Year 3 Reading test is transformed to a scale score of 354. This will also represent the same achievement for a student with the same scale score in Year 5, and for a student with the same scale score for Reading in a previous year.

The single scale for all students in all Year levels is centred on approximately 500. Scale scores also provide a basis for measuring and comparing students' abilities across years of schooling, for example, comparing a student's result in Year 3 in 2011 and Year 5 in 2013.

Range of difficulties

The tests include questions that are intended to test a range of student abilities in a Year level. This means that not all students will answer all questions correctly. Some questions are very easy and others are quite challenging.

Link questions

Link questions are those that appear on two tests, for example, Year 3 and Year 5. These questions provide a way of placing test questions on a common scale so comparisons between the performances of the Year levels can be made.

Placing the results in context

The NAPLAN tests are national instruments designed to contribute to a school's assessment program and to inform the teaching and learning cycle. The results from the 2013 NAPLAN tests represent only one aspect of a school's assessment program.

Principals and teachers should situate the test results within the context of the existing school assessment programs with data gathered through a balanced range of assessment techniques such as:

- observation
- consultation
- focused analysis.

The results from a school's formal and informal assessment of students should be consistent with the NAPLAN test results. Principals and teachers should keep in mind that these were pencil-and-paper, point-in-time, timed tests. If the test results are different from what was expected, consider why differences may have occurred. The results of the tests may indicate aspects of student performance that need further investigation within the classroom using other forms of assessment.

Error analysis

Incorrect responses given by students are included on class reports. An analysis of incorrect responses can provide teachers with insights into literacy and numeracy understandings. An analysis of the distracters presented in multiple-choice questions and the most common incorrect responses given to constructed-response questions is available through the SunLANDA data analysis tool. This is available on the QSA website and is designed to help schools with their analysis of class and school results along with other school-based assessments.

Test response formats

Two response formats are used in both the Literacy and Numeracy tests: multiple choice and constructed response:

- Multiple-choice questions ask students to respond to an item by shading a bubble or, in some instances, two bubbles.
- Constructed-response questions ask students to respond to items in a more open manner. Students write their responses in the box or boxes provided, on lines or by sequencing numbers in boxes.

Student participation

All students are expected to participate in NAPLAN tests. Their participation is recorded in bubbles on the front covers of the test booklets. National test results are based on the number of assessed students.

Assessed students include all students who attempt the test. Students who are present for the entire test session but do not complete any part of the test will be counted as assessed and receive a score of zero. Students exempt from testing are also included with assessed students.

Students who are absent or withdrawn from the testing by parental request or who abandoned the test due to illness/injury are not counted as assessed students.

The following table shows student participation categories and the corresponding statements that will appear on the student's individual report.

Student participation	Text shown on the student report
absent	Your child was absent from this test and no result has been recorded.
absent for one of the Numeracy tests in Years 7 or 9	Your child does not have a result for one of the two Numeracy tests. The result presented here is an estimate of the score your child would have received if both tests had been completed.
exempt	Your child was exempt from this test and is considered not to have achieved the national minimum standard.
parent withdrawn	Your child was withdrawn from this test.
abandoned test due to illness/injury	Your child does not have a result for this test due to illness or injury during the test.
refused to complete	Your child was present for the test but did not complete any part of the test paper.

Further information on student participation cohorts can be found in the *2013 National Assessment Program — Literacy and Numeracy — Handbook for Principals.*

Queries and anomalies

All student, class and school reports should be checked as soon as they become available. It is the responsibility of the school to check that student details on individual reports are correct before these are given to parents/carers. The student details on the reports are the same as those provided by schools to the QSA.

If any perceived errors are identified, principals should complete an *Application to query student report* and submit this to the QSA by **1 November 2013**. This form is available from the NAPLAN Portal on the QSA website: www.qsa.qld.edu.au.

Only queries submitted on this form will be processed.

Reading the student report

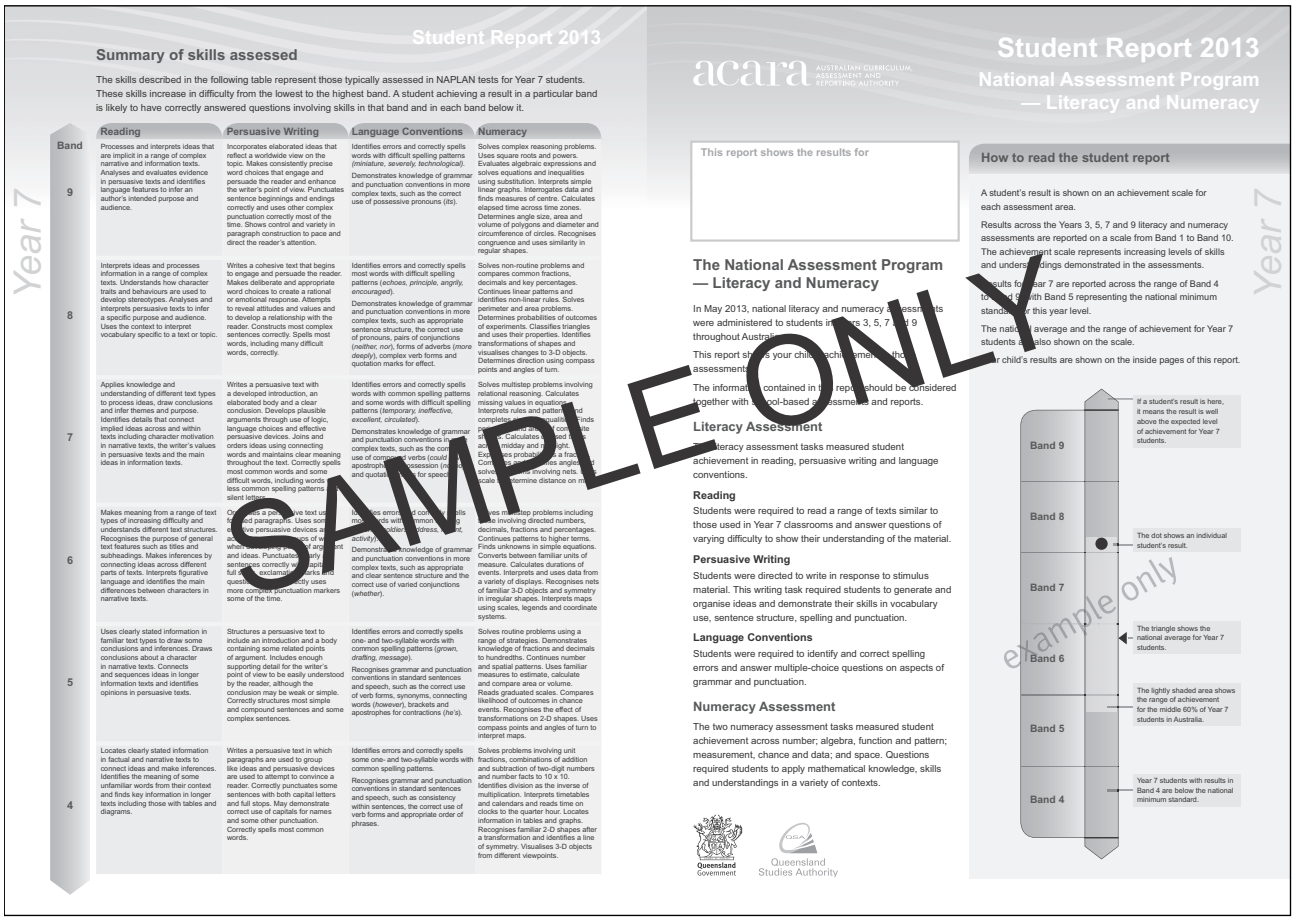
The student report presents individual student results.

One copy of the report is provided for each student for distribution to parents/carers.

If a student has transferred to another school, the report should be forwarded to the new school for distribution to parents/carers. If the original school is unsure of the student's new school, the report should be retained.

Sample student report — Pages 1 and 4

Pages 1 and 4 of the student report are illustrated below. The first page contains a brief explanation of NAPLAN and how to read the report. The matrix on the fourth page provides a summary of the skills assessed in this year's tests.



Student Report 2013

Summary of skills assessed

The skills described in the following table represent those typically assessed in NAPLAN tests for Year 7 students. These skills increase in difficulty from the lowest to the highest band. A student achieving a result in a particular band is likely to have correctly answered questions involving skills in that band and in each band below it.

Year 7

Band	Reading	Persuasive Writing	Language Conventions	Numeracy
9	Processes and interprets ideas that are implicit in a range of complex narrative and information texts. Analyses and evaluates evidence in persuasive texts and identifies language features to infer an author's intended purpose and audience.	Incorporates elaborated ideas that reflect a worldwide view on the topic. Makes consistently precise word choices that engage and persuade the reader and enhance the writer's point of view. Punctuates sentence beginnings and endings correctly and uses other complex punctuation correctly most of the time. Shows control and variety in paragraph construction to pace and direct the reader's attention.	Identifies errors and correctly spells words with difficult spelling patterns *(miniature, severely, technological)*. Demonstrates knowledge of grammar and punctuation conventions in more complex texts, such as the correct use of possessive pronouns *(its)*.	Solves complex reasoning problems. Uses square roots and powers. Evaluates algebraic expressions and solves equations and inequalities using substitution. Interprets simple linear graphs. Interrogates data and finds measures of centre. Calculates elapsed time across time zones. Determines angle size, area and volume of polygons and diameter and circumference of circles. Recognises congruence and uses similarity in regular shapes.
8	Interprets ideas and processes information in a range of complex texts. Understands how character traits and behaviours are used to develop stereotypes. Analyses and interprets persuasive texts to infer a specific purpose and audience. Uses the context to interpret vocabulary specific to a text or topic.	Writes a cohesive text that begins to engage and persuade the reader. Makes deliberate and appropriate word choices to create a rational or emotional response. Attempts to reveal attitudes and values and to develop a relationship with the reader. Constructs most complex sentences correctly. Spells most words, including many difficult words, correctly.	Identifies errors and correctly spells most words with difficult spelling patterns *(echoes, principle, angrily, encouraged)*. Demonstrates knowledge of grammar and punctuation conventions in more complex texts, such as appropriate sentence structure, the correct use of pronouns, pairs of conjunctions *(neither, nor)*, forms of adverbs *(more deeply)*, complex verb forms and quotation marks for effect.	Solves non-routine problems and compares common fractions, decimals and key percentages. Continues linear patterns and identifies non-linear rules. Solves perimeter and area problems. Determines probabilities of outcomes of experiments. Classifies triangles and uses their properties. Identifies transformations of shapes and visualises changes to 3-D objects. Determines direction using compass points and angles of turn.
7	Applies knowledge and understanding of different text types to process ideas, draw conclusions and infer themes and purpose. Identifies details that connect implied ideas across and within texts including character motivation in narrative texts, the writer's values in persuasive texts and the main ideas in information texts.	Writes a persuasive text with a developed introduction, an elaborated body and a clear conclusion. Develops plausible arguments through use of logic, language choices and effective persuasive devices. Joins and orders ideas using connecting words and maintains clear meaning throughout the text. Correctly spells most common words and some difficult words, including words with less common spelling patterns and silent letters.	Identifies errors and correctly spells words with common spelling patterns and some words with difficult spelling patterns *(temporary, ineffective, excellent, circulated)*. Demonstrates knowledge of grammar and punctuation conventions in more complex texts, such as the correct use of compound verbs *(could* [illegible] *apostrophes for possession (mo* [illegible] *and quotation marks for speech*.	Solves multistep problems involving relational reasoning. Calculates missing values in equations. Interprets rules and patterns and completes algebraic tables. Finds [illegible] Calculates [illegible] Expresses probabilities as a fraction [illegible] Converts angles [illegible] solves problems involving nets. [illegible] determine distance on m
6	Makes meaning from a range of text types of increasing difficulty and understands different text structures. Recognises the purpose of general text features such as titles and subheadings. Makes inferences by connecting ideas across different parts of texts. Interprets figurative language and identifies the main differences between characters in narrative texts.	Organises a persuasive text using [illegible] paragraphs. Uses some [illegible] persuasive devices and [illegible] when [illegible] and ideas. Punctuates mainly sentences correctly with [illegible] full stops, exclamation marks and question marks. Correctly uses more complex punctuation markers some of the time.	Identifies errors and [illegible] spells most words with common spelling patterns [illegible] *address, excellent, activity)*. Demonstrates knowledge of grammar and punctuation conventions in more complex texts, such as appropriate and clear sentence structure and the correct use of varied conjunctions *(whether)*.	Solves multistep problems including those involving directed numbers, decimals, fractions and percentages. Continues patterns to higher terms. Finds unknowns in simple equations. Converts between familiar units of measure. Calculates durations of events. Interprets and uses data from a variety of displays. Recognises nets of familiar 3-D objects and symmetry in irregular shapes. Interprets maps using scales, legends and coordinate systems.
5	Uses clearly stated information in familiar text types to draw some conclusions and inferences. Draws conclusions about a character in narrative texts. Connects and sequences ideas in longer information texts and identifies opinions in persuasive texts.	Structures a persuasive text to include an introduction and a body containing some related points of argument. Includes enough supporting detail for the writer's point of view to be easily understood by the reader, although the conclusion may be weak or simple. Correctly structures most simple and compound sentences and some complex sentences.	Identifies errors and correctly spells one- and two-syllable words with common spelling patterns *(grown, drafting, message)*. Recognises grammar and punctuation conventions in standard sentences and speech, such as the correct use of verb forms, synonyms, connecting words *(however)*, brackets and apostrophes for contractions *(he's)*.	Solves routine problems using a range of strategies. Demonstrates knowledge of fractions and decimals to hundredths. Continues number and spatial patterns. Uses familiar measures to estimate, calculate and compare area or volume. Reads graduated scales. Compares likelihood of outcomes in chance events. Recognises the effect of transformations on 2-D shapes. Uses compass points and angles of turn to interpret maps.
4	Locates clearly stated information in factual and narrative texts to connect ideas and make inferences. Identifies the meaning of some unfamiliar words from their context and finds key information in longer texts including those with tables and diagrams.	Writes a persuasive text in which paragraphs are used to group like ideas and persuasive devices are used to attempt to convince a reader. Correctly punctuates some sentences with both capital letters and full stops. May demonstrate correct use of capitals for names and some other punctuation. Correctly spells most common words.	Identifies errors and correctly spells some one- and two-syllable words with common spelling patterns. Recognises grammar and punctuation conventions in standard sentences and speech, such as consistency within sentences, the correct use of verb forms and appropriate order of phrases.	Solves problems involving unit fractions, combinations of addition and subtraction of two-digit numbers and number facts to 10 x 10. Identifies division as the inverse of multiplication. Interprets timetables and calendars and reads time on clocks to the quarter hour. Locates information in tables and graphs. Recognises familiar 2-D shapes after a transformation and identifies a line of symmetry. Visualises 3-D objects from different viewpoints.

acara AUSTRALIAN CURRICULUM, ASSESSMENT AND REPORTING AUTHORITY

Student Report 2013

National Assessment Program — Literacy and Numeracy

This report shows the results for

The National Assessment Program — Literacy and Numeracy

In May 2013, national literacy and numeracy assessments were administered to students in [illegible]s 3, 5, 7 and 9 throughout Australia.

This report shows your child's achievement in the assessments.

The information contained in this report should be considered together with school-based assessments and reports.

Literacy Assessment

The literacy assessment tasks measured student achievement in reading, persuasive writing and language conventions.

Reading

Students were required to read a range of texts similar to those used in Year 7 classrooms and answer questions of varying difficulty to show their understanding of the material.

Persuasive Writing

Students were directed to write in response to stimulus material. This writing task required students to generate and organise ideas and demonstrate their skills in vocabulary use, sentence structure, spelling and punctuation.

Language Conventions

Students were required to identify and correct spelling errors and answer multiple-choice questions on aspects of grammar and punctuation.

Numeracy Assessment

The two numeracy assessment tasks measured student achievement across number; algebra, function and pattern; measurement, chance and data; and space. Questions required students to apply mathematical knowledge, skills and understandings in a variety of contexts.

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How to read the student report

A student's result is shown on an achievement scale for each assessment area.

Results across the Years 3, 5, 7 and 9 literacy and numeracy assessments are reported on a scale from Band 1 to Band 10. The achievement scale represents increasing levels of skills and understandings demonstrated in the assessments.

Results for Year 7 are reported across the range of Band 4 to [illegible] with Band 5 representing the national minimum standard for this year level.

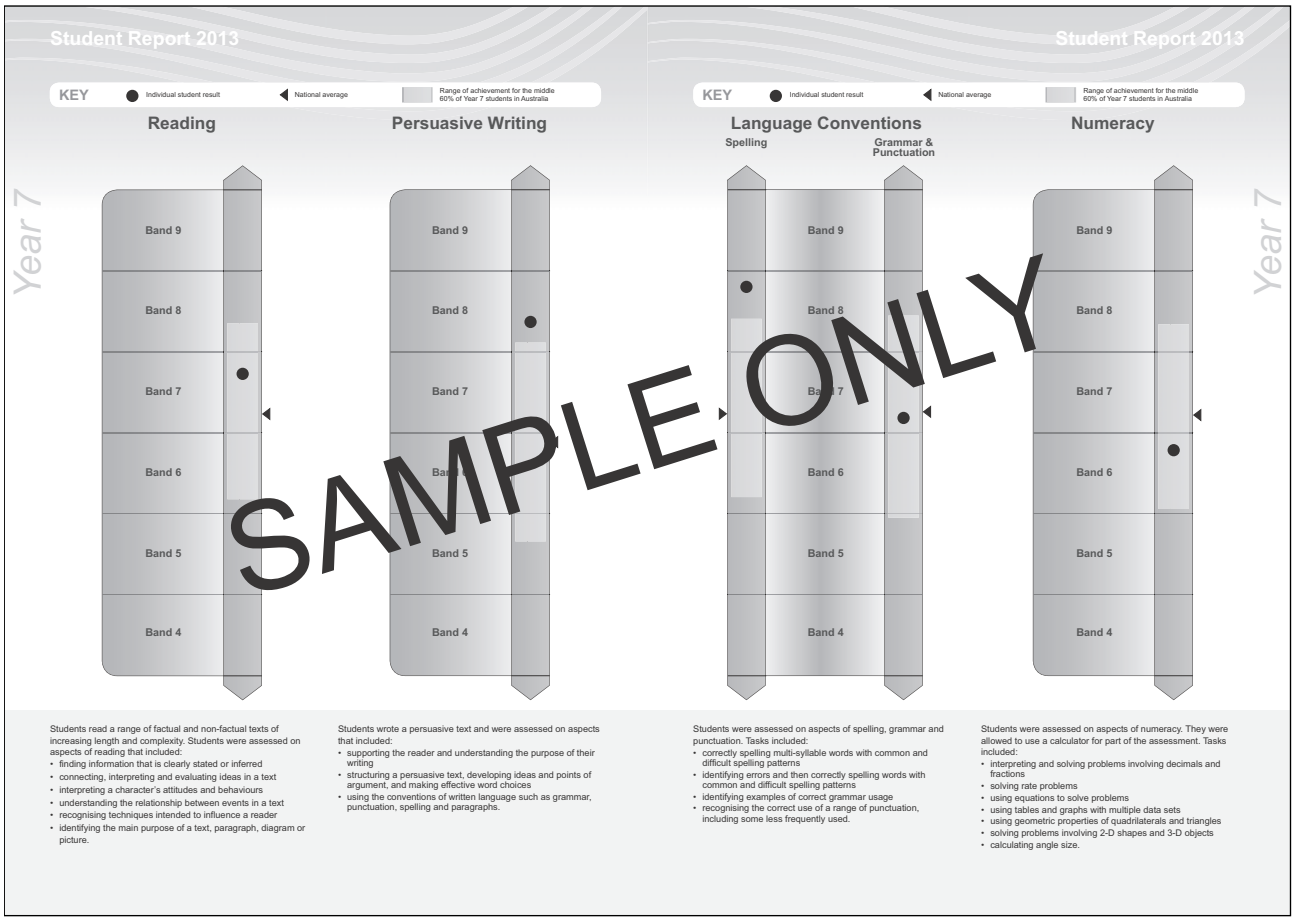
The national average and the range of achievement for Year 7 students are also shown on the scale.

Your child's results are shown on the inside pages of this report.

Sample student report — Pages 2 and 3

Pages 2 and 3 are illustrated below. They show:

- the student's results for each assessment area on an achievement scale marked in bands as shown by (●)
- the national average for each of the assessment areas, as shown by (◀)
- whether a student's achievements fall within the middle 60% of the year level cohort as shown by the shaded area or whether they are at a higher or lower range.



Reading the class report

Class reports are available on the secure section of the QSA website until **7 March 2014** (www.qsa.qld.edu.au/qsa.secure/QSAlogin.do).

Schools should download and save these files to the school network. Copies of the reports should be made available to class teachers and the files kept for future reference.

The class reports give the following information for each test question:

- a summary of each student's response to each question
- the performance of the class as a whole
- the performance of boys
- the performance of girls
- the performance of the state cohort.

For each student, the reports give a scale score for each assessment area.
(Note: There is a single scale score for Numeracy, but separate scale scores for all areas of Literacy.)

The achievement band for each student for the assessment area is also shown.

For each question, the class reports enable comparison of:

- the overall performance of the class and state cohort
- boys and girls within the class
- groups and the state cohort.

Electronic copies of reports are provided on the QSA's secure website in two formats: PDF and CSV. The PDF contains the official results for each school. The raw data is provided in CSV format to allow schools to organise the data for internal school purposes and to populate the QSA data analysis tool, SunLANDA, which is available for download from the QSA website.

Samples of the class reports are provided on the following pages.

Question descriptions and results

In this handbook, information for each test question is provided for teachers to use together with the class reports. This information is provided to help teachers interpret the results for their class and to provide some insights into the results for the entire Queensland cohort. For all reading, spelling and numeracy questions a description of the question, the answer and the percentage of students who answered the question correctly, both in Queensland and nationally, is provided. For the Writing test, annotated samples of writing scripts are provided to demonstrate how the marking rubric was applied. Teachers may wish to refer to these when interpreting their own students' writing scripts.

Scanned images of students' writing will be available on the QSA website until 30 November 2013. They are available from the same page as the class reports. Schools should download these if they wish to keep them for future reference.

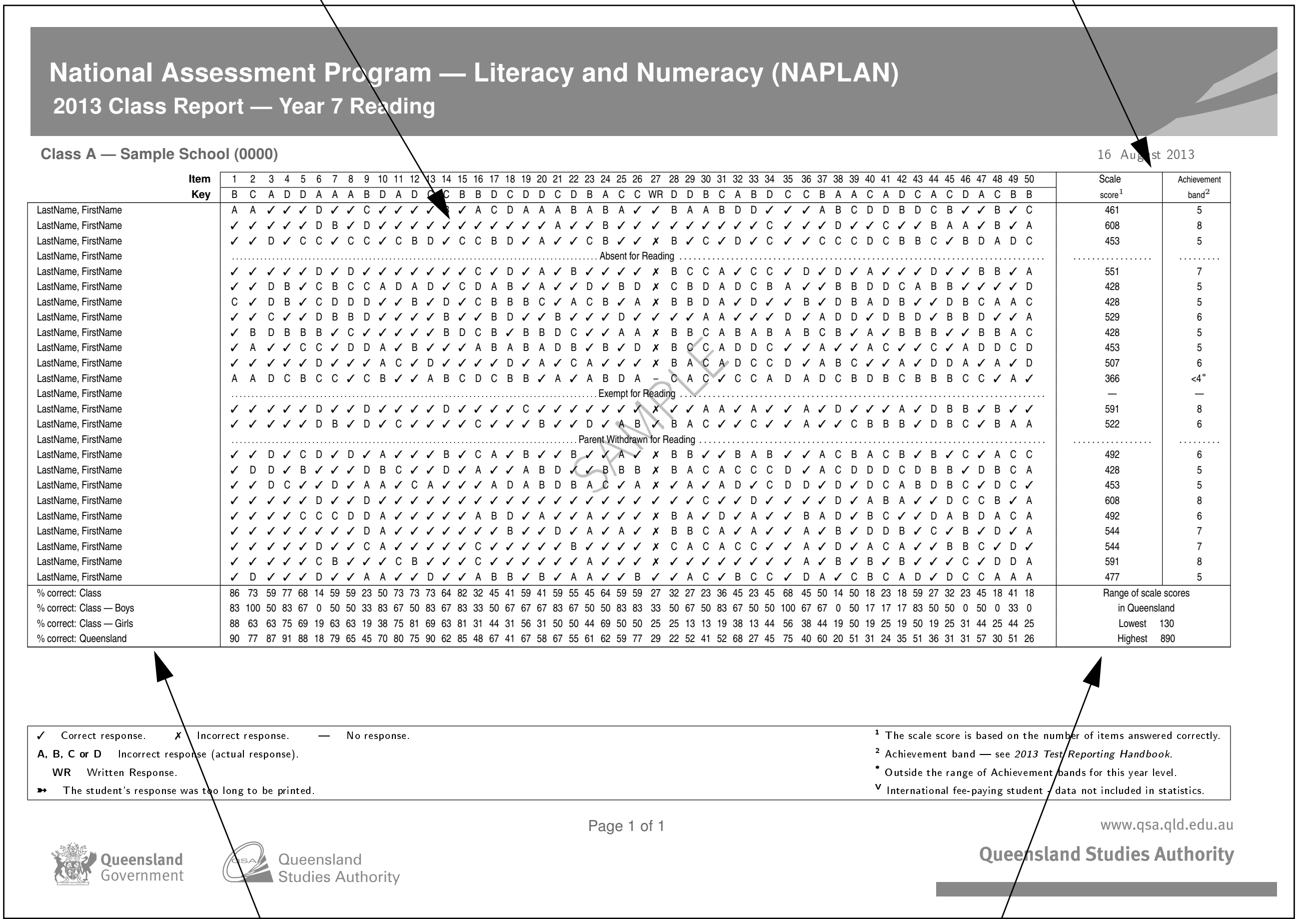
SunLANDA

Schools can use the QSA's literacy and numeracy data analysis tool, SunLANDA, to analyse the data from their students' performances on the NAPLAN tests. The program has been designed to be used by classroom teachers and school administrators.

Sample class report — Reading

How each Reading question was answered by each student. The item is either marked correct or the incorrect response is shown.

This section of the class report gives the scale score and achievement band for each student in the Reading test.



These four rows can be used to compare:

- the overall performance of the class with the state
- boys and girls within the class
- these groups within the state.

This section shows the range of scale scores in Queensland for this Year level.

Sample class report — Writing

How each criterion was judged for each student.

This section of the report gives the scale score and achievement band for each student in the Writing test.

National Assessment Program — Literacy and Numeracy (NAPLAN)

2013 Class Report — Year 9 Writing

Class A — Sample School (0000) 1 August 2013

Item / Key	Audience	Text Structure	Ideas	Persuasive Devices	Vocabulary	Cohesion	Paragraphing	Sentence Structure	Punctuation	Spelling	Scale score[1]	Achievement band[2]
	See *2013 Test Reporting Handbook*											
LastName, FirstName	4	2	3	2	3	2	1	2	2	4	489	6
LastName, FirstName	4	3	3	3	3	3	2	4	3	5	583	8
LastName, FirstName	4	3	3	2	2	3	1	4	2	4	523	6
LastName, FirstName	3	3	3	2	3	2	1	4	3	4	523	6
LastName, FirstName	3	2	3	1	3	2	2	4	3	4	512	6
LastName, FirstName	3	3	3	2	2	2	1	2	2	2	453	5
LastName, FirstName	4	3	4	3	3	3	2	4	4	4	595	8
LastName, FirstName	4	3	3	3	3	3	2	5	3	4	583	8
LastName, FirstName	4	3	3	3	2	3	2	3	3	4	546	7
LastName, FirstName	4	3	3	3	3	3	2	4	3	4	570	7
LastName, FirstName	1	1	2	1	2	1	1	2	2	3	374	<5*
LastName, FirstName	4	3	3	3	3	3	2	3	2	4	546	7
LastName, FirstName	4	2	3	2	3	2	1	3	3	5	523	6
LastName, FirstName	4	3	3	3	3	2	2	3	3	5	558	7
LastName, FirstName	3	3	3	2	2	2	2	3	3	4	512	6
LastName, FirstName	2	2	2	2	2	2	1	3	1	3	428	5
LastName, FirstName	2	1	2	1	2	1	0	2	2	3	374	<5*
LastName, FirstName	3	2	3	2	3	2	2	3	3	3	501	6
LastName, FirstName	4	3	4	3	2	2	3	4	3	4	570	7
LastName, FirstName	4	2	3	3	3	2	2	3	3	4	535	7

Range of scale scores in Queensland is from 95 to 807

This shows the range of scale scores in Queensland for this Year level.

See *2013 Test Reporting Handbook* for descriptions of the marking criteria and details of the range of score points.
Note: Writing results should not be compared with those from 2008 to 2010.

[1] The scale score is based on the standard achieved for each Writing criterion.
[2] Achievement band — see *2013 Test Reporting Handbook*.
* Outside the range of Achievement bands for this year level.

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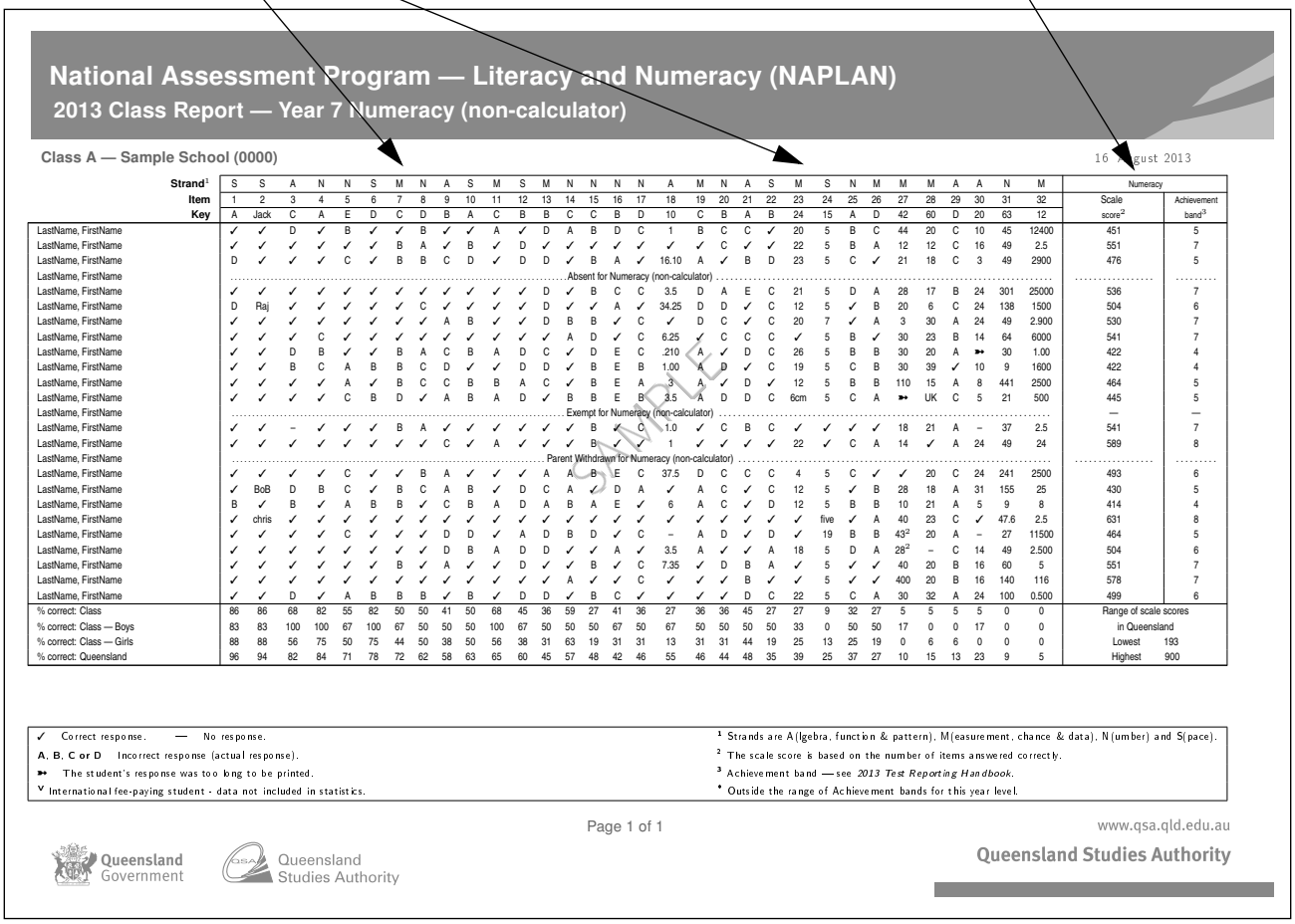
Sample class report — Numeracy

How each Numeracy question was answered by each student.

This section of the class report gives the scale score for each student in Numeracy and the range of scale scores for the relevant Year



National Assessment Program — Literacy and Numeracy (NAPLAN)
2013 Class Report — Year 7 Numeracy (non-calculator)

Class A — Sample School (0000) 16 August 2013

Strand[1]	S	S	A	N	N	S	M	N	A	S	M	S	M	N	N	N	N	A	M	N	A	S	M	S	N	M	M	M	A	A	N	M	Numeracy	
Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Scale score[2]	Achievement band[3]
Key	A	Jack	C	A	E	D	C	D	B	A	C	B	B	C	C	B	D	10	C	B	A	B	24	15	A	D	42	60	D	20	63	12		
LastName, FirstName	✓	✓	D	✓	B	✓	✓	B	✓	✓	A	✓	D	A	B	D	C	1	B	C	C	✓	20	5	B	C	44	20	C	10	45	12400	451	5
LastName, FirstName	✓	✓	✓	✓	✓	✓	B	A	✓	B	✓	D	✓	✓	✓	✓	✓	✓	✓	C	✓	✓	22	5	B	A	12	12	C	16	49	2.5	551	7
LastName, FirstName	D	✓	✓	✓	C	✓	B	B	C	D	✓	D	D	✓	B	A	✓	16.10	A	✓	B	D	23	5	C	✓	21	18	C	3	49	2900	476	5
LastName, FirstName	Absent for Numeracy (non-calculator)																																	
LastName, FirstName	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	D	✓	B	C	C	3.5	D	A	E	C	21	5	D	A	28	17	B	24	301	25000	536	7
LastName, FirstName	D	Raj	✓	✓	✓	✓	✓	C	✓	✓	✓	✓	D	✓	✓	A	✓	34.25	D	D	✓	C	12	5	✓	B	20	6	C	24	138	1500	504	6
LastName, FirstName	✓	✓	✓	✓	✓	✓	✓	✓	A	B	✓	✓	D	B	B	✓	C	✓	D	C	✓	C	20	7	✓	A	3	30	A	24	49	2.900	530	7
LastName, FirstName	✓	✓	✓	C	✓	✓	✓	✓	✓	✓	✓	✓	A	D	✓	C	6.25	✓	C	C	C	✓	5	B	✓	30	23	B	14	64	6000	541	7	
LastName, FirstName	✓	✓	D	B	✓	✓	B	A	C	B	A	D	C	✓	D	E	C	.210	A	✓	D	C	26	5	B	B	30	20	A	➳	30	1.00	422	4
LastName, FirstName	✓	✓	B	C	A	B	B	C	D	✓	✓	D	D	✓	B	E	B	1.00	A	D	✓	C	19	5	C	B	30	39	✓	10	9	1600	422	4
LastName, FirstName	✓	✓	✓	✓	A	✓	B	C	C	B	B	A	C	✓	B	E	A	3	A	✓	D	✓	12	5	B	B	110	15	A	8	441	2500	464	5
LastName, FirstName	✓	✓	✓	✓	C	B	D	✓	A	B	A	D	✓	B	B	E	B	3.5	A	D	D	C	6cm	5	C	A	➳	UK	C	5	21	500	445	5
LastName, FirstName	Exempt for Numeracy (non-calculator)																																—	—
LastName, FirstName	✓	✓	–	✓	✓	✓	B	A	✓	✓	✓	✓	✓	✓	B	✓	C	1.0	✓	C	B	C	✓	✓	✓	✓	18	21	A	–	37	2.5	541	7
LastName, FirstName	✓	✓	✓	✓	✓	✓	✓	✓	C	✓	A	✓	✓	✓	B	✓	✓	1	✓	✓	✓	✓	22	✓	C	A	14	✓	A	24	49	24	589	8
LastName, FirstName	Parent Withdrawn for Numeracy (non-calculator)																																	
LastName, FirstName	✓	✓	✓	✓	C	✓	✓	B	A	✓	✓	✓	A	A	B	E	C	37.5	D	C	C	C	4	5	C	✓	✓	20	C	24	241	2500	493	6
LastName, FirstName	✓	BoB	D	B	C	✓	B	C	A	B	✓	D	C	A	✓	D	A	✓	A	C	✓	C	12	5	✓	B	28	18	A	31	155	25	430	5
LastName, FirstName	B	✓	B	✓	A	B	B	✓	C	B	A	D	A	B	A	E	✓	6	A	C	✓	D	12	5	B	B	10	21	A	5	9	8	414	4
LastName, FirstName	✓	chris	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	five	✓	A	40	23	C	✓	47.6	2.5	631	8
LastName, FirstName	✓	✓	✓	✓	C	✓	✓	✓	D	D	✓	A	D	B	D	✓	C	–	A	D	✓	D	✓	19	B	B	43[2]	20	A	–	27	11500	464	5
LastName, FirstName	✓	✓	✓	✓	✓	✓	✓	✓	D	B	A	D	D	✓	✓	A	✓	3.5	A	✓	✓	A	18	5	D	A	28[2]	–	C	14	49	2.500	504	6
LastName, FirstName	✓	✓	✓	✓	✓	✓	B	✓	A	✓	✓	D	✓	✓	B	✓	C	7.35	✓	D	B	A	✓	5	✓	✓	40	20	B	16	60	5	551	7
LastName, FirstName	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	A	✓	✓	C	✓	✓	✓	B	✓	✓	5	✓	✓	400	20	B	16	140	116	578	7
LastName, FirstName	✓	✓	D	✓	A	B	B	B	✓	B	✓	D	D	✓	B	C	✓	✓	✓	✓	D	C	22	5	C	A	30	32	A	24	100	0.500	499	6
% correct: Class	86	86	68	82	55	82	50	50	41	50	68	45	36	59	27	41	36	27	36	36	45	27	27	9	32	27	5	5	5	5	0	0	Range of scale scores	
% correct: Class — Boys	83	83	100	100	67	100	67	50	50	50	100	67	50	50	50	67	50	67	50	50	50	50	33	0	50	50	17	0	0	17	0	0	in Queensland	
% correct: Class — Girls	88	88	56	75	50	75	44	50	38	50	56	38	31	63	19	31	31	13	31	31	44	19	25	13	25	19	0	6	6	0	0	0	Lowest	193
% correct: Queensland	96	94	82	84	71	78	72	62	58	63	65	60	45	57	48	42	46	55	46	44	48	35	39	25	37	27	10	15	13	23	9	5	Highest	900

SAMPLE

✓ Correct response. — No response.
A, **B**, **C** or **D** Incorrect response (actual response).
➳ The student's response was too long to be printed.
ˇ International fee-paying student - data not included in statistics.

[1] Strands are A(lgebra, function & pattern), M(easurement, chance & data), N(umber) and S(pace).
[2] The scale score is based on the number of items answered correctly.
[3] Achievement band — see *2013 Test Reporting Handbook*.
♦ Outside the range of Achievement bands for this year level.

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*For Years 7 and 9, there is a single scale score for Numeracy.

Trend graphs

Trend graphs will be available from late October 2013. These will indicate how students in the various year level cohorts performed in the five different NAPLAN assessment areas, year by year, since 2002.

Students' raw scores for each test are transferred to a scale that allows comparisons to be made between assessment areas, from year to year and with the state mean. The use of average normalised scale scores also means that NAPLAN performance data may be compared with Queensland Years 3, 5 and 7 Literacy and Numeracy Tests performance data.

Reading the school report

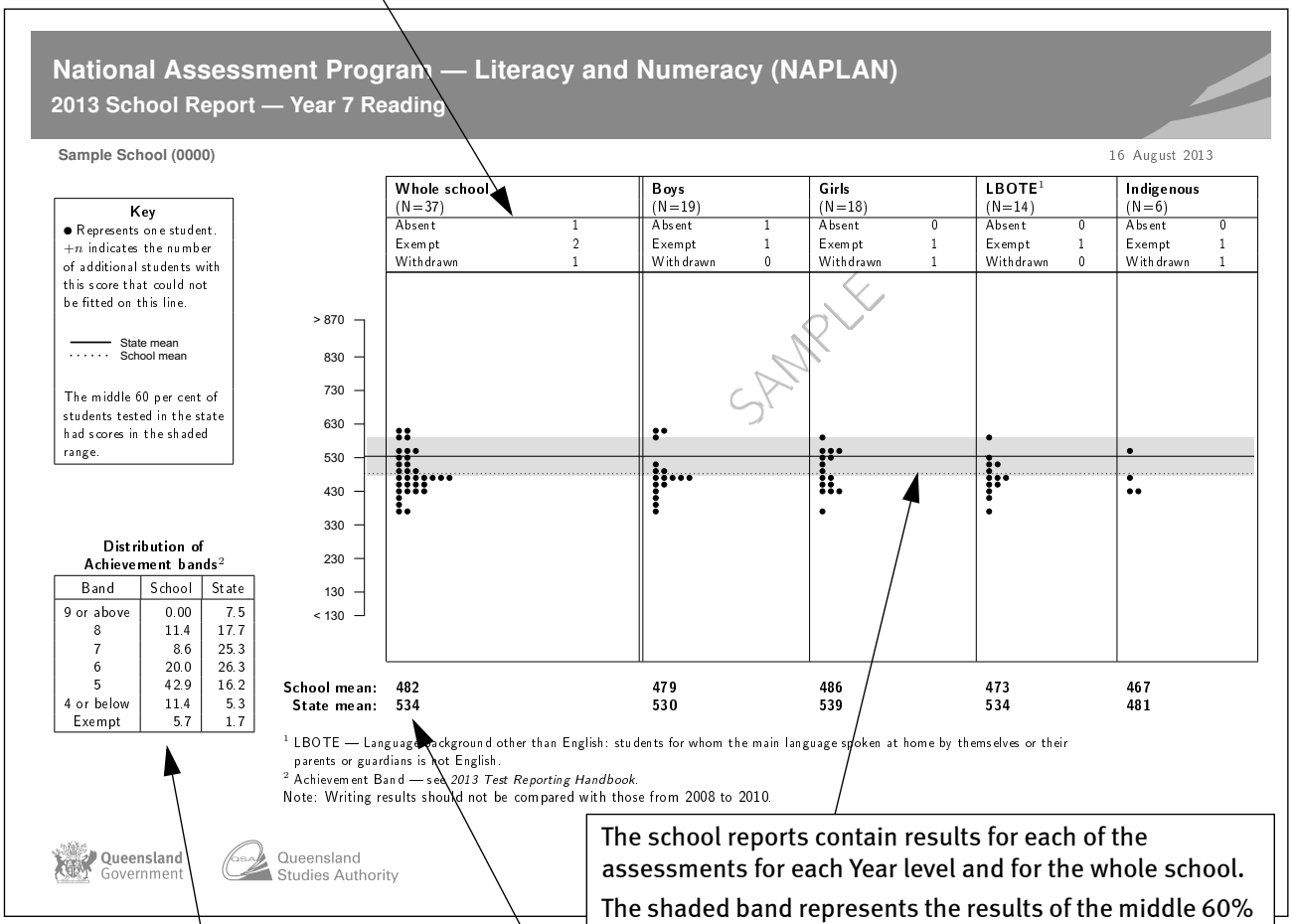
School reports are available on the secure section of the QSA website until **7 March 2014**.

It is recommended that schools download and save copies of school and class reports to the school network for school use and future reference. The reports should be made available to class teachers.

The school reports contain a school summary and shows student performance on the tests.
Below is a sample of a school report.

The reports give performance information for:

- the whole school
- boys
- girls
- students from a language background other than English (LBOTE)
- students from an Indigenous background.



The school reports contain results for each of the assessments for each Year level and for the whole school.

The shaded band represents the results of the middle 60% of students.

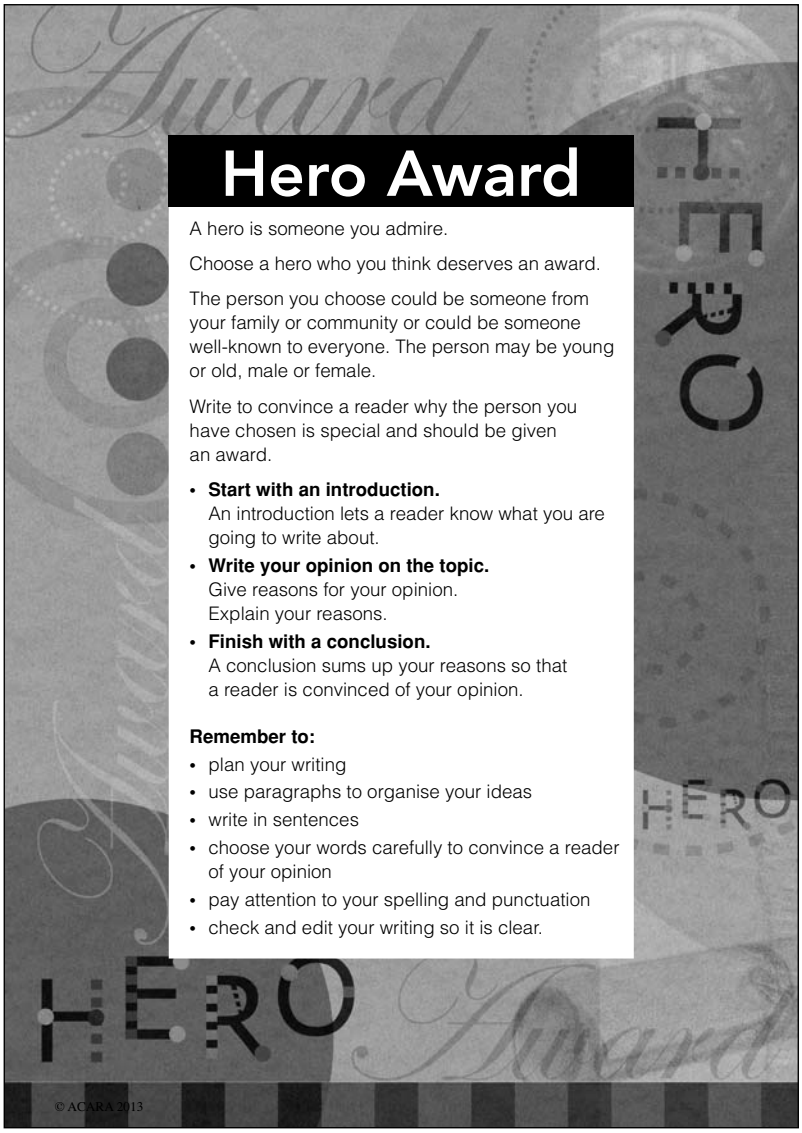
Distribution of students across the achievement bands for the school and the state, including the number of students below the minimum standard.

School means

State means

Test results and key messages

Writing — Years 3, 5, 7, 9



Key messages for teachers

About the task

All year levels were given the same prompt and the same spoken instructions. Teachers read the text on the stimulus page aloud to the students. No discussion of the task was allowed. Working independently, students had to plan, draft and edit a written response. They had 5 minutes to plan, 30 minutes to write their script and 5 minutes to edit and complete their writing. They were given a maximum of three pages on which to write their response.

This year the prompt was constructed without supporting images that might tempt students to write a 'tour of the stimulus'. The wording was also changed to remove the suggestion that students view the topic from both sides; although they could still use this rhetorical technique if they desired.

The prompt gave clear guidelines about the basic structural elements of the writing: an introduction, a body and conclusion. Within this structure, there were no prescribed methods for developing these elements. The prompt also provided students with a writing checklist.

Markers were trained using the national persuasive writing training package. This ensured that markers applied the 10 criteria and their related standards consistently across Australia. The *NAPLAN Persuasive writing marking guide* is available at www.nap.edu.au/NAPLAN/About_each_domain/Writing/index.html.

Performance

Broadly, the open-ended topic for 2013, *Hero Award*, and removal of the images from the stimulus page, appears to have allowed more students to engage with the task and write more openly about people they were well-acquainted with, and for whom they had genuine feelings and opinions. By engaging with the topic, students were in a better position to demonstrate how well they could write. Writing was assessed according to how well students persuaded the reader as to the heroic qualities of their respective nominee and controlled textual features of their writing.

In general, students from Years 3 and 5 could grasp the concept of 'hero' as someone worthy of admiration and consequently, an award. A few younger students struggled with this concept. Typical subjects for awards were family members, such as a parent (the Mother's Day factor no doubt playing some role here) or relative. Domestic duties and responsibilities figured highly in the reasons for writers' appreciation. Younger students wrote compassionately about their heroes' qualities.

When the younger students reached out beyond familial heroes into the realm of sporting identities or community services, the focus tended to be on the impact of the 'good work' by these people and the subsequent impact on the writers' lives, e.g. If your house is burning, they will come and save you and put the fire out.

Textually, the 'firstly, secondly, thirdly' argument was still adopted by many Year 3 and 5 students, even to the point where structural headings appeared on the page (Argument 1 etc.). Younger writers also tended to make assertions about what their heroes did, and sometimes supported this with evidence. Because of the adherence to the 'five paragraph essay', ideas were sometimes disconnected (Dad takes me fishing, Dad gets money for us, and Dad drives me to sport), creating issues around cohesion and the development of ideas. While this approach usually enabled students to write five sentences or more, the structure was an impediment to effective paragraphing. Most Year 3 students and some Year 5 students used only basic sentence structures. More able Year 5 students made greater use of complex sentences, enhancing and elaborating on their argument.

Many students from Years 7 and 9 also selected family members as heroes in their writing. As expected, these responses were generally deeper in scope, elaborating on attributes of their respective heroes while appealing to the reader's values and emotions. Sporting heroes and historical, religious, entertainment and political figures (some drawn from the school curriculum) also received guernseys. In some more sophisticated responses, students were able to share with the reader the broader qualities of what it is to be a hero then demonstrate how these qualities evidence themselves in the life and actions of their nominated hero. The topic for 2013 provided students with more scope to tackle these types of 'big ideas', and in general, subject matter and approach were both enhanced compared to the two previous persuasive writing tests.

Some Year 7 and 9 students wrote in a less formulaic way. The absence of visuals on the stimulus no doubt contributed to this. The 'five paragraph essay' in persuasive writing was still evident, though less stultifying than previously. The open-ended nature of the task this year assisted in varying both subject and form. Higher-end responses incorporated tonal techniques such as humour and compassion. Added to this was an improvement in the cohesiveness of texts, with generally stronger paragraphing and linkages between paragraphs by older students.

While selecting a highly personal topic such as 'mum', some students were still able to demonstrate their knowledge and use of higher level vocabulary. Some students were able to develop their essay about an everyday person around deeper or more global themes such as compassion or humanity, giving themselves an opportunity to demonstrate their power with words. Some students still persisted with over-use or inappropriate use of strengthening adjectives which do little to enhance the writing or the vocabulary score.

Markers reported the need to continuously improve students' skills in grammar, punctuation and spelling. Weaknesses in sentence level grammar, and predominantly phonetic approaches to spelling were identified as areas of concern by the marking pool.

Implications for teaching

A very important aspect of writing is to understand the task. The purpose for writing guides the genre for a text. This will be very important for the 2014 NAPLAN Writing task as ACARA has stated that students will be required to write either a narrative or a persuasive text. The stimulus will make clear which genre is required. The stimulus also defines the parameters of the subject to be written about. Students need a way of planning that helps them quickly

consider what aspects of the topic they know about and how they can best develop this. Students need different planning models to suit the different purposes they may have for writing about a topic. An example of a lesson sequence for teaching different models in Years 7–9 can be found on the *Hidden World* stimulus on the QSA website. Year 3 students may benefit from learning how to link related ideas after they brainstorm, rather than treating every idea as unique. By linking ideas they may be able to provide more elaboration to develop a few bigger ideas more effectively. As students become competent at clustering their ideas, the teacher can model different ways to plan for writing, e.g. explore a list of reasons for a position; compare and contrast the different aspects of an argument; explain a problem and provide a solution; describe the outcome or effect caused by particular ways of dealing with an issue or problem.

The *Australian Curriculum: English* outlines the *Sentence and clause level grammar* students need to be taught at each year level. The Scope and sequence for this learning area describes: *what a clause is and how simple, compound and complex sentences are constructed through one clause (simple) or by combining clauses using different types of conjunctions (compound and complex)*. To expand students' understanding of sentence structure, this curriculum document can form the basis for the systematic introduction of sentence structure in teaching programs across a school. For example, by the end of Year 1 students need to understand what a sentence is. By the end of Year 2 they know how to link clauses using conjunctions and at Year 3 students develop understanding of clauses and subject verb agreement. By Year 7 students need to study more complex clause structures and how authors pack information into sentences to make them lexically dense.

Systematic study of word-level grammar and vocabulary described in the *Australian Curriculum: English Scope and sequence* document would assist students to understand more about the grammar of the texts they write and the choices they can make to improve their writing.

Markers noted a growing tendency for students to spell using only sound/symbol knowledge rather than also using knowledge of derivation, syllables and meaning. The QSA document *Queensland's literacy test: A framework for describing spelling items* describes levels of development in spelling and the layers of knowledge spellers need as they spell words. This document may provide a useful framework for monitoring student spelling knowledge.

References

Australian Curriculum, Assessment and Reporting Authority (2013) *Australian Curriculum: English* www.australiancurriculum.edu.au

Queensland Studies Authority (2013) *Hidden worlds* www.qsa.qld.edu.au/downloads/p_10/3579_wt_hidden_worlds.pdf

Queensland Studies Authority (2011) *Queensland's literacy test: A framework for describing spelling items* www.qsa.qld.edu.au/downloads/p_10/3579_describing_spell_items.pdf

Year 3 Literacy — Language conventions

Spelling — item descriptions and key messages

This table shows the results for the spelling component of the Year 3 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Proofreading — error not identified				
1	B stars (starz)	92.3	92.5	Identifies an error in a word with the inflectional ending *-s*.
2	C pretty (pritty)	89.3	88.5	Identifies an error in a multisyllable word where the short vowel is represented by *-e*.
3	A pick (pik)	87.4	87.4	Identifies an error in a word where the digraph *-ck* follows a short vowel.
Proofreading — error identified				
4	yellow (yello)	79.3	77.8	Correctly spells a multisyllable word ending with *-ow*.
5	shopping (shoping)	74.1	72.3	Correctly spells a multisyllable word requiring doubling of the final consonant before the inflectional ending *-ing*.
6	leaf (leef)	67.8	69.2	Correctly spells a word with the long vowel digraph *-ea*.
7	bear (bare)	64.2	68.6	Correctly spells a homophone requiring the discrimination between *-ear* and *-are*.
8	winner (winnor)	64.2	65.9	Correctly spells a multisyllable word requiring doubling of the final consonant before the inflectional ending *-er*.
9	flower (flour)	59.8	63.0	Correctly spells a multisyllable homophone requiring the discrimination between *-ou* and *-ow*.
10	neatly (neatley)	48.4	51.1	Correctly spells a multisyllable word where the adverb forming suffix *-ly* is added without change to the base word.
11	bowl (bole)	37.1	43.6	Correctly spells a word with the digraph *-ow*.
12	parrot (parret)	23.2	29.1	Correctly spells a multisyllable word with the schwa *-o* in the final unstressed syllable.
13	popular (populer)	20.3	24.5	Correctly spells a multisyllable word with the ending *-ar*.
14	loose (luse)	22.7	27.2	Correctly spells a word with the long vowel digraph *-oo*.

Item no.	Answer	Qld%	Aust%	Description
Proofreading — error not identified				
15	white (wite)	54.3	59.7	Identifies an error, then correctly spells a word beginning with the consonant digraph *wh-*.
16	wise (wyse)	46.6	51.4	Identifies an error, then correctly spells a word with the long vowel pattern *-i_e*.
17	movement (movment)	47.1	52.5	Identifies an error, then correctly spells a multisyllable word where addition of a suffix requires no change to the base word.
18	waited (wayted)	33.2	38.0	Identifies an error, then correctly spells a multisyllable word with the long vowel pattern *-ai*.
19	glitter (gliter)	36.2	41.4	Identifies an error, then correctly spells a multisyllable word with the doublet *-tt* at the syllable juncture.
20	kindness (kindnes)	35.5	41.9	Identifies an error, then correctly spells a multisyllable word with the suffix *-ness*.
21	healthy (helthy)	33.5	36.1	Identifies an error, then correctly spells a multisyllable word with the short vowel spelt *-ea*.
22	battery (battary)	26.5	32.7	Identifies an error, then correctly spells a multisyllable word with an unstressed vowel *-er* in the second syllable.
23	daily (dayly)	17.8	22.5	Identifies an error, then correctly spells a multisyllable word where the long vowel is spelt *-ai*.
24	sneeze (sneese)	15.7	17.3	Identifies an error, then correctly spells a word with *-z* followed by *-e*.
25	technology (tecknology)	6.8	9.7	Identifies an error, then correctly spells a word derived from the Greek word *tekhno* where the *ch* represents the *-k* sound.

Key messages for teachers

About the test

This test comprised 25 items made up of three sets of different item types. In each set the difficulty of items gradually increased. In the first set, students were required to identify a spelling mistake (items 1–3). Around 90% of Australian students were able to correctly identify the words containing errors. In the second set of items, students were asked to correct the spelling of an already identified error (items 4–14). The third set of items was more challenging as it required students to identify a mistake and then spell the word correctly (items 15–25).

A comparison of the results for two words with a similar pattern in the 2012 and 2013 tests demonstrates the difference in difficulty between items where errors were identified, as they are in the second set, and unidentified, as they are in the third set. In 2012, only 14.8% of students spelt the word *actor* correctly. In 2013, a word with a similar pattern, *winner*, which appeared in the error-unidentified part of the test, was spelt correctly by 64% of Queensland students. This difference in performance between the two forms of items is not unusual. It signals the need for students to be taught how to apply their spelling knowledge to proofreading as it is a different and more sophisticated skill.

Performance

Queensland's performance was consistent with the national result in the first set of items. These one-step error identification items required knowledge of how to spell the plural ending *-s*, the short vowel *-e* and final *k* sound, which is usually spelt with the digraph *-ck* in words with a short vowel.

The second and third sets of items tested aspects of spelling such as the coding of vowels, sometimes in unstressed syllables, the adding of suffixes and the spelling of common homophones such as *bear* and *flower*. These elements are a major teaching focus in Years 2 and 3.

The results support what teachers know — that most students are still developing this knowledge. Queensland students performed well on the first of the error-identified items (*yellow*) and the other word with a common long vowel pattern (*leaf*). Performance shows these kinds of patterns are more challenging when they are in multisyllable words or are in homophones such as in *flower* and *bear* where decisions about meaning dictate the vowel patterns. While more than half of Queensland students were able to successfully spell the homophones *bear* and *flower*, students struggled to spell *loose* correctly, with 20% of students instead writing the near homophone *lose*.

About half of Queensland Year 3 students demonstrated that they could add suffixes to base words (*shopping, winner, neatly*). In the error-unidentified items, which target knowledge of suffixes, i.e. the spelling of *movement* and *kindness,* the results and the error patterns showed some of the aspects of adding suffixes that challenge students. For example, in spelling *movement,* students needed to know that no *e*-drop was needed in the base word because it follows a *-v* — 47% of Queensland students knew this.

Analysis of the common errors suggested some Queensland students were unable to make efficient use of the contextual information provided by the sentence. Students also struggled to spell *bowl* (item 11). They appeared not to recognise the target word, producing phonetic errors.

Students need to be testwise enough to know that the circled, identified word is wrong and that they should not reproduce it as a correct answer. In all but one of the error-identified items, the target word was one of the five most common errors. Students should use proofreading strategies to deconstruct the words to check the parts. For example, in checking the spelling of *wayted,* they should be able to recognise that this word is *wait+ed*. They should then check the spelling of each part and if necessary the conventions for adding the inflectional ending. The error patterns suggest that students were unable to do this. Instead, they appear to have tried to correct the spelling by using letter-to-sound matching — 12% of students wrote *wated,* a further 4% wrote *wayed*.

In an interesting twist of performance, more boys (8%) than girls (5%) were able to spell the word *technology*.

Implications for teaching

Year 3 students need to move beyond the strategy of mapping sounds to letters. They need to develop problem-solving strategies for learning and monitoring their spelling as well as for use in proofreading. As students learn about the coding of long vowels, they need to learn about the sequencing of these letter patterns, the positions in which they occur and the probability with which they occur. For example, in correcting the error in *waited*, students should know that while *ay* is highly likely to occur at the end of a word such as *way,* it is not likely to be used to spell the vowel sound in the middle of a word such as *wait* and that they should check to see if one of the two most common patterns for spelling this sound, *ai* or *a_e,* should be used instead.

Year 3 students need to be overtly taught about the influence of meaning on spelling. It is important that they develop the key understanding that words with similar meaning will maintain that spelling even if the pronunciation changes and words with a different spelling, even if they sound the same, will have a different meaning. The knowledge that students develop as they explore homophones provides the foundation on which understanding of the meaning layer can be built.

The conventions for adding inflectional endings and other suffixes is a key teaching point. The convention for doubling is of critical importance as it is one that will help students understand syllable patterns. It is also the one they find most difficult. Although 74% of the Queensland students correctly spelt *shopping,* none of the five most common errors showed evidence that students who were unable to spell it understood the conventions for doubling. Similarly in item 19, *glitter* (36%), where a doublet is required at the syllable juncture, none of the five most common error patterns showed evidence of a doublet.

The ability to apply spelling knowledge to proofreading is a sophisticated activity. Students must be able to draw on their knowledge about the spelling system in an organised and strategic way. Performance on the third set of items (error-unidentified) shows how difficult this is. Students need support to develop their proofreading abilities through focused and direct teaching. This knowledge can be built by using learning strategies such as Look-Cover-Write-Check, or the BEE keys which ask students to observe, remember and use specific word features such as sequence, frequency and position of letters.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Grammar and punctuation — item descriptions and key messages

This table shows the results for the Grammar and punctuation component of the Year 3 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
26	A	90.8	90.9	Identifies the correct preposition to introduce a prepositional phrase.
27	B	90.6	90.5	Identifies the conjunction that best signals the intended logical relations between two clauses in a compound sentence.
28	A	84.9	86.1	Identifies the indefinite article before a noun.
29	A	82.5	84.3	Identifies the correct form of a verb in the present tense.
30	C	80.7	81.6	Identifies the relative pronoun needed to introduce an adjectival clause in a complex sentence.
31	B	61.7	61.4	Identifies the function of an adverb in a complex sentence.
32	A	81.5	83.9	Identifies the pronoun representing the subject of a clause.
33	C	72.2	74.4	Identifies the appropriate modal auxiliary to suggest certainty.
34	A	72.0	71.0	Identifies the correct position for an apostrophe of contraction.
35	C	69.3	65.8	Identifies the correctly punctuated contraction.
36	D	60.5	67.3	Identifies the preposition to complete a phrasal verb.
37	B	61.0	61.1	Identifies the noun in a simple sentence.
38	D	46.2	49.0	Identifies the correct punctuation of quotation marks.
39	C	59.7	60.6	Identifies the correct sentence boundary punctuation between two simple sentences.
40	D	58.2	61.2	Identifies the correct auxiliary verb in a simple sentence.
41	D	51.6	55.9	Identifies the correct pronoun and word order for a compound subject in a simple sentence.
42	D	52.9	52.3	Identifies correct sentence boundary punctuation.
43	B	44.0	47.2	Identifies a simple sentence.
44	A	39.5	41.1	Identifies the correct use of commas in a list.
45	B	41.8	44.3	Identifies the correct tense for a verb in a simple sentence.
46	C	42.6	46.7	Identifies a sentence which correctly combines information from two sentences.
47	D	25.8	28.6	Identifies the correct use of capital letters for proper nouns.
48	D	35.4	39.5	Identifies an adverb of time in a complex sentence.
49	C	30.9	30.5	Identifies the correct punctuation of indirect speech.
50	B	22.9	25.7	Identifies the correct use of a superlative adjective in a simple sentence.
51	B	23.9	25.2	Identifies the correct use of an apostrophe of contraction in a simple sentence.

Key messages for teachers

About the test

The 2013 Year 3 Language conventions test consisted of 26 questions — 17 grammar and 9 punctuation. The grammar questions assessed aspects of knowledge at the word, group, clause and sentence levels. These appeared in the latter half of the test as the level of difficulty increased. Punctuation questions were assessed at both sentence and word level punctuation with fewer items assessing sentence boundary punctuation than in 2012.

Performance

The performance of Queensland students was very similar to that across the nation.

In grammar, Year 3 students across Australia excelled at items which focused on knowledge of prepositional phrases, conjunctions and indefinite articles. Queensland students also compared well on items which required knowledge of pronouns. In item 30, students needed to select the correct relative pronoun (*This is the girl **who** won the bicycle race*) and in item 32, students needed to select the pronoun which correctly represented the subject (*The good weather means that **it** will be possible to play the game*). The majority of students identified the correct pronoun and word order in item 41. The correct use of the relative pronoun is challenging to students at all year levels with significant numbers of students using *that* to refer to people. So, this is a grammatical feature that would benefit from direct teaching, particularly in the context of writing.

On items 29 and 45 students were required to identify correct tense. Performance on the two items shows those aspects that provide a challenge to students in mastering tense. While 82% of students were able to identify the correct form of a verb needed for correct present tense, about half that number were able to identify the correct tense from options that all began with a clear indication of time signalling the use of future tense.

At the word level, most students were able to identify the function of an adverb (item 31). In this item, the second most able students, other than those who were correct, selected the word which was an adjective. This may have been as a result of a misreading of the word *describes* in the question stem.

Students found the identification of the correct superlative adjective (item 50) challenging. The item required both close reading and a knowledge of Standard Australian English. A large number of students, including the second most able students, selected *most largest* as correct. This is possibly because students are still developing control over this language form in their everyday speech.

In punctuation, items 39 and 42 asked students to identify the sentence boundaries. Where students were asked to consider both the sentence boundary and internal punctuation as they were in item 38 (an item which required the correct use of quotation marks in direct speech) and item 49 (which required the punctuation of indirect speech) the demands were much more challenging. However, both the Queensland and national results show this is a concept that Year 3 students are ready to learn. Similarly, item 44 (which tested the use of list commas) was challenging to students across Australia. It required students to discriminate when to use commas and when not to — a high-level skill. The facility rate shows that students are ready to learn this concept.

At the word level, three items (34, 35 and 51) tested apostrophes of contraction. These items should be analysed together to show those aspects which provide learning challenges. In the first two items, where the students had to identify a correct contraction, the facility rates were around 70%. However, where students were required to use a higher level skill to discriminate between the options to determine the correct use, only about a quarter of students could do this. Students also found the punctuation of proper nouns challenging.

Implications for teaching

Explicit teaching, which involves contrasting the similarities and differences between Standard Australian English and local usage, would help students develop a richer understanding of language and its use. Being able to discriminate between forms will assist students to comprehend more accurately and to write well.

In learning about punctuation, students will benefit from being taught the relationship between punctuation and meaning. Explicit teaching of sentence punctuation, particularly as students begin to read and write more complex sentences, remains an important focus. As students write more complex sentences they can lose their sense of where the boundaries are and need help to identify how and where chunks of meaning should be separated.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA item analyses are also available to Education Queensland schools through *OneSchool*.

Writing task sample

Year 3

Every Mum Deserves a award

Everyone should know that mums do alot of work around the house. I think every mum definitely deserves a award. Mums certainly do alot of work with making sure you understand things, make sure we have things to wear and makes sure the house is clean.

Firstly, mums help us with alot of things. It is very important that you know everything you can about naplan. It is also absolutely importani that you knaw what is coming up. If you don't understand a bit your mum will help you. It's very, very important that you know all your maths by year 4. You will have alot of trouble if you don't let your mum help you. Your mum also looks after you and your body. If you are sick she will look after you and give you medicine. Mums are very good at looking after you.

Secondly, mums pay lots of money to mabe sure you can learn at school, have clothes to wear and so you can eat healthy food. It is

definitely important that you can go to school. It is important that you learn lots of things to get a job. At school you will also learn sport to keep you fit. Everyone has to have something to wear! It would be so embarassing to have no clothes! I think mums are absolutely marvellous! It is so very important that we have healthy food. It helps us keep fit and have a good life. Don't you think?

Finally, mums are very nice and kind to clean the house while we are having fun. A clean house helps us keep fresh and happy. I love keeping fresh and happy. At night I love having a lovely warm bed. Thanks to mum who did for us! Mums are absolutely fabulous for keep the house clean for us! Aren't they?

Thanks to mums we have great lives. By now everyone should know every mum deserves a award! They help us with everything such as: helping us, making sure they buy us enough stuff and making sure the house is clean.

MUMS DESERVE A AWARD!

END OF TEST

Year 3

Audience 4

The script orients the reader and provides sufficient information for a reader to follow easily. The writer addresses the reader as a separate person with separate interests. She writes about *every Mum* rather than just her own, and she praises mothers for supporting children's real and long-term interests, i.e. to have *a good life*.

The writer's personality emerges through the use of formal language, e.g. *certainly* rather than *really* and *important* rather than *great*. The tone is lively and positive and there is an engaging quip about needing clothes.

Text structure 3

The script organises ideas into the three identifiable components just well enough for a score of 3.
The writer knows how to 'mind map' ideas and to make a first draft, and is ready to learn how to improve the internal order and structure within the sections and the paragraphs.

Ideas 3

Ideas are relevant to persuading that mums deserve an award. The ideas are mainly assertions about how mums help with children's education, health and home life and about why this is important.

Persuasive devices 3

Basic persuasive devices are used. The most effective persuasion in the text comes from the use of language to persuade a reader of the positive qualities of an appropriate nominee, mothers in general. These include emphatic statements (*definitely*), evaluative adjectives (*so*, *marvellous*), conditional statements (*If you don't*), modality (*everyone should*), rhetorical address (*Don't you think?*) and the capitalised statement at the end.

Vocabulary 3

Precise vocabulary choices include, *healthy food*, *so embarrassing, keeping fresh and happy*.
There are some choices of formal verbs and adjectives.

Cohesion 3

The script is a sustained piece of writing. The use of related words works well, e.g. *wear* linked to *clothes*, *at night* linked to *warm bed*. The use of repetition, e.g. *it is important … is also important*, is a learned technique that the student is experimenting with and will be able to develop further.

Paragraphing 2

The student attempts a topic sentence in the second and the fourth paragraphs with some success.

Sentence structure 3

Most simple, compound and complex sentences are correct. In the second sentence the writer attempts a more sophisticated sentence structure, but a lack of control leads to errors in tense formation (*making*, *make* and *makes*) and preposition choice. A similar tense error occurs in the first sentence of the third paragraph. The writer is developing an understanding of the use of conjunctions *that* and *if*. The writer is beginning to understand how to distance herself through the use of sentences beginning with *It is*.

Punctuation 3

All sentence boundary punctuation is correct. There is some other correct punctuation, including use of contractions, commas and a colon in the final sentence.

Spelling 5

Eleven difficult words are spelt correctly: *deserve, deserves, certainly, important, absolutely, medicine, secondly, healthy, definitely, marvellous, fabulous*.

Year 3 Literacy — Reading

Item descriptions and key messages

This table shows the results for the Year 3 Reading test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Earthworms (Informative)				
1	C	91.0	90.7	Locates directly stated information.
2	A	88.1	88.0	Locates directly stated information.
3	C	89.0	88.5	Locates directly stated information.
4	B	79.8	81.6	Makes a synonymous match to answer a literal question.
5	B	87.0	86.7	Identifies the main idea of a simple text.
6	D	70.4	70.9	Summarises the main purpose of a simple text.
Eggs (Informative)				
7	B	75.5	77.1	Interprets directly stated information.
8	D	75.6	76.4	Locates directly stated information in a label.
9	A	54.0	56.9	Interprets the meaning of technical vocabulary using knowledge of a textual feature (brackets).
10	A	63.7	66.6	Integrates information from a diagram label.
11	D	59.9	61.5	Identifies the purpose of a table.
12	A	41.3	44.7	Interprets an image using information from a table.
The Story of Thunder and Lightning (Narrative)				
13	D	33.6	34.0	Identifies the character's action.
14	D	37.0	39.1	Identifies additional descriptive information provided in brackets.
15	C	51.3	54.5	Infers how characters are portrayed.
16	B	70.1	72.8	Interprets the reason for a character's action.
17	B	48.0	52.4	Interprets a phrase of time to infer a character's actions.
18	D	37.9	38.8	Interprets figurative language to make a context-based inference.
An Interview with Andy Griffiths (Informative)				
19	A	71.4	74.5	Locates directly stated information.
20	D	20.9	23.5	Integrates information to make a text-based inference.
21	B	59.6	64.0	Interprets directly stated information.
22	A	54.0	60.6	Infers the relationship between ideas and interprets vocabulary.
23	B	71.6	75.6	Interprets directly stated information.
24	A	40.1	45.1	Infers the purpose of a quotation in an interview.

Item no.	Answer	Qld%	Aust%	Description
Kaiya goes hunting (Narrative)				
25	B	45.7	48.9	Interprets the meaning of a word (*drone*).
26	C	20.4	19.2	Integrates information to infer the reasons for a character's reaction.
27	C	38.4	41.1	Infers the reason for a character's action.
28	C	47.2	50.0	Infers the reason for a character's action.
29	D	23.2	23.7	Infers a character's emotion by interpreting an action.
30	D	21.5	21.9	Identifies the underlying theme of a narrative.
Adopt-a-Dog (Persuasive)				
31	B, E, A, C, D	20.6	26.2	Identifies structural elements in an advertisement.
32	C	45.7	50.9	Integrates textual and contextual information to identify authorship.
33	B	34.1	39.2	Locates directly stated information using knowledge of grammar.
34	4, 2, 3, 1	28.1	33.4	Sequences the order of recounted events.
35	D	39.1	43.4	Identifies a persuasive device used in an advertisement.
36	D	18.3	20.2	Identifies the meaning of a quotation containing an idiom.

Key messages for teachers

About the test

The Year 3 Reading magazine contained six stimulus texts. There were three informative texts: one a report about earthworms, another about eggs and an interview with Andy Griffiths. The two imaginative texts in the Year 3 magazine were both narrative: the first was a Nigerian folktale and the other an excerpt of an event exploring a young indigenous boy's quest to prove himself. The final text was persuasive, an advertisement for *Adopt-a-Dog*.

After reading each stimulus, students responded to 36 items of which 34 were multiple choice and two constructed response. One constructed response required students to indicate the features of a text using A–E and one item required students to sequence events using the numbers 1–4. Nearly half the items assessed literal comprehension requiring students to match information in the stimulus with the correct option in the question or recognise the match expressed in other words. There were similar numbers of text-based and context-based inferential items throughout the test. To respond to these items, students must use their knowledge of the craft of writing (e.g. plot development, literary techniques, persuasive devices), the features of language (e.g. vocabulary, cohesion, and text structure) and reading strategies (e.g. skimming to locate information, re-reading and reading on).

Performance

Overall the results indicate that Queensland students performed similarly on most questions to students across Australia. The comprehension of the final stimulus, a persuasive text, was the most difficult nationally, as well as for Queensland students.

Queensland students achieved at or close to 90% on literal comprehension questions related to the first text, *Earthworms*. These items required students to match information in the text with that in the options. However, for literal questions where the students had to recognise the answers that were not a direct match, but translated into other words, the facility rate dropped by 10%. For example, in item 4 the question stem stated, *Earthworms use the hairs on their body to …* . The correct option was *move*. Students needed to understand that *wriggle* in the stimulus meant *move* in the answer. With the exception of item 33, students performed well on literal questions.

Item 33, with a facility rate of 39% nationally, was a literal question that required students to match information in the text with that in the answer. It proved to be significantly more difficult than other literal questions on the paper. Students had to skim the text to locate the sentence that was the source of the information. They then needed to understand the relationship between the subject of that sentence (*Candy)* and the three propositions that followed. The answer was in the second of these. Students had to read on to the next line to locate the answer.

Where students were required to read on to locate or link information, facility rates were lower. For example, in item 27, with a facility rate of 38%, students had to locate *He stopped …* and read on to find the information they needed to infer the reason why a character acted as he did … *just long enough to see her walking back home*.

Vocabulary knowledge and the ability to work out the meaning of new words is important for Year 3 students. Having a vocabulary that is both broad and deep is important for understanding single ideas and information and for making links between ideas. In item 7, students needed to know the meaning of the word *popular* to link it with the indication of popularity in the stimulus — *all over the world.* Across Australia, more than three-quarters of the Year 3 students could do this. However, where they had to understand the specific meaning of a word as they did in item 25, students found this more difficult with under half the students able to do this. In item 29, where students needed to understand the connotations of meaning of figurative language, *edged backwards*, the facility rate was 23%.

Implications for teaching

Activities that make the students answer questions and locate or justify their responses with references in the text would be useful for improving literal and inferential comprehension. This type of activity may also deter students from answering by using prior knowledge rather than from the information provided in the text.

Knowledge of the purpose and structure of texts should help students to access the information contained in them. In particular, students need to learn about the purposes and structures of different diagrams, tables, maps or graphs and the contexts in which they are found. For example, the stimulus *Eggs* included a picture glossary which showed the relationship between the parts of an egg and introduced new vocabulary.

An emphasis on why authors make the vocabulary choices they do will lead to a deeper understanding of texts. Authors of quality texts select vocabulary with precision for their intended purpose. For example, vocabulary can be used to:

- describe precisely, e.g. in *Earthworms*: dark, damp soil
- differentiate between specific things (time), e.g. in *Eggs:* just over a week, about two weeks, over two weeks
- provide a connotation of meaning, e.g. in *The Story of Thunder and Lightning:* rumblings
- infer a relationship, e.g. in *Kaiya goes hunting*: Kaiya sighed
- persuade a reader, e.g. in *Adopt-a-Dog*: fun-loving dog, much-loved pet, perfect pet, each of our furry friends.

The ability to answer inferential questions is heavily dependent on vocabulary knowledge. For example, the personality of Andy Griffiths is revealed in his answers through the words he uses to express his ideas.

Generally Year 3 students love puns and jokes. Learning to play with words is critical to their understanding of connotative vocabulary. For example, in *Adopt-a-dog* the author used *in two wags of a tail* which is a play on the colloquial phrase, *two shakes of a lamb's tail*. While this reference may be beyond Year 3 readers, the author actually used the term *straightaway* and then followed it with this play on words. Also in this text was the play on the word *barking* where students needed to also understand the term *barking mad*.

Year 3 students need to be explicitly taught to track the cohesive links across texts. This is essential to being able to identify the main idea, make inferences, integrate information as well as to summarise and evaluate texts. Students need to use both the lexical cohesion and the logical links between ideas. These are often signalled by the text connectives or through conjunctions and prepositions. In *Eggs*, students needed to recognise the precision with which the time connectives *about, just over* and *over* were used. Without this understanding students are unable to interpret the information in the table. In the first paragraph of *The Story of Thunder and Lightning*, the conjunction *but* is used to indicate that while the mother ram tried to stop her son from damaging the village, he took no notice of her. Students need to learn that prepositions, conjunctions and articles have precise meanings.

Pronoun referencing is critical. In narrative texts, it is key to understanding the plot. In other texts, such as *Eggs*, tracking pronouns is essential to understanding the information provided. For example, using all the cohesive devices makes understanding the new word *albumen* accessible even for younger readers.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA item analyses are also available to Education Queensland schools through *OneSchool*.

Year 3 Numeracy

Item descriptions and key messages

This table shows the results for the Year 3 Numeracy test. The numeracy strands are abbreviated as follows: Algebra, function and pattern (AFP); Measurement, chance and data (MCD); Number (N); Space (S). All items are worth one score point.

The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Strand	Answer	Qld%	Aust%	Description
1	N	B	94.7	92.0	Interprets a pictorial representation of a 3-digit number.
2	S	B	87.3	87.7	Locates a position on an alphanumeric grid.
3	S	A	85.8	84.6	Identifies a common object as being most like a cylinder.
4	AFP	56	91.7	91.1	Interprets a partially completed number chart to identify a missing number.
5	MCD	D	84.7	86.1	Identifies the shape with the largest area from a set of shapes on a triangular grid.
6	MCD	C	83.7	81.6	Interprets tally marks to identify a number.
7	MCD	B	68.5	69.3	Visually compares and orders lengths.
8	S	C	86.3	87.7	Recognises a geometric property of a triangle.
9	N	D	79.1	81.1	Calculates the total of two amounts of money.
10	S	C	70.4	71.6	Identifies the next term in a repeating shape pattern.
11	MCD	D	69.1	68.6	Reads an analogue clock to the half hour.
12	N	C	62.2	65.9	Identifies a shape that is one-quarter shaded.
13	MCD	A	64.8	61.1	Selects the spinner most likely to give a specified outcome.
14	N	A	59.8	62.5	Solves a multistep division problem.
15	S	D and G or G and D	61.5	63.3	Identifies specific faces after visually rotating a 3-D model.
16	AFP	35	48.2	53.3	Calculates the missing addend in a subtraction problem.
17	N	C	50.2	52.1	Counts a collection and identifies half.
18	MCD	B	52.4	56.3	Evaluates the likelihood of an outcome of a given event.
19	N	B	53.8	56.5	Solves a word problem by reasoning which number falls within a given range.
20	N	D	49.9	52.6	Calculates and compares the totals of amounts of money.
21	S	A	39.6	48.0	Identifies the shape that is not symmetrical.

Item no.	Strand	Answer	Qld%	Aust%	Description
22	MCD	D	38.9	40.8	Calculates the difference between two values displayed on a many-to-one pictograph.
23	S	D	49.5	41.5	Identifies the number of edges on a hexagonal prism.
24	N	A	36.2	41.3	Solves a subtraction problem involving regrouping.
25	MCD	C	37.4	39.1	Solves a measurement problem involving the interpretation of a ruler and subtraction.
26	MCD	A	31.7	33.0	Uses a calendar to determine the date of an event.
27	AFP	D	32.3	33.7	Solves a word problem involving inverse relationships.
28	N	1500	12.3	15.9	Calculates the solution to a word problem involving multiplicative thinking.
29	S	B	27.9	31.5	Identifies the reflected image of a complex design.
30	S	4	24.9	25.7	Calculates the number of rectangles that can be cut from an irregular shape.
31	S	C	42.8	45.1	Identifies the result of folding a rectangle along its diagonal.
32	N	33	8.0	12.6	Solves a problem involving the difference between two pay rates.
33	N	11	3.7	4.8	Solves a money problem involving subtraction and division.
34	S	72	3.8	5.8	Interprets a visual representation of a 3-D object to solve a problem involving edges.
35	MCD	5.30	3.2	4.9	Interprets a column graph to calculate the total value of the number of coins represented.

Key messages for teachers

About the test

The Year 3 Numeracy test consisted of 35 items from the four strands of Numeracy. The test is constructed to assess a range of abilities with a graduation from straightforward items at the start through to the more demanding ones at the end of the paper. On the previous table the number of students who answered the items correctly is expressed as a percentage and referred to as a facility rate. These rates can be used to gauge the relative difficulty of items on the paper. Teachers can compare the facility rates of Queensland students to the facility rates in the provisional National results. This year facility rates for items ranged from around 95% to 3% with 21 items answered correctly by 50% or more of Queensland students. Most Year 3 students attempted all the items.

Performance

This year over 90% of Queensland Year 3 students were able to interpret representations of 3-digit numbers and find missing values in hundreds charts. More than 85% could compare areas and interpret tally marks, and 80–85% could recognise a cylinder, identify spatial properties of 2-D shapes and use an alphanumeric grid. Queensland students performed better than the national results in the areas of chance and space. For chance (item 13), about 65% of students were able to identify the spinner *most likely* to land on black, compared to 61% nationally and for space (item 23), nearly 50% of Queensland students were able to recognise the number of edges on a hexagonal prism, compared to only 42% nationally.

There were only three questions where the facility rates of Queensland students were 5% lower than the national data. These items involved subtraction, recognising symmetry and solving word problems. Two items (16 and 24), tested subtraction. These two items were not written word problems but expressed completely in numbers. For item 16, students were required to calculate the minuend (starting number) using the given total and the addend. Approximately 48% of Queensland students answered this item correctly compared to 53% nationally. Common incorrect responses suggest that 11% of students simply subtracted the two numbers shown. This type of item has been tested previously with results of 30% in 2012 and 25% in 2011.

The other subtraction (item 24), was answered correctly by 36% of Queensland students and 41% nationally. Results show that many of the second most able group, after the students who answered correctly, did not regroup to subtract, they incorrectly reversed the numbers to avoid regrouping. This type of error is common when students are learning decomposition subtraction. It can be addressed through greater experience with concrete materials.

Item 21 involved identifying a design based on a smiley face that was **not** symmetrical. This item had a facility rate of 39% for Queensland compared to 48% nationally. Results suggest that a majority of Queensland students were attracted to the distracter that showed a sad face. However, further analysis of incorrect responses showed that the second most able group, after those who answered correctly, chose the only face that included a nose. This represented 11% of the Year 3 students. Sometimes it is more common to look for a particular feature rather than a feature that is not there. These types of 'not' questions can increase the difficulty for younger students. Teachers can include these types of questions in games when describing shapes and objects, for example, find a shape block that is **not** a square.

The last few items on this year's paper were challenging written problems, particularly the last three items with less than 6% of students both in Queensland and nationally able to provide a correct result. These items required multiple steps and a range of numeracy skills and it is important that teachers try to incorporate them in classroom experiences to extend their more able students.

Implications for teaching

Teachers wanting to use the state NAPLAN data to interpret their own data should look at how students have performed against the state and national facility rates. On this basis, teachers of Year 3 students may wish to focus learning experiences on the recognition of symmetry in the environment and develop skills in describing what features are missing from images and designs. They may wish to review the understanding of subtraction and how well their students use decomposition as a subtraction strategy. There is also some evidence that relating addition to subtraction would also assist with missing addend problems.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. Additionally, SunLANDA materials are available to Education Queensland schools through *OneSchool*.

Year 5 Literacy — Language conventions

Spelling — item descriptions and key messages

This table shows the results for the Spelling component of the Year 5 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Proofreading — error identified				
1	handball (hanball)	95.3	93.7	Correctly spells a compound word where the first word ends in *-nd*.
2	blood (blud)	78.3	78.1	Correctly spells a word with the short vowel digraph *-oo*.
3	neatly (neatley)	74.5	73.0	Correctly spells a multisyllable word where the adverb forming suffix *-ly* is added without change to the base word.
4	pocket (pockit)	76.3	76.0	Correctly spells a two-syllable word with the ending *-et*.
5	chocolate (choclate)	62.8	67.9	Correctly spells a multisyllable word with an unstressed syllable *-o*.
6	thirsty (thersty)	58.4	59.4	Correctly spells a multisyllable word with the *r*-influenced vowel *-ir*.
7	sample (sampel)	61.2	61.6	Correctly spells a multisyllable word with the ending *-le*.
8	loose (luse)	62.8	59.5	Correctly spells a word with the long vowel digraph *-oo*.
9	reliable (relyable)	48.2	44.4	Correctly spells a multisyllable word where the suffix *-able* is added with a change to the base word (*y* to *i*).
10	stretch (strech)	45.2	44.9	Correctly spells a word ending with the consonant trigraph *-tch*.
11	groceries (growceries)	27.3	30.8	Correctly spells a multisyllable word with an open first syllable ending in the long vowel *-o*.
12	anticipate (antisipate)	13.2	15.3	Correctly spells a multisyllable word with the soft consonant *-c*.
Proofreading — error not identified				
13	wise (wyse)	77.1	78.6	Identifies an error, then correctly spells a word with the long vowel pattern *-i_e*.
14	waited (wayted)	64.9	65.2	Identifies an error, then correctly spells a multisyllable word with the long vowel pattern *-ai*.
15	wonderful (wonderfull)	56.3	58.0	Identifies an error, then correctly spells a multisyllable word where the suffix *-ful* is added without a change.
16	glitter (gliter)	53.7	57.6	Identifies an error, then correctly spells a multisyllable word with the doublet *-tt* at the syllable juncture.
17	boxes (boxs)	54.2	54.9	Identifies an error, then correctly spells a word where the inflectional ending *-es* is added.

Item no.	Answer	Qld%	Aust%	Description
18	daily (dayly)	46.4	46.0	Identifies an error, then correctly spells a multisyllable word where the long vowel is spelt *-ai*.
19	average (avrage)	44.6	46.1	Identifies an error, then correctly spells a word with the vowel *-er* in the unstressed middle syllable.
20	brief (breif)	45.2	46.7	Identifies an error, then correctly spells a word with the long vowel digraph *-ie*.
21	audience (audiance)	31.2	28.3	Identifies an error, then correctly spells a multisyllable word with the ending *-ence*.
22	diamond (dimond)	24.0	27.6	Identifies an error, then correctly spells a multisyllable word where the letter pattern *i/a* at the syllable juncture represents two different vowels.
23	desperate (desparate)	27.3	31.6	Identifies an error, then correctly spells a multisyllable word with the schwa *-e* in the unstressed middle syllable.
24	citizenship (citisenship)	25.2	22.7	Identifies an error, then correctly spells a multisyllable word based on the word *citizen*.
25	documentary (documentry)	9.2	11.5	Identifies an error, then correctly spells a multisyllable word ending with *-ary* in the unstressed final syllable.

Key messages for teachers

About the test

The spelling test assessed students' organised understandings of the:

- sounds (sound/symbols and pronunciation layers) in words
- the morphology and function of words (syllable word function layer)
- the spelling–meaning connections of and between words (the meaning layer).

The items 1–12 in the Year 5 paper tested students' abilities to correct the spelling of an identified misspelt word in a sentence. Items 13–25 required students to first identify a misspelt word and then spell it correctly. Many of the words students were asked to spell were multisyllabic. This required students to know how to apply coding knowledge learnt in earlier years to longer words. Six items (8, 11, 13, 14, 18, 20) assessed long vowels (*loose, groceries, wise, waited, daily, brief*). Six items (3, 9, 15, 17, 24, 25) also directly or indirectly assessed students' knowledge of how the English spelling system codes the function of words, in particular the conventions for adding either inflectional endings (*box**es***) or meaning-based suffixes (*neat**ly**, reli**able**, wonder**ful**, citizen**ship**, document**ary***). Other items (4, 5, 7, 19, 22, 23) explored student understanding of syllable patterns including how vowel sounds perform in stressed and unstressed syllables *(pocket, chocolate, sample, average, diamond, desperate*).

Performance

Most students attempted all identified spelling items. Some Queensland Year 5 students correctly spelt all words on this test paper. Girls performed better than boys on 18 of the 25 items. Girls were significantly more able (23%) to spell the word *glitter*. The difference between the performance of boys and girls lessened on more difficult items, with slightly more boys than girls able to spell *diamond*.

A critical mass of students appear to have control of the spelling patterns for long and ambiguous vowels such as those in *wise, waited, blood* and *loose*. The spelling of the word *thirsty* with its *r*-controlled vowel pattern offered a slightly greater challenge, with many students recognising that they needed to select another *r*-combination but unable to select the correct one, e.g. *thursty* (8%), *thearsty* (4%). These results demonstrate the need to keep a teaching focus on this aspect of spelling, reinforcing it with short and familiar words while revisiting and extending as the Year 5 students write more and more multisyllabic words.

There are still aspects of spelling consonants that remain challenging. Across Australia, students are still developing their ability to spell the final blend in *stretch*. Interestingly, the student errors for this item show that,

in an attempt to correct it, many students changed the vowel pattern failing to notice the missing consonant in the final blend. Control of ambiguous consonants such as the soft *c* in *anticipate* and *s/z* as in *citizenship* is also still developing. The error patterns for *anticipate* are similar to those for *stretch*. Students typically did not identify the error in the spelling of the consonant but rather changed the spelling of the vowel in the unstressed syllables.

By Year 5, most students are being taught about syllable patterns. Even straightforward patterns such as the two consonants in *poc/ket* and the doublet in *glit/ter* offer a degree of challenge for those unable to spell them. While more than three-quarters of Queensland students could spell *pocket,* those students who were unable to correct it left out either the *c* or the *k*. Similarly, those students who identified the error in *glitter*, but failed to correct it, typically did not double the *t*; instead changing the vowel in the second syllable or selecting the wrong word.

As part of learning about syllables, students need to learn how vowels work in the stressed and unstressed syllables of multisyllabic words. This aspect of the spelling system was assessed in items 5, 19, 21, 23 and 25. This is one of the more difficult aspects of the spelling system to master and one that students will need to continue learning as they encounter more and more complex words. One such word — *chocolate*, spelt *choclate* without the middle vowel — saw Queensland students perform more than 5% below the national cohort. About 6% of students knew that a vowel was missing from the middle of the word but chose the wrong one (*chocalate*). These students understand the concept but need to refine their visual patterning for this word. Another 3% identified the *c* as the error and changed it to *chocklate* while the remainder have either reproduced the given error or produced a phonetic spelling. In general, the analysis of error patterns of students indicated an over-reliance upon, or reversion to, an earlier more embryonic strategy of trying to sound out the words letter by letter.

Students also need to be taught about the meaning of words. The ability to identify the base word improves spelling knowledge, allowing students to spell and edit more complex and even unseen words. For example, students should know that *reliable* is made up of the base word *rely* and therefore requires a change from *y* to *i* before taking *able* as a suffix. The error patterns would suggest that few of the students who were unable to spell this word knew the base word.

Careful consideration needs to be given to the interpretation of the results for words such as *boxes, wonderful, glitter* and even *diamond*. In these items, the error patterns suggest that many students were unable to even identify the incorrect spelling and, as a result, little is known about their ability.

Implications for teaching

In Year 5 many students are consolidating their knowledge of aspects of the sound layer of the spelling system. Once students are confident with spelling consonant digraphs, complex consonant patterns, long vowels, *r*-controlled vowels and diphthongs, they need to examine how these, and particularly the vowel sounds, perform in stressed and unstressed syllables. Year 5 students will benefit from continued explicit teaching of the more ambiguous sounds such as the spelling of consonants that have more than one sound such as soft *c* and *g* or where a consonant is spelt in more than one way such as final hard *k* or *s*.

Explicit and extensive teaching of syllable patterns needs to be a major focus in this year level. Year 5 students are generally able to spell words where the closed syllable patterns are regular and obvious such as in *pocket* and this knowledge provides a basis from which to teach more difficult open syllable patterns such as that seen in *groceries*.

Knowledge of the meaning layer needs to be extended as students learn commonly occurring suffixes such as *-ly*, *-ful*, *-ance* and *-ence* and the conventions for adding them. They need to know these change the meaning and the function of words.

Above all, teachers need to assist students to see that spelling is an organised body of knowledge. The NAPLAN assessment is primarily a proofreading one, and so it requires that children have access to this organised body of knowledge to be able to deconstruct words and apply proofreading strategies. Metacognitive strategies should be used to teach, support and model the decision making needed in learning to spell. They also need to be developed to guide the selection of proofreading strategies.

As a testwiseness strategy, students need to know that they should NOT rewrite the error as written. In all but one of the error-identified items, this was one of the five most common errors.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Grammar and punctuation — item descriptions and key messages

This table shows the results for the Grammar and punctuation component of the Year 5 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rate). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
26	A	97.8	97.0	Identifies the adjective in a complex sentence.
27	C	88.5	88.6	Identifies the correct preposition to introduce a comparative phrase.
28	B	81.6	79.3	Identifies the function of an adverb in a complex sentence.
29	C	63.0	63.3	Identifies the correct indefinite article before a noun.
30	A	94.3	93.5	Identifies the correct appropriate modal auxiliary.
31	A	85.3	86.0	Identifies the correct punctuation to end a statement.
32	A	87.1	86.3	Identifies the pronoun representing the subject of a clause.
33	A	80.8	81.8	Identifies the correct simple past tense of an irregular verb.
34	B	75.5	76.2	Identifies the correct non-finite verb form.
35	C	80.2	80.5	Identifies the correct sentence boundary punctuation between two simple sentences.
36	D	74.1	73.3	Identifies the correct simple past tense forms of two irregular verbs.
37	B	67.2	66.0	Identifies the correct use of a list comma.
38	A	67.5	70.8	Identifies the correct use of brackets to enclose the explanation of an acronym.
39	C	65.2	64.6	Identifies the correct connective to introduce a conditional clause.
40	B	61.7	63.3	Identifies the correct tense of a verb.
41	C	59.6	56.5	Identifies the sentence which correctly combines information presented in a table.
42	C	61.5	60.2	Identifies an adjective in a complex sentence.
43	A	41.2	43.8	Identifies the incorrect use of *real* as an adverb.
44	C	58.3	56.2	Identifies the correct use of the homophones *your* and *you're*.
45	D	46.8	47.5	Identifies the correct use of capital letters for proper nouns.
46	C	39.4	40.9	Identifies the incorrect use of an apostrophe in a plural word.
47	D	39.5	38.2	Identifies a contraction.
48	D	30.5	31.2	Identifies the correct relative pronoun to introduce an adjectival clause.
49	B	36.4	34.6	Identifies the correct possessive pronoun.
50	D	27.2	29.3	Identifies incorrect subject–verb agreement.
51	D	15.4	14.8	Identifies the first event in a time sequence using the grammatical signals.

Key messages for teachers

About the test

The 2013 Year 5 Language conventions test (items 26 to 51) assessed students' use and knowledge of common grammatical conventions and punctuation in written Standard Australian English. Nineteen items tested aspects of grammar and seven items tested the correct use of punctuation. Grammatical concepts tested included identifying the correct use of:

- verb tense, subject–verb agreement and modal auxiliaries
- adjectives to indicate relationships between objects or expand the meaning of nouns and noun groups in sentences
- adverbs to intensify or add information to verbs
- the function of pronouns, prepositions and conjunctions within sentences.

The punctuation items tested sentence boundary punctuation, capital letters for proper nouns, different contextual uses of apostrophes and parenthesis and the use of commas to structure a list.

Performance

The performance of Queensland students was very similar to the national performance. Some Queensland Year 5 students correctly answered every item on this test paper. Girls performed better than boys on the grammar and punctuation questions. Nine items (26–28 and 30–35) were answered correctly by more than 75% of Queensland Year 5 students. Two of these items tested sentence punctuation, while the remainder assessed grammatical knowledge at the word level — the function of adjectives, adverbs, prepositions and verb forms. In contrast, item 43, which tested knowledge of the adverb *really*, asked students to discriminate between Standard Australian English and the more colloquial use of the word. The facility rate for this was 41%.

Year 5 students are still developing their knowledge of clause structure. Items about clause and sentence structure were among the most difficult. Item 51, which asked students to unpack the clause structure of a sentence in order to identify a narrative, was answered correctly by only 15% of students. The result for this item should be considered together with item 41, which asked students to identify a sentence that correctly combined multiple pieces of information contained in a table.

In addition to the two items testing sentence boundaries in straightforward contexts, the punctuation items (38, 45) asked students to identify the correct use of brackets and the correct capitalisation of proper nouns. While 47% of students could capitalise proper nouns, 30% of Queensland students incorrectly selected the option where *island* was capitalised. While many students would be familiar with place names where *island* is capitalised, they needed to identify that in this context it wasn't a proper noun.

Three items assessed knowledge of the apostrophe. Items 44 and 47 asked students to identify correct use of apostrophes of contraction with the first asking students to discriminate between *you're* and its homophone. Item 47 required students to identify a contraction while item 46 required students to identify a misused apostrophe.

Implication for teaching

Grammar and punctuation needs to be taught in meaningful contexts, so that students connect knowledge of these systems with the way they contribute to meaning making. The metalanguage of grammar and punctuation should be continuously and systematically developed over the years of schooling, in line with the *Australian Curriculum: English*.

In the upper years of primary schooling, it is particularly important to develop student understanding of clause and sentence level grammar. Clauses are the building blocks for extending, enhancing and elaborating simple units of language into more sophisticated structures. The development of knowledge about, and control over, clause structure is a long process. While basic clause structure is introduced into the curriculum two years earlier, the focus in Year 5 is on subordination and the creation of tight cohesive language units which use the placement of clauses in sentences as a way to highlight particular meanings. As students move to express more complex ideas through their sentences, understanding the role of conjunctions to introduce independent and dependent clauses becomes a powerful tool for developing control over writing. Students need to learn the precise role of conjunctions as they express the logical relationship between clauses. As students learn to expand sentences they also need to revisit the related clause and sentence boundary as they mark out these units of meaning.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Writing task sample

Year 5

Super Granny

Great Cooks, kind helpers and super fun. Children, how could you not like your grandma? My grandma is totally awesome! She takes me to Australia Zoo, cooks dinner with me and is always kind to everyone she knows. All grandmas do those sorts of things but mine is extra special. If you don't believe me, I will tell you why. One of the main reasons is because she is a great cook.

Creamy lasange, flavoursome fruit cake and sweet apple strudel are just a few of the many things my grandma cooks. Absolutely everything she cooks smells, looks and tastes sensational! But the best part is when she cooks with me. Then I know that 'as well as being a terrific chef she is kind and warm-hearted.

Has anyone's granny ever been nasty to them? Of course not! It's just not in their nature to be. Grandmas are a comfort when you are feeling blue and they give the best hugs ever. Mine in particular is very much like that. Also my grandma gives fabulous presents to me and my brother and sister. That shows that she is generous and wants us to have fun.

Australia Zoo, the pool, the beach and the park. That is where my grandma takes me so that I can have lots of fun.

But wait, there's more!
There are numerous games she plays with me like chess, Scrabble, pick up sticks and many more. Now can't you say that grandmas are just cranky old crosspatches?

Now you will be entirely of the opinion that my grandma is sensational and deserves a Hero Award. Without a doubt she is terrifically fun, a super cook and a loyal friend. There are many more reasons why she is a super grandma but it would take too long to tell. All granny's are awesome but mine is absolutely fabulous!

Year 5

Audience 4

The writer begins to engage and persuade a reader by developing an enthusiastic persona and actively seeks to win the reader's sympathy. The reader needs a reason to award this grandmother above their own. The writer's solution is to make it seem that readers can show their appreciation of grandmothers in general by recognising this one special grandmother.

Text structure 3

All structural components show some development. This text is built on a logical framework. It establishes general features of the subject (grandmas) and then shows how the particular case *my grandma* exemplifies the features.

Ideas 4

The writer uses personal examples to back up assertions about the universal appeal of grandmothers.
The willingness to look beyond personal feelings to general ideas about grandmothers lifts the score to 4.

Persuasive devices 3

The direct address to the reader is engaging and natural. There is some brief refutation of contrary ideas about grandmothers being *cranky*. The student uses some persuasive devices effectively, including the imitation of the advertising phrase, *But wait, there's more!* which is well placed and relevant to the argument. Listing items shows an attempt to persuade through evidence and suggests believability of the propositions made.

Vocabulary 3

The student effectively uses some words and phrases that make a point (*not in their nature to be*, *cranky old crosspatches)* and add vividness (*feeling blue, warm-hearted)*. The use of adjectives such as *sensational* and *fabulous* shows that the student is aware of the power of words and is ready to focus on the selection and crafting of vocabulary to write more controlled texts.

Cohesion 3

This is a sustained piece of writing where the writer has learned the technique of introducing the topic of the following paragraph at the end of the preceding paragraph (*cook to food*, *kind to not nasty*, *fun to games* and *excursions* etc.). There is accurate use of connectives such as *then, also*, *in particular* and the vocabulary keeps the topics focused and clear.

Paragraphing 2

All paragraphs have the outlines of an internal structure but not quite enough elaboration. The page break tempts the writer to put in breaks where a single paragraph on the topic of *fun* should be.

Sentence structure 4

The sentences are correct but do not show the variety and sophistication needed for higher scores. The writer makes good use of her repertoire of sentence structures, including contrast (e.g. *All grandmas do … but mine is …*), questions and answers and the use of lists. This last one is sometimes uncontrolled but it is also a sign that the student is ready to learn more sophisticated techniques.

Punctuation 4

Sentence boundary punctuation is controlled, with correct use of some other punctuation. An error, *granny's*, a stray capital on *Cooks* and insufficient evidence of control of a range of punctuation keeps this text at a score 4.

Spelling 5

There are enough correctly spelt difficult words for a score of 5: *awesome*, *flavoursome, strudel, absolutely, sensational, terrific, particular, fabulous, generous, numerous, entirely, opinion, deserves*.

Incorrect spelling: *lasange*.

Year 5 Literacy — Reading

Item descriptions and key messages

This table shows the results for the Year 5 Reading test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
The tree of life (Informative)				
1	D	90.2	89.9	Locates directly stated information.
2	A	77.3	77.1	Locates directly stated information.
3	B	87.9	87.2	Locates directly stated information.
4	C	78.4	77.5	Interprets information from a labelled photograph.
5	A	89.6	88.7	Locates directly stated information.
6	C	58.1	56.5	Identifies the purpose of a labelled photograph.
An interview with Andy Griffiths (Informative)				
7	A	91.3	91.2	Locates directly stated information.
8	D	43.2	43.8	Integrates information to make a text-based inference.
9	B	87.1	87.6	Interprets directly stated information.
10	A	84.4	85.0	Infers the relationship between ideas and interprets vocabulary.
11	B	89.9	90.0	Interprets directly stated information.
12	A	72.2	74.8	Infers the purpose of a quotation in an interview.
Kaiya goes hunting (Imaginative)				
13	B	67.9	69.4	Interprets the meaning of a word (*drone*).
14	C	29.7	28.2	Integrates information to infer the reasons for a character's reaction.
15	C	66.2	65.4	Infers the reason for a character’s action.
16	C	72.1	70.9	Infers the reason for a character’s action.
17	D	39.6	36.6	Infers a character’s emotion by interpreting an action.
18	D	43.3	42.7	Identifies the underlying theme of a narrative.

Item no.	Answer	Qld%	Aust%	Description
Fishing from the rocks (Imaginative)				
19	A	69.2	69.5	Infers a character's identity using knowledge of roles and relationships.
20	A	47.3	47.2	Interprets vocabulary and punctuation to infer the action of packing.
21	B	38.5	39.7	Infers a character's feelings from the tone of a command.
22	D	54.5	54.7	Infers the reason for an emotional response.
23	A	71.6	71.3	Identifies the intended purpose of a command.
24	D	63.6	64.3	Interprets the common motivations of characters.
Duyfken (Informative)				
25	C	76.8	76.8	Locates directly stated information.
26	C	46.2	47.8	Infers the meaning of the word, *Foundation,* from the text.
27	B	65.6	68.6	Locates directly stated information.
28	B	26.9	34.5	Interprets directly stated information using vocabulary knowledge (*maiden voyage*).
29	D	42.2	44.1	Locates and interprets directly stated information.
30	C	27.2	26.9	Locates and interprets directly stated information.
31	D	45.6	47.7	Integrates information to infer the main idea of a text.
City of the Ancients (Persuasive)				
32	C	40.1	39.1	Identifies the purpose of a movie review.
33	A	39.5	39.9	Identifies the referent for a pronoun.
34	*	24.1	28.0	Interprets idiomatic language in a movie review.
35	A	30.3	32.2	Interprets the purpose for using an exclamation mark.
36	B	65.9	67.0	Integrates information to infer an opinion.
37	B	30.1	31.7	Identifies an appropriate medium for a movie review.

*Item 34

Responses which show an understanding of the idiom *twists and turns* were marked correct:

- unexpected happenings
- you keep being surprised
- many different things happened in the story/storyline of the movie.

Responses that show no understanding or interpretation of the idiom were marked incorrect:

- it's about the plot
- it's confusing
- the story twists and turns.

Key messages for teachers

About the test

Students were asked to read and respond to six different stimuli — three informative texts (*The tree of life, An interview with Andy Griffiths, Duyfken*), two imaginative tests (*Kaiya goes hunting, Fishing from the rocks*) and a persuasive text (*City of the Ancients*). Students were asked to locate information, to make both text-based and context-based inferences and to integrate information in the text in order to answer some higher order comprehension questions. Students were also asked to identify the medium for a text and to evaluate the use of textual features.

Performance

Queensland students continued to attain results that are close to the national result in items which required them to locate explicitly stated information in a text. This was particularly so in information texts such as *The tree of life* and *An interview with Andy Griffiths*. This data suggests that while explicit teaching and continued practice of this skill should certainly occur, teachers should be confident in focusing their teaching on higher order reading comprehension skills.

Year 5 students also achieved well in the items from *Fishing from the rocks*. In previous years, some students found poetry-related items more difficult. These often call for skills of inference, synthesis and evaluation. In this unit, however, most students were able to identify elements of the poem such as the speaker in item 19 (69%), the intended purpose and audience of a statement in item 23 (72%) and to infer meaning from the poem regarding characters' emotions and motivations in items 22 and 24.

In the persuasive text, *City of the Ancients*, students had to interpret the effect of rhetorical devices such as the use of idiomatic language, … *many twists and turns* (item 34) and the use of punctuation, e.g. *One of the children is captured by a giant seagull!* (item 35). Typically, because they have to synthesise their own understandings, students find items that require a written response difficult. However, around a quarter of students were able to answer item 34, applying their understanding of the expression *twists and turns* in a literary context. Students who were incorrect gave the literal meaning of one or both words.

The *Duyfken* required close reading, making links across a passage to synthesise or infer meaning using information from different parts of the text. Students needed to do this in items 27, 28, 29 and 30. However, they frequently chose an option which was similar to information provided in the question stem instead of finding and confirming their answers from the text. For example, in item 30, 31% of students selected an incorrect option by referring to the word *after* in the question and matching it to *after* in the text. Students need to learn how to read around a potential answer and then to confirm whether their understanding is right or wrong.

In responding to these questions, students need to read all of the question and all of the options rather than reading part of a question and answering what they think they are being asked. Open-ended questions are always going to be among the most difficult. Students should read instructions carefully and then read the text closely to confirm their answer.

Implications for teaching

Higher-order comprehension consists of a range of skills, such as inferring, synthesising and evaluating. Year 5 students are still developing the knowledge and strategies needed for these reading skills. These skills need to be explicitly taught, the strategies for using them modelled and supported by guided practice in a range of material varying in complexity and subject.

At a school level, teachers and curriculum leaders may wish to use the following questions to review their existing programs:

- How are reading comprehension strategies being taught and developed across subject areas? Is this being done with a range of texts and for different purposes?
- How could using a different lens to look at existing reading strategies and comprehension programs be useful? For example, the *Australian Curriculum: English*/Literacy strand/Interpreting, analysing, evaluating would provide a starting point.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Year 5 Numeracy

Item descriptions and key messages

This table shows the results for the Year 5 Numeracy test. The numeracy strands are abbreviated as follows: Algebra, function and pattern (AFP); Measurement, chance and data (MCD); Number (N); Space (S). All items are worth one score point.

The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Strand	Answer	Qld%	Aust%	Description
1	S	A	94.8	95.0	Identifies the net of a pyramid.
2	S	Jack	89.9	89.1	Uses an alphanumeric coordinate to locate a cell in a spreadsheet.
3	MCD	A	83.6	80.8	Selects the spinner most likely to give a specified outcome.
4	N	A	80.5	81.5	Solves a multistep division problem.
5	S	D and G or G and D	82.0	81.4	Identifies specific faces after visually rotating a 3-D model.
6	AFP	35	77.3	76.8	Calculates the missing addend in a subtraction problem.
7	MCD	B	78.9	79.9	Evaluates the likelihood of an outcome of a given event.
8	MCD	D	72.7	69.6	Calculates the difference between two values displayed on a many-to-one pictograph.
9	S	B	78.7	78.3	Locates a position on an alphanumeric grid.
10	N	B	68.4	66.8	Interprets a number line to identify a missing number.
11	N	B	69.4	69.6	Compares and orders common fractions represented as area models.
12	MCD	D	63.3	64.0	Interprets tally marks representing money to calculate a total.
13	S	D	74.7	74.5	Visualises the result of an oblique fold.
14	AFP	B	55.2	54.7	Analyses a spatial pattern to identify the repeating section.
15	N	B	68.5	63.5	Interprets the representation of a fraction to identify the whole.
16	S	A	64.4	59.4	Identifies an image after it is rotated a quarter turn clockwise.
17	MCD	B	58.6	59.0	Calculates a duration.
18	MCD	A	48.5	48.6	Uses a calendar to determine the date of an event.

Item no.	Strand	Answer	Qld%	Aust%	Description
19	AFP	D	45.1	45.4	Solves a word problem involving inverse relationships.
20	N	A	55.5	50.1	Calculates the difference between two 4-digit numbers in context.
21	S	B	57.1	57.1	Identifies the reflected image of a complex design.
22	MCD	C	41.2	39.1	Interprets and uses a double column graph to compare totals.
23	S	A	42.2	41.4	Recognises a different view of a stack of objects.
24	MCD	C	46.7	46.5	Estimates to identify the angle closest to 45 degrees.
25	MCD	C	44.9	44.8	Interprets a two-way table involving distance.
26	N	33	48.6	48.5	Solves a problem involving the difference between two pay rates.
27	N	D	46.3	42.5	Calculates with common fractions.
28	S	C	44.0	39.1	Identifies a non-symmetrical shape.
29	S	C	45.0	44.2	Estimates a curved distance on a grid map.
30	N	C	39.0	40.4	Solves a division problem involving money.
31	N	C	37.3	37.7	Identifies the value of four notes needed to make a given total.
32	N	D	24.2	26.1	Solves a word problem involving a rate and money.
33	N	D	32.0	33.5	Estimates a fraction of a large number.
34	AFP	10	29.8	25.0	Completes a number sentence involving decimal numbers and division by 10.
35	MCD	24	26.1	26.0	Solves a perimeter problem involving calculating a missing length.
36	N	11	11.6	13.1	Solves a money problem involving subtraction and division.
37	S	15	12.8	13.6	Calculates the number of edges of a prism when given a picture of its base.
38	S	60	10.1	10.3	Calculates the number of identical blocks used to make a prism.
39	MCD	500	4.1	4.8	Interprets a graduated scale to calculate a difference.
40	MCD	60	5.4	6.5	Calculates the total size of a data set given a simple pie graph and data about two categories.

Key messages for teachers

About the test

The Year 5 Numeracy test consisted of 40 items assessing the four sub strands of Numeracy, with no access to a calculator. There are common items between the Years 3 and 5 papers and between the Year 5 paper and the Year 7 non-calculator (NC) paper. Schools can use these common items to look at differences in performance between the two year levels on the same items.

The table on the preceding pages reports the number of students who answered the items correctly expressed as a percentage. This is referred to as the facility rate. Schools can use this rate to gauge the relative difficulty of items on the paper. Queensland facility rates for the Year 5 Numeracy test ranged from around 95% to 5%, with 19 items answered correctly by 50% or more of students. When compared to the provisional national data, Queensland Year 5 students achieved a higher facility rate on 22 items, with five items higher by approximately 5%.

Performance

The five items (15, 16, 20, 28, and 34) where Queensland had significantly higher facility rates than the provisional national data covered a range of concepts including symmetry, both line and rotational; fraction and decimal numbers, including calculating with decimals; and solving single-step number problems. These were encouraging results and teachers may wish to compare their own class data with this achievement.

Other encouraging trends include the results for items 3, 8, 22 and 27. These four items were around 2–3% higher than the facility rates nationally and these items covered calculating with common fractions, interpreting graphs and recognising an event that would give a 'most likely' outcome.

Encouragingly, Queensland's performance on 24 of the 40 items showed little difference, less than one per cent, compared with the national results. However, there were still some areas where the gap was slightly wider. These areas included item 10, where students had to work out the graduations on a number line. Many students in the second most able group selected 35 as the answer. Items 30, 32 and 36, which were all word problems involving more than one step, also had a slightly lower facility rate. Many of the incorrect responses given for these items suggest that students find multiple operations challenging. For example, in item 30 many students in the higher performing group selected an answer that involved only a single calculation and, as in item 32, students did not read the question to ensure that it matched the stated conditions.

The last item on the paper was very challenging for all students. It had a facility rate of 5% in Queensland and 6% nationally. It was a link item to the Year 7 (NC) paper and Year 7 students also found it challenging with only 15% correct in Queensland. This item was a multistep problem involving pie charts, fractions and multiplicative thinking.

Implications for teaching

Schools can compare the performance of their students with the statewide data. One area that could be a focus for further teaching is problem solving, and in particular, problems with more than one-step. From a review of incorrect responses, it seems that many students may have answered only part of the problem. Perhaps these students have not been able to fully develop a plan or process to solve the problem. One suggestion to address this issue is to use the *Polya 4-stage model* for problem solving. This model has been well-documented over time as a way of giving students a logical process to work through when solving word problems.

Polya's 4 stage model

- *Understand the problem*, restate the problem in your own words and think about other problems that were like this one and how you solved them.
- *Devise a plan*, consider what strategies to use, the operations needed and the order to do them.
- *Carry out the plan*, do the problem.
- *Check the answer,* ensure the answer matches the problem and if not start again.

Teachers may wish to review the way they engage students in problem solving and look for ways to encourage a classroom environment that supports the sharing of problem-solving strategies and solutions. Teachers could also look to extend their more mathematically-able students with non-routine problems that use knowledge and skills from all strands of Numeracy.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. Additionally, SunLANDA materials are available to Education Queensland schools through *OneSchool*.

Year 7 Literacy — Language conventions

Spelling — item descriptions and key messages

This table shows the results for the Spelling component of the Year 7 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rate). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Proofreading – error identified				
1	sample (sampel)	82.1	82.9	Correctly spells a multisyllable word with the ending *-le*.
2	extra (ekstra)	82.1	82.7	Correctly spells a multisyllable word beginning *ex-*.
3	annoyed (anoyed)	78.0	78.9	Correctly spells a multisyllable word with the doublet *n/n* at the syllable juncture.
4	thumbnail (thumnail)	77.9	79.5	Correctly spells a compound word where the first word ends in a silent letter *-b*.
5	worst (werst)	76.9	78.3	Correctly spells a word with the *r*-influenced vowel *-or*.
6	reliable (relyable)	61.4	63.3	Correctly spells a multisyllable word where the derivational ending *-able* is added with a change to the base word (*y* to *i*).
7	catchment (cachment)	76.4	67.7	Correctly spells a multisyllable word with the trigraph *-tch*.
8	similar (similer)	51.9	51.4	Correctly spells a multisyllable word with the unstressed syllable ending *-ar*.
9	perimeter (perimetre)	58.4	51.7	Correctly spells a multisyllable word with the etymological element *-meter*.
10	groceries (growceries)	46.3	48.8	Correctly spells a multisyllable word with the long vowel *-o*.
11	responsibilities (responsabilities)	38.2	36.5	Correctly spells a multisyllable word where the base word ends in *-ible*.
12	canyon (canion)	36.1	41.2	Correctly spells a word with the consonant *-y* beginning the second syllable.
13	deafening (defening)	30.6	34.2	Correctly spells a multisyllable word with the short vowel digraph *-ea* in the base word.
14	nurture (nurchure)	23.6	24.8	Correctly spells a word with unaccented final syllable *chur* spelt *-ture*.
15	abbreviation (abreviation)	18.0	18.6	Correctly spells a multisyllable word with the doublet *b/b* at the first syllable juncture.
16	forfeit (forfet)	14.7	15.7	Correctly spells a two-syllable word with the vowel pattern *-ei* in the unstressed syllable.

Item no.	Answer	Qld%	Aust%	Description
Proofreading – error unidentified				
17	garbage (garbege)	73.7	75.5	Identifies an error, then correctly spells a multisyllable word ending in *-age*.
18	accompany (acompany)	58.1	52.2	Identifies an error, then correctly spells a multisyllable word with the doublet *c/c* at the first syllable juncture.
19	average (avrage)	71.2	71.3	Identifies an error, then correctly spells a word with the vowel *-er* in the unstressed middle syllable.
20	accept (aksept)	54.2	58.9	Identifies an error, then correctly spells a multisyllable word where the *c/c* at the syllable juncture represents two different sounds.
21	southern (southen)	49.0	50.7	Identifies an error, then correctly spells a multisyllable word with the derivational ending *-ern*.
22	symphony (symfony)	44.2	45.4	Identifies an error, then correctly spells a multisyllable word where the digraph *-ph* forms part of an etymological unit *phon(e)* = voice.
23	diamond (dimond)	46.2	50.9	Identifies an error, then correctly spells a multisyllable word where the letter pattern *i/a* at the syllable juncture, represents two different vowels.
24	whirlpool (wirlpool)	30.0	36.0	Identifies an error, then correctly spells a compound word where the consonant pattern *wh-* begins the first word.
25	frightened (frightned)	38.1	40.4	Identifies an error, then correctly spells a multisyllable word to which inflectional endings have been added *(fright+en+ed)*.
26	independent (independant)	35.0	34.0	Identifies an error, then correctly spells a multisyllable word with the ending *-ent*.
27	arguments (arguements)	31.8	29.3	Identifies an error, then correctly spells a multisyllable word where an *e*-drop is required before adding the noun forming suffix *-ment*.
28	gauge (guage)	23.1	28.1	Identifies an error, then correctly spells a word with the diphthong digraph *-au*.
29	permanently (permenently)	17.4	20.5	Identifies an error, then correctly spells the vowel in a multisyllable base word, *permanent*.
30	treacherous (trecherous)	10.3	12.3	Identifies an error, then correctly spells a multisyllable word with the short vowel digraph *-ea*.

Key messages for teachers

About the test

The 2013 Year 7 Spelling test was designed to assess knowledge of the English spelling system through proofreading. The paper had 30 items. In 16 of these items the error was identified and students needed to spell it correctly. The other 14 items involved a two-step process; students had to first identify the error and then spell it correctly.

By Year 7, students need to be able to use more multisyllabic words. They are expected to be able to use their spelling knowledge to spell words that they may not have seen before. To spell multisyllabic words, students need to be able to process those words in bigger chunks, i.e. in syllables and units of meaning. Therefore, the items in this test are designed to test knowledge of:

- letter patterns
- syllable patterns
- affixes and the conventions for adding them
- word meanings/etymology.

Students need to have a range of strategies to be able to use this knowledge for proofreading.

Performance

The test had four items which assessed the coding of pronunciation, e.g. *worst, garbage, deafening* and *gauge*. While *worst* and *garbage* were spelt correctly by approximately three-quarters of Australian students, they were less able to correct the misspelling of the vowel in *deafening* even though it was an error-identified item. In Queensland, 20% of students wrote a word that looked similar to the error — *defining* (16%) and *defending* (4%) — despite the fact that neither made sense in this context. The other group of errors demonstrated an inability to select the correct letter pattern for the vowel. The error-unidentified item 28, *gauge*, with its uncommon letter sequence representing the long vowel had a slightly lower facility rate. However, the error patterns for this item suggest that the students were unable to identify this word as the error, selecting instead one of the longer words in the sentence.

Year 7 students are still developing their knowledge of syllable patterns. Words such as *sample, extra* and *annoyed* with straightforward closed syllable patterns had high facility rates. However, the error patterns of the students unable to spell these words would indicate that they are unaware of the most common long vowel patterns, i.e. *vc/cv.* The error patterns are phonetic. The error patterns for words like *annoyed, abbreviation* and *accompanied* show little evidence that students are aware that they should check the doublets in these words.

Where words have unstressed syllables or less common, less straightforward syllable patterns they are more challenging as the results for words such as *similar, groceries, average* and *permanently* show. Open syllable patterns like that in *gro/cery* are more difficult for students to identify, particularly where an affix is added to the base word.

Words such as *thumbnail*, *reliable*, *catchment* and *forfeit* require an understanding of how meaning influences spelling patterns. Although more than three-quarters of students were able to spell the words with the most obvious meaning links, the compound word *thumbnail* and the base word plus suffix construction, *catchment,* produced error patterns that suggest that students did not identify the base words in either. These students provided various phonetic spellings of *thumb* and appeared not to recognise the base word *catch* which was consistently misspelt. Interestingly, about 10% more Queensland students were able to spell *catchment* compared to the Australian cohort.

The error patterns for *reliable* again suggest that students unable to spell the word were also unable to recognise the base word, *rely* and to know that they had to change the *y* to an *i*. The good news is that these students also identified the spelling of the suffix *-able* as correct. Contrast this with the performance on item 11, *responsibilities*, where errors show that students did not recognise the suffix *-ible* in the base word as being consistent with the convention that *-able* is added to a base word and *-ible* is added to a root.

Implications for teaching

A teaching approach that helps students to understand English spelling as systematic and not random will help them build a sound foundation from which to deploy their strategies for learning and monitoring their spelling. A conscious knowledge of the patterns and conventions of spelling is also needed for proofreading. Students need to be overtly taught proofreading strategies and how to use them.

As a general comment, Year 7 students need to be guided in the use of more sophisticated spelling strategies.

Grammar and punctuation — item descriptions and key messages

This table shows the results for the Grammar and punctuation component for the Year 7 Literacy test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
31	A	91.8	92.2	Identifies the correct preposition to introduce a prepositional phrase.
32	A	92.3	92.5	Identifies the correct preposition to complete a phrasal verb.
33	B	88.5	88.8	Identifies the correct comparative form of an adjective.
34	D	93.0	92.2	Identifies the correct determiner for a countable noun.
35	A	86.4	86.0	Identifies the correct interrogative verb group for a simple question.
36	A	81.0	80.1	Identifies the correct pair of verbs to indicate past tense.
37	D	81.0	80.9	Identifies the correct pronoun as the subject of a simple sentence.
38	C	78.0	78.9	Identifies the correct connective to introduce a conditional clause.
39	B	58.1	59.8	Identifies the correct use of capital letters for proper nouns.
40	C	67.8	66.0	Identifies the correct use of list punctuation.
41	A	70.7	70.9	Identifies the correct use of brackets to enclose dates.
42	C	68.9	67.7	Identifies the sentence which correctly combines information presented in a table.
43	C	69.4	67.2	Identifies an adjective in a complex sentence.
44	C	74.9	74.3	Identifies the correct use of the homophones *your* and *you're*.
45	C	47.6	46.9	Identifies the incorrect use of an apostrophe in a plural word.
46	A	49.2	48.2	Identifies in a given sentence, the connective which does not express time.
47	D	51.4	50.0	Identifies an apostrophe of possession.
48	C	57.9	59.2	Identifies the correct use of list punctuation in a sentence.
49	D	50.4	45.1	Identifies a contraction.
50	A	52.6	54.6	Identifies the correct use of an apostrophe of possession.
51	D	40.7	42.9	Identifies the correct connective introducing a dependent clause in a complex sentence.
52	D	42.0	39.7	Identifies correctly the pronoun in a sentence.
53	B	39.1	36.2	Identifies the use of a present participle as an adjective.

Item no.	Answer	Qld%	Aust%	Description
54	D	28.8	30.2	Identifies incorrect subject–verb agreement.
55	B	30.5	31.9	Identifies the correct adverbial form of a word.
56	D	27.5	29.6	Identifies the sentence which correctly combines information from two sentences.
57	A	24.3	22.4	Identifies the word that is not an adverb in a complex sentence.
58	B	21.7	19.8	Identifies the word used as a preposition in a simple sentence.

Key messages for teachers

About the test

The 2013 Year 7 Language conventions test consisted of 28 items, with an emphasis on items assessing punctuation knowledge and targeting the word level of text organisation. Items targeting group, clause and sentence levels of text organisation were fairly evenly distributed. The test covered aspects of grammar such as prepositions, pronouns, connectives, and the grammatical function of homophones. Punctuation skills tested included list punctuation and use of brackets and apostrophes. The ability to read information carefully in order to demonstrate knowledge of clauses and sentence construction was also tested in items 42 and 56.

Overall, Year 7 students performed more strongly on those items which provided a sentence with a word omitted and required them to select a single word as the correct response. More challenging was the format where the question required students to discriminate between four complete sentences. These items require close reading to determine the difference.

Performance

The performance of Queensland Year 7 students was similar to the performance of the Australian cohort, with facility rates either just above (16 items) or slightly under (12 items) the national figure. Queensland performed slightly better on items which required knowledge of the metalanguage. In item 49, 5% more Queensland students were able to discriminate a contraction from any other use of an apostrophe.

The correct use of apostrophes to indicate contraction was also successfully identified by most students in item 44. However, possessive apostrophes proved challenging for students to identify. Item 45 required students to identify an incorrect use of punctuation. To do this, they had to know the meaning of the metalanguage, i.e. the name and the use for each of the alternatives — capital letter, comma, apostrophe and brackets. To choose the correct option, students needed to know that there are apostrophes of possession and contraction and specifically that plural nouns do not require an apostrophe. Performance on item 50 reflects a similar confusion about plurals and possessive apostrophes.

A majority of Queensland students were able to correctly punctuate lists (items 40 and item 48) suggesting developing awareness and control of internal sentence punctuation.

In grammar, 69% of Queensland students and 68% nationally were able to identify the option which combined propositions presented in a table into an appropriately constructed sentence. Similarly, item 56 tested the ability to combine clauses to accurately signal time sequence. Students were challenged by the use of more complex connectives such as *despite* and *although*. Students need to develop control over these more advanced forms in their own writing.

Implications for teaching

Teachers of Year 7 students would find it beneficial to discuss the skills and knowledge required when encountering the different types of questions and options seen in the NAPLAN test. Practising proofreading of items which are lengthy or similar to one another, where students annotate differences and engage in mental reasoning to select the correct option, would also be a useful strategy.

In order to be literate individuals who engage with and understand the texts they encounter — whether for the purpose of study, leisure or to accomplish tasks in everyday life — students need to continually revisit, consolidate and refine their understanding of grammar and punctuation while making meaningful links with new knowledge. Activities which may prove useful include:

- revisiting the purpose and use of apostrophes, to understand how they are used to indicate contractions and possession. Activities which provide students with this reinforcement should also include reference to plural subjects
- addressing proper nouns where teachers could invite students to explicitly discuss their understandings of the rules for capitalisation of certain nouns, clarify any misunderstandings and guide students in putting this knowledge into practice.

Indicating relationship and order and connecting ideas in a logical flow requires an understanding of the role and purpose of a variety of connectives. Explicitly teaching the use of more complex connectives such as *despite*, *although*, *whereas*, *however* and *furthermore* should enable students to improve their writing and gain a deeper understanding of the material they read.

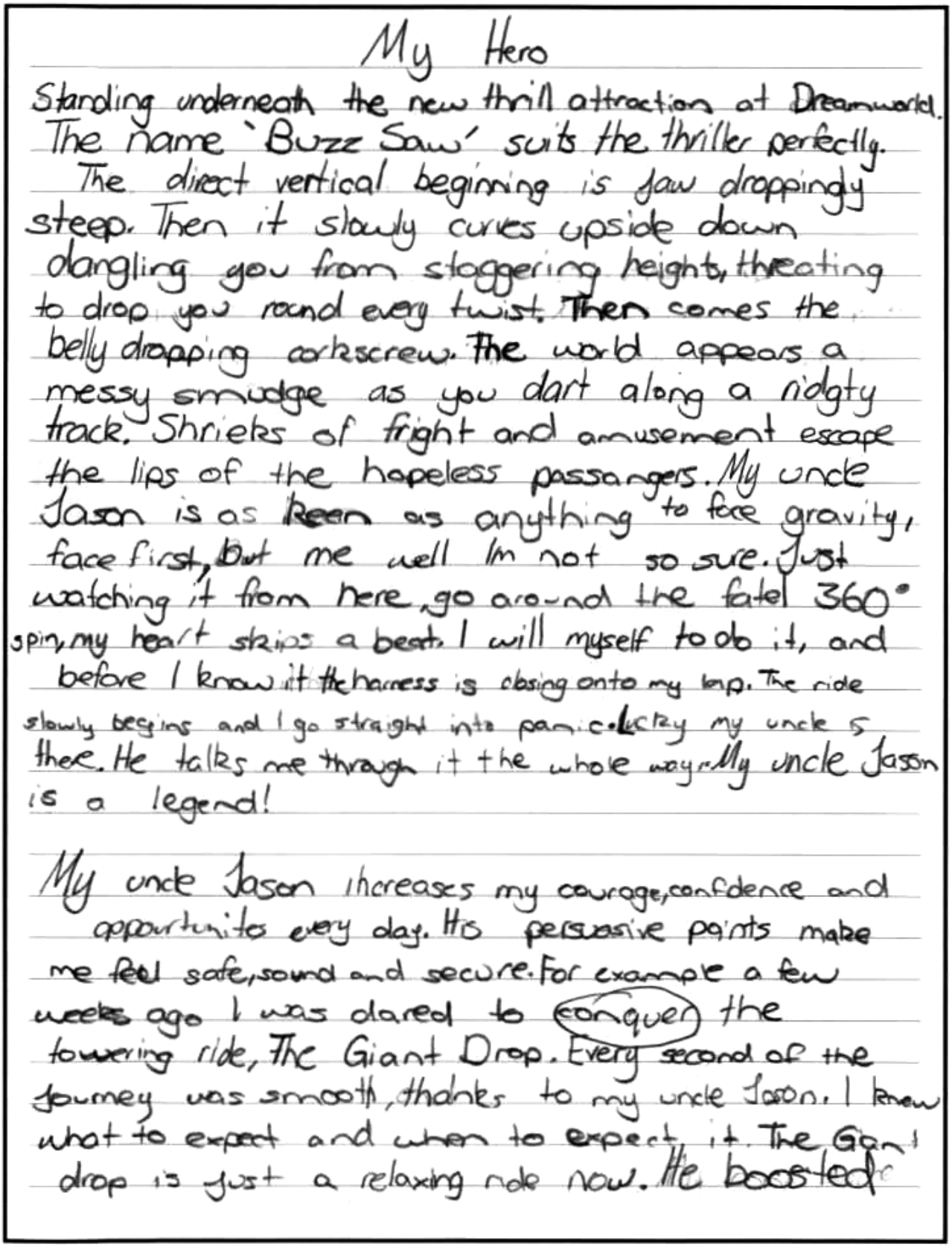
At a school level, teachers and curriculum leaders may wish to use the following questions to review their existing programs:

- How do teaching programs develop student understanding of the purpose and function of punctuation through the stages of schooling? How might the scope and sequence of the *Australian Curriculum: English* prove useful in this evaluation?
- What strategies are currently taught to develop proofreading and self-editing skills? How do these strategies enable students to systematically review texts at word, clause, sentence, paragraph and whole-text levels?
- To what extent are students presented with opportunities to demonstrate their knowledge of grammar and punctuation in a range of formats and mediums? Are they familiar with a range of questioning styles? Have they been provided with questions that are taken from the context of a shared text or experience as well as questions which are not connected to a shared experience?

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Writing task sample

Year 7



My Hero

Standing underneath the new thrill attraction at Dreamworld. The name 'Buzz Saw' suits the thriller perfectly.

The direct vertical beginning is jaw droppingly steep. Then it slowly curves upside down dangling you from staggering heights, threating to drop you round every twist. Then comes the belly dropping corkscrew. The world appears a messy smudge as you dart along a ridgty track. Shrieks of fright and amusement escape the lips of the hapeless passangers. My uncle Jason is as keen as anything to face gravity, face first, but me well Im not so sure. Just watching it from here, go around the fatel 360° spin, my heart skips a beat. I will myself to do it, and before I know it the harness is closing onto my lap. The ride slowly begins and I go straight into panic. Lucky my uncle is ther. He talks me through it the whole way. My uncle Jason is a legend!

My uncle Jason increases my courage, confdence and opportunito every day. His persuasive points make me feel safe, sound and secure. For example a few weeks ago I was dared to conquer the towering ride, The Giant Drop. Every second of the journey was smooth, thanks to my uncle Jason. I knew what to expect and when to expect it. The Giant drop is just a relaxing ride now. He boosted

my confidence in under 5 minutes, whereas if just anyone tried, it would take 5 years! His abilites are rare, his attitude is rare and my uncle Jason is one of a kind.

Also, Im entering into Highschool. Im nervous. When I ask Mum, the best advice she has is "you'll be fine!". How useful is that? My uncle could talk with my for 1000 years if we had them. He gives me information about Highschool, about its chalenges and about life in general. The wise words of a wise man always lift the weight off my shoulders and my uncle could never run out of solutions. Jason is the best uncle I could wish for!

On the other hand, he is the most immature, fun loving adult you will ever find. He is just like a brother he will play tiggy with you at the age of 27! He will watch kids shows no matter his age and he loves a bit of fun.

So, we are back on the ride here comes the corkscrew. The blood curling

screams of the other riders linger in my ears. I shut my eyes prepared for the worst and BANG, the ride is over! We slide out of the seats and head for the exit. "What a rush. I would never have done it without my one hit wonder! "Thanks Jay, your a real hero."

END OF TEST

Year 7

Audience 5

The writer tells why she sees her uncle as a hero; this only indirectly serves to persuade the reader to see him as a hero. The script contains some direct persuasive argument but mainly it contains recounted experience and personal reflection. These choices could have led to a lower score in this criterion, but the writer is rewarded for her skill in making the reader believe and care about her and her relationship with her uncle.

Text structure 3

The text begins in the middle of the action, with the writer confronting a scary show ride. Knowing her uncle is with her, she gets on the ride. Her thoughts then stray to her admiration of, and gratitude to, this helpful uncle. Finally, we return to the ride and its successful completion. This sophisticated structure is well chosen for the purpose of exploring a relationship. However, it allows too little space for the writer to argue directly for a proposition required by the set task and this leads to the score.

Ideas 4

The details of recounted show rides are extensive. The writer's personal emotions are explored. Her praise for her uncle is set out in a number of assertions. There is not much evidence of an ability to marshal facts and reasoning. However, the writer does set out a contrast between superficial and serious types of support.

Persuasive devices 3

The writer plays on readers' sympathy by evoking the fears and nervousness of childhood and the relief that comes when a competent adult gives support. Reasons and examples add to the credibility. Some sentences are crafted to make a point, e.g. *His abilities are rare, his attitude is rare and my uncle Jason is one of a kind*.

Vocabulary 4

There is sustained and effective use of vocabulary including words to create vivid images, e.g. *The world appears as a messy smudge as you dart along a ridgty* [rickety] *track*. Many verbs are chosen for effect, e.g. ***curves*** *upward*, ***conquer***, ***linger***, ***slide*** *out … and* ***head*** *for the exit.* Some inappropriate or inaccurate use keeps this script from scoring 5 for vocabulary, e.g. *hopeless passengers* [helpless], *blood curling* [curdling].

Cohesion 4

Well developed links between ideas mainly show how events unfold in time to lead the reader through the complex twists and turns in the structure. (The error *talk with* ***my*** [me] is forgiven as a slip.)

Paragraphing 3

All paragraphs segment the overall structure and are internally well structured.

Sentence structure 4

Most simple, compound and complex sentences are correct with more routine use and greater control of elaborating clauses and phrases.

Punctuation 3

Most sentence boundary punctuation is correct and some other forms of punctuation correctly used, e.g. capitalisation of proper nouns (name of rides) and list commas.

Spelling 5

Many difficult words are spelt correctly, e.g. *attraction, perfectly, vertical, amusement, conquer, confidence, abilities, information, nervous, challenges, solutions, immature, prepared, persuasive.*

However, a number of incorrect spellings prevents the script from scoring 6: *threating, passangers, oppurtunities, fatel, ridgty.*

Year 7 Literacy — Reading

Item descriptions and key messages

This table shows the results for the Year 7 Reading test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Skippy the Bush Kangaroo (Informative)				
1	B	89.6	90.6	Locates directly stated information.
2	C	77.3	78.4	Identifies the specific purpose of brackets.
3	A	87.3	88.5	Interprets directly stated information using vocabulary knowledge (*dubbed*).
4	D	90.7	91.1	Locates directly stated information.
5	D	87.7	88.2	Locates directly stated information.
6	A	17.8	17.5	Identifies the reference of a relative pronoun to the previous paragraph.
Fishing from the rocks (Imaginative)				
7	A	79.1	78.6	Infers a character's identity using knowledge of roles and relationships.
8	A	64.6	63.9	Interprets vocabulary and punctuation to infer the action of packing.
9	B	45.3	45.9	Infers a character's feelings from the tone of a command.
10	D	69.6	69.8	Infers the reason for an emotional response.
11	A	80.4	80.3	Identifies the intended purpose of a command.
12	D	74.7	73.9	Interprets the common motivations of characters.
Duyfken (Informative)				
13	C	89.9	88.4	Locates directly stated information.
14	C	61.7	62.1	Infers the meaning of the word, *Foundation*, from the text.
15	B	84.8	85.9	Locates directly stated information.
16	B	48.1	54.7	Interprets directly stated information using vocabulary knowledge (*maiden voyage*).
17	D	67.2	69.6	Locates and interprets directly stated information.
18	C	41.4	39.8	Locates and interprets directly stated information.
19	D	67.3	69.6	Integrates information to infer the main idea of a text.

Item no.	Answer	Qld%	Aust%	Description
Weeds (Persuasive)				
20	D	57.8	57.7	Identifies the persuasive purpose of text.
21	C	66.9	66.2	Identifies the purpose of a narrative device used to persuade.
22	D	55.4	58.6	Interprets the persuasive purpose of a revising statement.
23	B	61.0	61.1	Identifies the use of an idiom as a persuasive device.
24	A	62.1	62.2	Integrates information to infer a point of view.
25	C	58.9	60.0	Evaluates the intended emotional appeal of a point of view.
Out at Midnight (Imaginative)				
26	C	76.9	78.2	Infers a character's attitude by integrating depicted actions with knowledge of roles and relationships.
27	*	28.6	28.7	Interprets the meaning of figurative language.
28	D	21.8	22.0	Interprets a recounted event as a character's illusion.
29	D	51.7	53.0	Infers the motivation for a character's action from his described thoughts.
30	B	40.7	39.8	Identifies a critical turning point in the plot.
31	C	52.4	49.1	Identifies the correct metalanguage for a figure of speech (*metaphor*).
RSPCA (Persuasive)				
32	A	67.6	68.7	Infers a position statement.
33	B	26.9	30.3	Infers the meaning of a word from context.
34	D	45.3	47.5	Infers the meaning of a word from context.
35	C	75.2	77.2	Locates directly stated information.
36	C	39.7	40.8	Integrates information to interpret the underpinning motivation for a stance.
37	B	60.0	57.7	Identifies the weblink with its content using knowledge of webpage conventions.
Encounter in Castle Estondrake (Imaginative)				
38	A	20.3	20.4	Identifies the purpose of the introduction of a narrative excerpt.
39	A	50.8	55.7	Interprets vocabulary that develops characterisation.
40	C	30.9	32.8	Interprets directly stated information.
41	A	23.7	24.7	Infers a character's personal qualities from vocabulary.
42	D	35.3	36.3	Infers the meaning of a word from links with other synonyms in the text.
43	C	51.0	53.1	Infers the reason for a character's behaviour.
44	A	36.3	37.9	Infers the relationships between characters.

Item no.	Answer	Qld%	Aust%	Description
The melting Third Pole (Informative)				
45	C	31.1	33.4	Identifies the focus of an informative text.
46	D	30.5	31.8	Interprets the reason for the use of quotation marks.
47	A	56.6	59.8	Interprets the author's purpose for using statistics.
48	C	29.8	30.5	Interprets directly stated information.
49	B	51.0	53.3	Integrates information to determine the role of an organisation.
50	B	25.7	28.2	Identifies the correct metalanguage for an acronym.

*Item 27

Responses which show an understanding of the meaning of *trilling* as an expression of fear were marked correct:

- Screaming out.
- It isn't really singing, they were making a loud high pitched noise.
- Screaming/crying out with fear.

Responses that show no understanding or interpretation of the idiom were marked incorrect:

- Singing songs.
- Singing because they were frightened.
- They were really scared.

Key messages for teachers

About the test

The Year 7 Reading magazine contained eight texts. There were three informative texts, one about an Australian television series (*Skippy*), another about a replica of a historic vessel (*Duyfken*), and one a discussion about the importance of the Hindu Kush-Himalayan region (*The third pole*); three imaginative texts, a poem (*Fishing from the rocks*) and two story excerpts, one set in contemporary times (*Out at Midnight*) and one from an historical fiction (*Encounter in Castle Estondrake*); and two persuasive text (*Weeds* and the *RSPCA*).

After reading each stimulus students responded to 50 items of which 49 were multiple choice items and 1 required students to write a response.

Performance

Queensland students performed on par with the national cohort. Almost all Queensland students completed the test.

Many items on this test paper either directly asked students to identify the meaning of a word in the stimulus or required interpretation of the vocabulary in the stimulus, the options or both. Terms such as *maiden voyage* in *Duyfken* and the vocabulary in the options for item 39 — *imposing figure*, *dishevelled* and *vulnerability* — appear to have been quite challenging for Queensland students. Items 33, 34 and 35 all require some level of translation of the line in paragraph 3 of the RSPCA stimulus — *culling of saltwater crocodiles should be firmly in the hands of trained professionals*. While the vocabulary in item 35 is likely to be more familiar to Year 7 students, they had to interpret words like *authorised* and *securely* in items 33 and 34 which may explain the significant difference in performance between these two items and item 35. The terms (metalanguage) used to describe aspects of language such as *metaphor*, *idiom*, *simile* and *acronym* were used directly in items 31 and 50, with only about a quarter of Queensland students able to identify *ICIMOD* as an *acronym*.

Context-based inferences require students to draw together the information in the text with their knowledge of texts, how language is used in texts and their knowledge of the world. Understanding the roles and relationships in stories often requires students to interpret characters through their actions and interactions in the text. All three imaginative texts on this paper required students to interpret the motivations or relationships of characters within the texts, drawing on the language used and their knowledge of how people interact.

Often students are attracted to the first option that has something correct about it. For example, item 2 asked students *Who do the words in the brackets refer to?* The option A response was *characters in the show*. While not correct, this option had some appeal to students, as the bracketed information in the stimulus was related to the characters in the show. However, this information as identified in option C, indicated the name of the *actor who played the character*. Students need to know that information in brackets can either elaborate or exemplify information that precedes it.

Implications for teaching

A continued emphasis on developing strategies for making inferences is important for Year 7 students. Discussing the deliberate vocabulary choices writers make may help students comprehend the subtle but essential understandings in texts. The meaning of some unfamiliar words can be worked out using the links between words in the texts. For example, in item 42 which word from the text could replace the word *bastion*?

> *They had slipped through into the* ***castle*****,** *through a little-used gate; one that seemed forgotten by defenders and protectors of this* ***bastion****. Ayleth had not expected any encounter with the enemy in this part of the* ***fortress****.*

Teaching students how to track the links in this way will also help them to summarise or synthesise information and identify the main ideas or themes in the texts. For example, to answer item 48, students needed to track the links to the word *researchers* through the third paragraph:

> **The researchers** *at the Kathmandu-based International Centre for Integrated Mountain Development (ICIMOD)* ***monitor*** *the condition of the glaciers and* ***advise*** *on sustainable land management in the HKH region.* ***Collecting accurate information*** *is essential to* **their work***.*
>
> **ICIMOD** ***reports*** *that glaciers … .*

Students have to link the word *researchers* with the things that they **do** and realise that the words *their work* is the over-arching label for these activities. They then have to take the next step and realise that the work researchers do is called research. That gives them the answer and distinguishes it from the next strongest distracter.

Discussions around how to join the stated and implied links, particularly when undertaken in conjunction with the 'think aloud' teaching strategy, will help students develop the more sophisticated strategies that underpin higher-order thinking skills.

A testwiseness strategy is to always read the stimulus and the question carefully and always read every answer before making a decision.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Year 7 Numeracy

Item descriptions and key messages

This table shows the results for the Year 7 Numeracy test. The numeracy strands are abbreviated as follows: Algebra, function and pattern (AFP); Measurement, chance and data (MCD); Number (N); Space (S). All items are worth one score point.

The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Calculator allowed paper

Item no.	Strand	Answer	Qld%	Aust%	Description
1	N	A	81.3	77.9	Calculates the difference between two 7-digit numbers containing zeros.
2	S	C	84.1	82.0	Identifies a line of symmetry.
3	S	D	69.7	68.7	Visualises a 3-D shape from an isometric drawing.
4	S	C	70.6	69.6	Identifies a 3-D object from its net.
5	N	C	78.9	76.2	Applies an understanding of fractions to solve a problem.
6	S	D	71.4	70.2	Uses reasoning to determine the length of a side of a given triangle.
7	AFP	B	65.2	62.5	Completes a table of values using an informal linear rule.
8	N	C	68.2	69.3	Matches a graphical representation to a percentage.
9	N	E	68.9	61.2	Calculates the square of a 2-digit number.
10	N	B	62.8	65.0	Compares and orders decimal numbers to hundredths.
11	MCD	A	57.7	60.4	Calculates time from a given speed and distance.
12	MCD	D	66.4	64.0	Interprets a diagram to determine a missing length.
13	MCD	A	56.7	51.7	Identifies a representation of equal chance.
14	N	C	58.1	57.4	Calculates the fractional amount added to make a given total.
15	S	B	60.6	45.9	Identifies the unknown angle on a quadrilateral given the three other angles.
16	MCD	A	54.5	54.0	Interprets a pie chart to solve a money problem involving percentage.
17	AFP	B	42.9	43.7	Solves a problem involving a missing addend.
18	AFP	D	44.0	38.5	Calculates a future term in a number pattern when given the rule.
19	S	C	44.1	41.2	Uses coordinates to describe a future position in a visual pattern.

Item no.	Strand	Answer	Qld%	Aust%	Description
20	AFP	B	36.5	39.0	Calculates the first term in a money pattern when given the rule and a total.
21	S	D	36.8	36.9	Follows directions and interprets scale on a map to identify a location.
22	AFP	B	42.4	41.7	Calculates the fraction that completes a decimal equation.
23	AFP	A	32.3	33.7	Interprets a table of values to identify and apply a linear rule.
24	AFP	9	27.8	27.2	Solves a word problem involving addition, subtraction and division.
25	MCD	50	27.0	28.0	Uses the mass and value of coins to solve a multistep problem.
26	N	25	20.0	20.5	Calculates a quantity from a rate.
27	MCD	7500	17.5	17.0	Solves a multistep problem by calculating the mean of a small data set.
28	N	60	12.3	14.4	Solves a problem involving money and percentage.
29	S	2.8	16.5	16.6	Solves a problem involving scale and proportional reasoning.
30	N	66.50	7.7	9.6	Calculates and compares unit prices.
31	MCD	5	11.3	12.9	Solves a measurement problem involving ratio and area.
32	MCD	44	10.7	10.9	Calculates the perimeter of a square when given the area.

Non-calculator paper

Item no.	Strand	Answer	Qld%	Aust%	Description
1	S	A	95.5	95.1	Identifies the net of a pyramid.
2	S	Jack	94.0	93.8	Uses an alphanumeric coordinate to locate a cell in a spreadsheet.
3	AFP	C	82.0	82.3	Identifies the maximum point on a frequency/time graph.
4	N	A	84.3	85.1	Solves a problem involving calculating change.
5	N	E	71.0	74.1	Matches a visual representation of a common fraction to a percentage.
6	S	D	78.1	78.2	Visualises the result of an oblique fold.
7	MCD	C	71.6	72.3	Identifies the set of objects that matches a given probability.
8	N	D	62.3	61.8	Calculates the difference between a positive and a negative temperature.
9	AFP	B	58.3	56.6	Matches equivalent numerical expressions.

Item no.	Strand	Answer	Qld%	Aust%	Description
10	S	A	63.4	62.1	Recognises a different view of a stack of objects.
11	MCD	C	65.3	61.8	Estimates to identify the angle closest to 45 degrees.
12	S	B	60.3	61.6	Identifies the shape that will tessellate in an irregular hexagon.
13	MCD	B	45.4	47.6	Calculates an elapsed time from pm to am in hours and minutes.
14	N	C	56.6	58.4	Solves a division problem involving money.
15	N	C	48.2	50.1	Identifies the value of four notes needed to make a given total.
16	N	B	42.3	39.6	Solves a problem involving the comparison of decimal fractions.
17	N	D	46.2	47.4	Estimates a fraction of a large number.
18	AFP	10	55.3	44.5	Completes a number sentence involving decimal numbers and division by 10.
19	MCD	C	46.0	46.3	Interpolates scale to identify a value.
20	N	B	43.6	43.7	Solves a division problem where the numbers are in millions.
21	AFP	A	47.4	46.9	Solves a problem involving partitioning a quantity.
22	S	B	34.8	33.5	Uses scale to calculate a length.
23	MCD	24	38.6	41.0	Solves a perimeter problem involving calculating a missing length.
24	S	15	24.6	22.1	Calculates the number of edges of a prism when given a picture of its base.
25	N	A	37.5	33.6	Solves an equation involving the addition of fractions.
26	MCD	D	27.4	28.2	Solves an estimation problem involving volume, metric conversion and fractions.
27	MCD	42	10.1	10.2	Calculates the area of a composite shape based on two isosceles right-angled triangles.
28	MCD	60	15.4	14.8	Calculates the total size of a data set given a simple pie-graph and data about two categories.
29	AFP	D	12.7	13.0	Interprets a linear graph to approximate an unknown value.
30	AFP	20	23.1	21.2	Solves an equation with an unknown value on both sides.
31	N	63	8.5	9.2	Solves a problem involving ratio.
32	MCD	12	5.1	5.4	Solves a problem involving perimeter and metric conversion.

Key messages for teachers

About the test

The Year 7 Numeracy test consisted of 64 items from the four strands of Numeracy spread across two papers — calculator allowed (CA) and non-calculator (NC) — each with 32 items. Not all items on the calculator-allowed test required the use of a calculator. The distribution of items was as follows: 19 Number, 13 Algebra, function and pattern, 17 Measurement, chance and data, and 15 Space.

Items on the tests were in either a multiple choice format (72%) or required students to construct a response (28%). Most students attempted to answer all items. However, as the items near the end of the test were the most challenging and required students to construct a response rather than select an answer from a number of options, the percentage of students who omitted these items was quite high, ranging between 7% and 16%.
The highest percentages of omits were on items on the calculator-allowed test. This could indicate that students found these items more difficult or that they needed more time for this test.

Many of the items required students to use multiplicative thinking. These involved whole numbers, decimal and common fractions in rate, ratio, proportion and percentage problems from across the strands. Many problems also included a graphic that provided information integral to finding the correct solution. A student's ability to decode the mathematical relationships and other information presented in graphics influences their ability to respond to test items.

Performance

As shown in the preceding tables, the percentage of students answering items correctly ranged from 96% to 5%. Items with the highest and lowest facility rates were on the non-calculator test.

Thirty items had a facility rate of greater than 50% while a total of 11 items were correctly answered by less than 20% of students. Queensland students performed close to or above the national cohort data on most items. Compared to the national cohort, almost 8% more Queensland students were able to square a 2-digit number using a calculator (9 CA); 11% more completed a number sentence involving decimal numbers (18 NC); and approximately 15% more identified an unknown angle in a quadrilateral (15 CA).

Performance on items from the Algebra, function and pattern strand was particularly pleasing, with item 20 CA the only question in this strand where Queensland students were more than 2% behind the national cohort. This item required students to calculate the first term in a money pattern when given the rule. It is doubtful that many Year 7 students would have written an algebraic expression or equation to represent this problem.

In contrast to a facility rate of 69% for item 9 CA, approximately 11% of Queensland (and Australian) students were able to calculate the perimeter of a square when given the area (32 CA). This could indicate that students did not know how to use a calculator to find the square root of a three-digit number or, alternatively, to calculate the perimeter of a square when given the area. Fifteen per cent of Queensland students did not answer this question. Another three items involving the calculation of either area or perimeter were among the six from the Measurement, chance and data strand that had a facility rate of less than 20%. Responses to item 32 NC, a multistep problem involving calculating the perimeter of an irregular shape and metric conversion, demonstrated that students frequently complete only the first step in a multistep problem. This was also evident in item 31 CA where students were asked to solve a problem involving area and ratio. A number of students calculated the perimeter instead of the area but it was the proportional reasoning required that seemed to challenge most students. In item 27 NC, another multistep problem, it was lack of knowledge of how to calculate the area of a triangle that lead to incorrect responses.

Implications for teaching

Most students were able to correctly answer items that assessed a single concept or involved only one step.

Explicitly teaching students a range of strategies to solve word problems will help them develop the skills and confidence needed to tackle difficult problems and develop their reasoning abilities. These strategies include: reading for understanding, how to recognise the quantities/values in a word problem and the relationships between them, how to interpret information graphics, how to translate the information presented in the words and graphics into algebraic expressions or equations, and how to check the reasonableness of answers. Constructed-response items on the calculator-allowed test invariably result in a wide range of answers many of which were unreasonable.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. Additionally, SunLANDA materials are available to Education Queensland schools through *OneSchool*.

Year 9 Literacy — Language conventions

Spelling — item descriptions and key messages

This table shows the results for the spelling component of the Year 9 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Proofreading — error identified				
1	straight (strait)	85.1	86.2	Correctly spells an advanced homophone (*straight/ strait*).
2	ordinary (ordinry)	81.9	81.7	Correctly spells a word using the adjective-forming suffix *-ary*.
3	urban (urben)	75.2	76.6	Correctly spells a word using the adjective-forming suffix *-an*.
4	catchment (cachment)	81.3	74.6	Correctly spells a multisyllable word with the trigraph *-tch*.
5	accomplishment (acomplishment)	72.6	70.9	Correctly spells a word with the doublet c/c at the juncture of the first syllable and using an absorbed prefix (*ad-*).
6	circuit (circut)	60.6	56.5	Correctly spells a word using a Latin word root (*circum*)
7	monitor (moniter)	56.9	56.6	Correctly spells a word with the noun-forming suffix *-or*.
8	structural (structurell)	43.4	40.5	Correctly spells a multisyllable word where an *e*-drop is required before adding the adjective forming suffix *-al*.
9	canyon (canion)	41.9	44.4	Correctly spells a word with the consonant *-y* beginning the second syllable.
10	deafening (defening)	42.0	44.2	Correctly spells a multisyllable word with the short vowel digraph *-ea* in the base word.
11	practically (practicly)	51.8	50.8	Correctly spells a word with an unstressed syllable using knowledge of affixes.
12	campaign (campane)	41.3	41.0	Correctly spells a multisyllable word with the long vowel pattern *-ai* in an unstressed syllable.
13	nurture (nurchure)	38.2	40.3	Correctly spells a word with an unaccented final syllable *chur* spelt *-ture*.
14	jeopardy (jepardy)	26.1	27.8	Correctly spells a multisyllable word with the short vowel digraph *-eo*.
15	incorporated (incorperated)	24.6	23.6	Correctly spells a multisyllable word based on the Latin root *corpus*.
16	acquired (aquired)	22.8	21.7	Correctly spells a multisyllable word where the first syllable is spelt *ac-*.

Item no.	Answer	Qld%	Aust%	Description
Proofreading — error unidentified				
17	garbage (garbege)	85.9	87.8	Identifies an error, then correctly spells a multisyllable word ending in *-age*.
18	classify (classafy)	79.6	81.2	Identifies an error, then correctly spells a multisyllable word with the schwa *-i* in the unstressed syllable.
19	weird (wierd)	63.2	68.8	Identifies an error, then correctly spells a word with the *r*-influenced diphthong digraph *-ei*.
20	southern (southen)	62.7	63.1	Identifies an error, then correctly spells a multisyllable word with the derivational ending *-ern*.
21	deforestation (defforestation)	60.6	58.1	Identifies an error, then correctly spells a multisyllable word where the prefix *de-* is added.
22	considerable (considarable)	69.7	69.3	Identifies an error, then correctly spells a multisyllable word with the schwa *-e* in the unstressed syllable.
23	fulfilling (fulfiling)	48.6	47.3	Identifies an error, then correctly spells a multisyllable word where the final letter of the base word is doubled before adding an inflectional ending.
24	schedule (shedule)	52.8	56.3	Identifies an error, then correctly spells a multisyllable word beginning with the trigraph *sch-*.
25	gourmet (gormet)	26.4	29.0	Identifies an error, then correctly spells a multisyllable word of French origins.
26	enzymes (enzimes)	17.9	22.8	Identifies an error, then correctly spells a technical word where the diphthong is spelt *-y*.
27	permanently (permenently)	29.3	32.7	Identifies an error, then correctly spells the vowel in a multisyllable base word, *permanent*.
28	exhilaration (exilaration)	18.5	19.6	Identifies an error, then correctly spells a multisyllable word of Latin origin where the second syllable is unstressed.
29	vacuum (vaccum)	21.4	22.7	Identifies an error, then correctly spells a multisyllable word of Latin origins with the long vowel pattern *-uu*.
30	dilemma (dilema)	10.6	11.5	Identifies an error, then correctly spells a multisyllable word of Latin origins with the doublet *m/m* at the final syllable juncture.

Key messages for teachers

About the test

By the way they spell specific words, students indicate their knowledge of general patterns of the spelling system. The target words in the Year 9 test exemplify the advanced layers of the system. They required knowledge of:

- the sound of language, coded at the sound/symbols and pronunciation layer of the spelling system, and applied to unusual vowel and syllable spellings
- the morphology and function of words, coded at the syllable/word function layer, and applied to advanced affixes

- the spelling–meaning connections in words, coded at the meaning layer, and applied to roots derived from classical and foreign languages.

The Spelling test relates to two ways of using spelling knowledge — recognising spelling while proofreading and correcting spelling. Students need to read and comprehend a sentence, infer the intended word represented by a misspelling, then write the correct word. There are 30 items in two formats. Items 1 to 16 supply sentences in which the misspelt word is identified by being circled. Items 17 to 30 supply sentences in which the misspelt word is not identified.

Performance

Overall, Queensland Year 9 students are performing similarly to students nationally.

The percentage of correct answers was considerably lower on the items in the mistake-unidentified section. On three of these items, fewer than 20% were marked correct. In this section, the target words were often more difficult to spell, the proofreading load of the sentences was heavier and distracting words were included in the sentences. But students also struggled because they lacked a strategy or were not able to persist with the task. Omission rates were also much higher on these items; sometimes over 10%.

Girls were consistently more able than boys. Typically, the gap was about 7% but in one case, item 11, *practically*, it was 18%. This pattern was reversed for only one word: item 9, *canyon*, where the simple substitution of a *y* for an *i*, solved the problem.

Students performed better when spelling more familiar words and words with predictable patterns within the word. For example, the high facility rate for the words *straight* and *garbage* might have been even greater if the word was asked as dictation and removed from the distracting influence of the supplied misspellings (*strait* and *garbege*). There was also a high facility rate in spelling words such as *accomplishment*, *ordinary* and *classify*. This is understandable because these are more visually familiar and have regular, sounded pronunciations.

Even though the facility rate was low for the words such as *nurture* and *schedule*, the error patterns indicated that students are ready to learn and generalise the spelling patterns related to these words.

The error patterns show that almost all the poor performances occur because students merely attempt to spell words by *sounding out*: by imagining the individual sounds of the word as spoken and writing a letter for each sound. The common errors in spelling *fulfilling*, for example, included *fufilling* and *forfilling*.

Many students seemed unable to break a word into its component base word and affix. For example, the error patterns on *structural* suggest many students did not understand the adjective suffix *-al*. Many students also offered implausible spellings of base words such as items 10 and 15, *deafening* and *incorporated*. That is, students who could surely spell *deaf* did not break *deaf-en-ing* into its components.

Implications for teaching

Teaching should focus on:

- suffixes, including the unstressed, and alternating syllables that they often create in the base word (see items 27 and 13, *permanently* and *nurture*)
- absorbed prefixes (see items 5 and 16, *accomplishment* and *acquire*)
- subject-specific Greek, Latin and French spellings of vowels and consonants such as items 6, 12, 25, 26, 28, 29 and 30, *circuit*, *campaign*, *gourmet*, *enzymes*, *exhilaration*, *vacuum* and *dilemma*.

Formative assessment should include cloze dictation to avoid the extraneous effects of seeing misspelt words and monitoring of spelling-in-writing. Teachers should also find ways to engage boys. There is a strong logic to the English spelling system and making this evident to boys is likely to improve their spelling.

Finally, teachers should impart a proofreading ‘ethic’ and its skills and strategies. Proofreading is not a worthless test splinter skill, but a literacy skill that improves student reading and writing.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. Additionally, SunLANDA materials are available to Education Queensland schools through *OneSchool*.

Grammar and punctuation — item descriptions and key messages

This table shows the results for the Grammar and punctuation component for the Year 9 Language conventions test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
31	A	96.3	95.9	Identifies the correct prepositions to introduce prepositional phrases in a complex sentence.
32	A	94.2	94.2	Identifies the correct pronoun to complete a phrase.
33	D	91.3	90.6	Identifies the correct pronoun as the subject of a simple sentence.
34	C	87.5	87.9	Identifies the correct modal adverb.
35	C	89.3	89.1	Identifies the correct modal auxiliary indicating past tense.
36	A	88.1	87.2	Identifies the correct prefix to create an antonym.
37	D	88.0	86.7	Identifies the meaning created by the relationship *neither/nor*.
38	C	85.5	86.1	Identifies the sentence which correctly combines information from three sentences.
39	C	74.2	72.7	Identifies the correct use of list punctuation.
40	B	71.6	71.1	Identifies the correct pair of verbs to maintain tense.
41	C	79.7	81.8	Identifies the incorrect contraction.
42	C	72.1	70.7	Identifies the correct form of an irregular verb indicating present tense in a simple sentence.
43	A	53.7	53.9	Identifies in a given sentence, the connective which does not express time.
44	A	54.6	58.8	Identifies the correct use of an apostrophe of possession.
45	B	69.8	68.3	Identifies the correct use of clause commas to indicate a relative clause.
46	C	61.8	61.2	Identifies the first event in a series in a complex sentence.
47	A	68.5	69.6	Identifies the correct use of capital letters for the name of an organisation.
48	B	73.7	72.4	Identifies the clause which is a simple sentence.
49	C	59.5	60.2	Identifies the correct pronoun reference.
50	C	35.5	34.5	Identifies the correctly referenced participial phrase.
51	D	50.8	51.1	Identifies the adjectival function of a present participle.
52	D	60.8	62.7	Identifies the correct connective introducing a dependent clause in a complex sentence.
53	D	50.8	47.9	Identifies the noun from a list of related words.
54	B	38.9	40.6	Identifies the correct adverbial form of a word.
55	C	24.7	27.1	Identifies the incorrect punctuation of a list.

Item no.	Answer	Qld%	Aust%	Description
56	A	38.3	39.4	Identifies the correct punctuation of an address.
57	B	26.2	26.1	Identifies the correct punctuation of a question in direct speech with internal attribution.
58	A	21.0	20.3	Identifies the correct pair of verbs indicating past tense staging in a complex sentence.

Key messages for teachers

About the test

The 2013 Year 9 Language conventions test assessed Standard Australian English. There were 20 grammar and 8 punctuation items on this part of the Language conventions test. The grammar items sampled student knowledge of grammatical forms and functions. The punctuation items sampled such aspects as the appropriate use of commas in a list or as markers of clause boundaries; apostrophes of contraction and possession; capitalisation of proper nouns and the punctuation of direct speech.

Performance

Queensland Year 9 students performed at a similar level to their counterparts in other states. In 15 of the 28 items, Queensland recorded slightly better results than Australia as a whole. The item with the most difference between Queensland and the Australian outcome was item 44, where 55% of Queensland students answered correctly compared with the national result of 59%. This item required an understanding of contractions of possession to correctly punctuate the sentence.

On the whole, Year 9 students did not appear to find the paper difficult with a facility rate of more than 85% on eight items. Only six items had facility rates of less than 50%.

Students performed well on items that required them to identify the straightforward use of grammatical forms. More than 90% of Australian students were able to correctly reference pronouns or identify correct prepositions.

Those items which required students to understand and control tense were answered correctly by the majority of students both in Queensland and nationally. Students who selected incorrect options may have read only part of the sentence.

A continuing challenge is helping students to know the difference between Standard Australian English and colloquial usage. In items where a colloquial form of language use was presented in distracters, such as item 54, students needed to know that the adverbs in the three distracters required an *-ly* ending in order to be correct. Only 40% of the cohort answered this correctly. Similarly, in item 42 which tested an easier concept of tense, colloquial forms of *I seen* and *I done* were used in distracters.

Aspects of punctuation such as the more sophisticated punctuation of direct speech or lists would benefit from direct teaching. Interestingly, identifying the correct punctuation of an address proved to be one of the more difficult items on the paper with only 38% of Queensland students and 39% of Australian students able to answer correctly.

Implications for teaching

Teaching students about the form and function of grammar is important as is the teaching of the metalanguage that allows knowledge to be shared. Only about half the students sitting the test were able to correctly identify a noun or an adjective.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. Additionally, SunLANDA materials are available to Education Queensland schools through *OneSchool*.

Writing task sample

Year 9

Kishimoto is a rather famous manga creator across the world. The comics he draws not only have entertained people for a stunning thirteen years, they also import a great deal of wisdom and teach life lessons to fans that will be valued for a very long time. Outside of his work, Kishimoto also proves to be a generous and responsible member of society. While not exactly what one would deem 'heroic' in the typical sense, he is certainly someone that inspires and worthy of admiration; hence why in my eyes and what I'm sure is that of thousands of other fans, he deserves formal recognition for it.

His main creation, Naruto, has been in production for 13 years and the number of fans has only continued to increase. Long after growing out of childhood his fans even as adults continue to enjoy the manga and its televised version (anime) simply because it is quality material that's enjoyed by a wide and varied audience of vastly different ages, cultures and people. Other works that claim the same, such as Harry Potter and the Hunger Games have had their owners duly recognised and praised, so why should this be any exception? If anything, seeing has Naruto has run for much longer, the quality of it's content never faltering, it deserves much more.

The messages and lifelessons portrayed in Naruto are invaluable and as a large number of viewers begin at a young age, where they are easily impressionable, the positive effect it has on them is immeasurable. As an individual who's deeply immersed in the series myself, I can personally vouch that

it indirectly builds character just by its portrayal of its main protaganist (Naruto). It, in a sense, forces the viewer to acknowledge our faults and how important it is to persevere in the face of adversity. Perhaps the most important lesson taught in Naruto is that no matter our circumstances or differences, we can always work together to accomplish anything, and that together the sky's no longer the limit but our point of views. Works that promote so much positive effect deserve much more acknowledgement for its creator than books such as Twilight which do nothing more than ramble on about forbidden love and other nonsense.

Finally, Kishimoto as an individual has proved to be much more responsible and generous as an individual than others of his wealth and status. To state one example, the ever famous Stephenie Myer earned 1billion in profit as the author of the twilight saga and lavished the majority of it on a mansion and other such luxuries, with only a tiny fraction to charity - and that seems a publicity stunt than anything else. Our personal lives and family are exceedingly important, yes. But ever creator has a moral and societal imperative and responsibility to aid in bringing a positive effect of some sort on society. Kishimoto recognises this, and hence lives a simple lifestyle, with regular donations to charity and other organisations.

In conclusion, Kishimoto has proved to be, for me in any case, an inspiration and individual capable of admiration on so many levels. His work has entertained and amused and had a positive effect on the world, especially its younger generation for so many years. Hence I believe him worthy of formal recognition as a true hero.

END OF TEST

Year 9

Audience 6

While the writer wants to promote and praise Kishimoto's work, this does not override her focus on persuading us that Kishimoto, deserves a hero award. The writer wins trust by declaring her personal experience as a fan and by arguing with evidence and logic. She establishes a persuasive definition of heroism based on personal ethical standards which have a positive effect on other people.

Text structure 4

The introduction establishes the full context for the nomination of Kishimoto. Comparison and contrast unites the script. The body develops three proofs of his worth (the high quality of his work, how the work builds character in his young audience and how he exhibits personal integrity) and in each case these positive qualities are shown to exceed those of more recognised artists. The conclusion restates, but with good effect.

Ideas 5

Evidence is relevant and mostly plausible. Whether or not the writer's facts about Kishimoto are true, her statements of ethical principles and literary/artistic standards are weighty and sophisticated.

Persuasive devices 4

The writer uses a mostly measured tone to establish credibility. The contrast that is set up between Myer and Kishimoto is effective. When she resorts to disparagement, dismissing the *Twilight* books, her attitude seems authoritative. Although the attack on Stephanie Myer might seem strong, the writer knows that the criticisms are widely held. She uses the strategy of contrast in a controlled way to develop her point of view.

Vocabulary 5

The writer chooses emotive verbs (e.g. *lavished*, *vouch)* and adjectives (e.g. *deeply immersed individual)* to be persuasive. Other word choices are precise and appropriate for topics of culture, ethics and society.

Cohesion 4

Lexical links and precise connectives abound as the writer unfolds thoughts without straying from the point. Pronoun referencing is tight and controlled. See, for example, references to the topic of paragraph three: *Naruto … the series … it … Naruto … works … it*.

Paragraphing 3

Each paragraph is fully elaborated and structured and represents a logical step in the argument.

Sentence structure 5

Coherent and cogent thinking is conveyed by fluent and varied sentence forms. Sentences show addition (*The comics not only … they also …*), concession/qualification (*While not … he is …*), and exemplification (… *books such as Twilight which …*). The writer attempts to craft sentences for rhetorical impact.

In seeking to control more sophisticated structures, the writer has omitted words thus creating sentence errors, e.g. *somebody that inspires and* [is] *worthy*; *that seems* [more] *a publicity stunt than … .* Others are poorly connected, e.g. *hence why* [as a result]; *seeing has* [considering that]; *in my eyes and* [those] *of thousands of other fans*. These errors prevent this from achieving the top score.

Punctuation 4

The writer demonstrates the correct use of many forms of punctuation. A few errors prevent the top score being awarded. An apostrophe is incorrectly added on one occasion to the possessive pronoun *its*. On two occasions, one of the two required commas around a subordinate clause is omitted. The title, *Twilight* is not capitalised on one occasion.

Spelling 6

The writer's spelling is correct and includes many challenging words such as: *acknowledgement*, *publicity*, *immeasurable*, *luxuries*, *societal*, *recognition*, *exceedingly*, *imperative*, *faltering*.

Year 9 Literacy — Reading

Item descriptions and key messages

This table shows the results for the Year 9 Reading test. The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Item no.	Answer	Qld%	Aust%	Description
Mind your reflection (Informative)				
1	D	96.8	96.3	Locates directly stated information.
2	C	37.5	38.6	Evaluates an underlying presumption for an experiment.
3	2,4,5,3, 1	77.8	78.6	Sequences the steps of the experiment.
4	D	80.5	79.7	Infers the actions of the magpie using two directly stated facts.
5	B	74.1	75.6	Explains use of a text feature.
6	C	87.3	87.4	Infers from directly stated information.
RSPCA (Informative)				
7	A	78.7	79.1	Infers a position statement.
8	B	46.2	49.3	Infers the meaning of a word from context.
9	D	61.5	61.7	Infers the meaning of a word from context.
10	C	87.9	89.2	Locates directly stated information.
11	C	48.5	50.9	Integrates information to interpret the underpinning motivation for a stance.
12	B	64.5	62.8	Identifies the weblink with its content using knowledge of webpage conventions.
Malaria's ancient mask (Informative)				
13	D	38.1	37.7	Interprets the figurative use of the word *mask*.
14	D	69.4	70.2	Integrates text-based and context-based information to make an inference.
15	B	71.3	72.1	Integrates directly stated information to make an inference.
16	D	85.8	86.8	Locates the explanation of the idiom, *clever trick up its sleeve,* using directly stated information.
17	C	58.6	57.9	Identifies the purpose and main idea of the final paragraph.
18	A	49.1	51.8	Interprets the information in a footnote.

Item no.	Answer	Qld%	Aust%	Description
Encounter in Castle Estondrake (Imaginative)				
19	A	29.8	31.5	Identifies the purpose of the introduction of a narrative excerpt.
20	A	64.2	68.4	Interprets vocabulary that develops characterisation.
21	C	45.6	48.2	Interprets directly stated information.
22	A	33.9	34.9	Infers a character's personal qualities from vocabulary.
23	D	44.6	45.4	Infers the meaning of a word from links with other synonyms in the text.
24	C	69.2	70.6	Infers the reason for a character's behaviour.
25	A	45.1	45.1	Infers the relationships between characters.
Being a vegetarian (Persuasive)				
26	B	82.6	83.2	Interprets the meaning of the expression *sick and tired* to identify the writer's reaction to a series of questions.
27	B	55.4	58.6	Identifies a persuasive technique.
28	C	77.6	80.1	Identifies the reason for the use of points of ellipsis.
29	A	29.4	32.2	Identifies a persuasive technique.
30	A	21.1	22.3	Identifies an example of colloquial language.
31	C	73.5	73.8	Identifies a writer's tone.
In the moment (Imaginative)				
32	B	29.9	31.3	Identifies changes in tone from the beginning compared with the end of a narrative.
33	C	53.0	55.3	Infers a character's attitude.
34	D	41.8	42.8	Locates and integrates two directly stated ideas.
35	B	53.4	53.8	Infers meaning of a simile.
36	A	69.0	72.1	Infers meaning of the word *intoxicated*.
37	A	59.5	60.8	Identifies a description of the text.
The ultimate connection (Informative)				
38	D	39.5	40.6	Integrates information across paragraphs.
39	B	73.5	76.0	Locates information within a paragraph.
40	C	52.9	56.4	Identifies directly stated information.
41	C	73.3	74.9	Locates directly stated information.
42	A	42.6	42.4	Identifies the use of a conjunction to signal contrast.
43	B	57.5	57.9	Identifies the author's stance.

Item no.	Answer	Qld%	Aust%	Description
Going somewhere (Imaginative)				
44	D	46.3	49.1	Infers a key aspect of a character.
45	B	38.3	39.2	Interprets a character's view of his world.
46	*	8.6	7.6	Infers the relationship between setting and character.
47	A	31.6	34.8	Infers a character's feelings and perceptions.
48	C	55.4	58.6	Interprets figurative language.
49	B	53.8	59.0	Infers a character's reaction to an event.

*Item 46

Responses which make connections between the sense of decay in the descriptions of the place (setting) and the man's decline were marked correct:

- The man's condition is getting worse just like the houses and fences.
- Both are getting worse/deteriorating.
- Things in the street are getting older, falling apart and the man is too.

Responses which make no connections between the description of the place and the man, or connections that do not identify the significant difference, were marked as incorrect:

- The man became older and looked much worse by the end of the text.
- The man was in the street where Laurie was walking.
- They are both dark.

Key messages for teachers

About the test

The Year 9 NAPLAN Reading test consisted of 49 items based on eight texts in the accompanying Reading magazine. Most items (47) were multiple choice, with one item requiring a numeric sequencing of aspects of the stimulus material, and one item requiring a written response.

The reading stimulus material covered a broad range of genres, including *narrative* (historical fiction, short story, reflection), *persuasion* (a press release from the RSPCA and a website 'blog' on vegetarianism), *description* (informative text on malaria transmission), and two other *explanation* texts (illustrating aspects of brain–computer interaction and light/reflection).

Literal items required students to retrieve explicitly-stated information from within the texts. However, as expected for Year 9, a number of questions required students to make inferences from the text that were straightforward, required further interpretation or translation, or involved the integration of ideas. Very few questions required evaluative reasoning.

Performance

Facility rates of Queensland students were generally near to, or above, the national facility rates on most items. In general, Queensland students performed well on inferential questions that used or linked ideas or information from the text itself.

Queensland Year 9 students were generally less successful on those items requiring context-based inferences, linking information from the text with prior knowledge of the world, other texts or language. For instance, in the final item (49), the key, Laurie *wants to distance himself from him* (the old man), required students to infer that the developing connection between the two characters, as indicated throughout the text, was broken by the stark reality of their actual physical proximity and meeting. This inference depended, to some extent, on students identifying with the character, and recognising the discomfort Laurie then felt.

Queensland students also performed slightly lower on items related to the more imaginative texts: *Encounter in Castle Estondrake*, *In the moment* and *Going somewhere*. This was particularly evident in the performance of boys in the latter two texts. Interestingly, boys outperformed girls in the *Encounter at Castle Estondrake* items. It could be reasonably assumed that this text contained more of an action focus, whereas *In the moment* and *Going somewhere* tended to be more reflective in tone. The text, *In the Moment*, in particular, contained extensive use of imagery, figurative language and sentence fragments to enhance mood. In item 35, for instance, students were asked to unpack the simile *beside the pile my crayons lay like a bouquet of spring blooms*. The facility rate for Queensland girls on this item was nine percentage points higher than for Queensland boys — a significant disparity.

Implications for teaching

Exposure to as wide a variety of authentic texts as possible for Year 9 students would both enhance student general reading comprehension, and complement testwiseness practice for NAPLAN type assessments. In particular, texts that enhance associations between characters, situations and concepts with real student experience and the wider world should assist in developing the skills in context-based inference. Selection of reading materials that appeal to both boys and girls is important, and is part of most school reading programs already. If possible, imaginative texts that can blend action sequence with reflective/figurative components would be useful in addressing the difference in gender performance.

In terms of a testwiseness strategy, the careful reading of the entire text and the question (with any locational markers, e.g. *paragraph 2*) should be obligatory. Key words like *Explain the connection …* in the question (item 46) should guide students directly in their responses. The Common Curriculum Elements for the Queensland Core Skills Test provide useful definitions for key words such as *explain*, *compare*, *contrast* etc.

Grammatical concepts such as *lexical cohesion* should be identified for students so that they can track meaning and message throughout a text. Again, this sits behind an understanding of what is implied in items such as the open-ended response item (46).

By Year 9, students should be encouraged to elicit themes and concepts from their reading across the genres. Paraphrasing and précis would be useful in this regard. So too are three-level-guides, which require central ideas and concepts to be identified and distilled.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

Year 9 Numeracy

Item descriptions and key messages

This table shows the results for the Year 9 Numeracy test. The numeracy strands are abbreviated as follows: Algebra, function and pattern (AFP); Measurement, chance and data (MCD); Number (N); Space (S).
All items are worth one score point.

The percentage columns give the relative proportion of correct answers (facility rates). These results are based on provisional data.

Calculator allowed paper

Item no.	Strand	Answer	Qld%	Aust%	Description
1	N	E	92.4	92.0	Solves a problem involving multiplication with a decimal number.
2	S	D	88.2	87.4	Calculates a distance using a given map, ruler and scale.
3	AFP	A	83.5	83.2	Calculates the missing value in an equation.
4	N	C	75.7	77.3	Calculates the total of three 5-digit numbers to the nearest thousand.
5	S	D	78.2	78.2	Visualises a 3-D shape from an isometric drawing.
6	N	C	65.9	64.9	Calculates a percentage increase of a given measure.
7	N	C	77.2	76.3	Interprets a given table of costs to calculate a final price.
8	MCD	C	61.6	60.5	Calculates the area of a hexagon using rectangles.
9	N	D	57.6	57.7	Locates decimal approximations for irrational numbers on a number line.
10	MCD	C	66.4	66.9	Uses statistical information about mean and population to calculate a total.
11	S	C	59.5	57.4	Uses the properties of rectangles to calculate the interior angles of a composite shape.
12	AFP	B	53.6	53.6	Solves a problem involving a missing addend.
13	AFP	B	52.2	55.3	Calculates the first term in a money pattern when given the rule and a total.
14	N	C	51.9	53.9	Solves a rate problem involving speed.
15	S	D	48.6	45.7	Follows directions and interprets scale on a map to identify a location.
16	MCD	B	40.5	42.4	Calculates the radius of a circle from the circumference.
17	AFP	A	49.0	50.3	Interprets a table of values to identify and apply linear rule.
18	N	B	41.6	45.8	Represents part of a model as a percentage of its length.

Item no.	Strand	Answer	Qld%	Aust%	Description
19	MCD	A	33.0	33.7	Uses data in a table to identify the probability of a random event.
20	AFP	B	30.8	32.9	Interprets the graph of a simple non-linear function to solve a time/height problem.
21	MCD	B	42.3	42.3	Calculates the surface area of a composite shape.
22	MCD	7500	33.5	30.4	Solves a multistep problem by calculating the mean of a small data set.
23	MCD	D	31.0	33.5	Identifies the range of a small data set.
24	N	60	16.2	17.3	Solves a problem involving money and percentage.
25	S	2.8	38.2	38.6	Solves a problem involving scale and proportional reasoning.
26	N	A	20.6	23.0	Solves a problem involving the subtraction of numbers expressed in scientific notation with different negative indices.
27	S	54	11.1	11.0	Calculates the size of a given angle using the properties of a series of similar triangles.
28	AFP	C	22.5	22.2	Solves a problem involving proportional reasoning.
29	AFP	8	16.0	17.9	Solves a problem involving the use of a non-linear rule and metric conversion.
30	S	36	12.0	14.4	Interprets a network diagram to calculate the shortest path between two locations.
31	MCD	7	8.8	10.9	Calculates the height of a prism constructed from two identical cubes when given its volume.
32	S	150	6.0	7.9	Calculates part of the area of a complex diagram made up of squares.

Non-calculator paper

Item no.	Strand	Answer	Qld%	Aust%	Description
1	N	D	58.7	61.9	Calculates a fraction of a 3-digit number.
2	AFP	C	87.6	87.4	Identifies the maximum point on a frequency/time graph.
3	N	E	80.9	82.7	Matches a visual representation of a common fraction to a percentage.
4	N	D	77.9	80.4	Calculates the difference between a positive and negative temperature.
5	AFP	C	68.8	68.9	Recognises and discriminates between mathematical symbols.
6	S	B	78.3	76.8	Identifies the two lines of symmetry of a given shape.
7	MCD	C	60.5	63.1	Recognises that the probability of a certain event is 1.0.
8	N	B	62.7	62.6	Uses knowledge of simple powers to solve a problem.

Item no.	Strand	Answer	Qld%	Aust%	Description
9	S	B	67.5	67.4	Identifies the shape that will tessellate in an irregular hexagon.
10	MCD	C	54.0	54.3	Interpolates scale to identify a value.
11	N	C	50.9	51.1	Interprets simple powers to solve a problem.
12	AFP	B	66.8	65.0	Distinguishes between correct and incorrect expressions for the perimeter of a square.
13	S	D	45.7	46.8	Uses the properties of triangles to select a set of conditions that would not produce a triangle.
14	MCD	A	43.3	43.2	Calculates a duration in minutes and seconds.
15	AFP	A	51.9	51.6	Solves a problem involving partitioning a quantity.
16	S	C	52.0	47.3	Identifies the coordinates of a point that completes a 2-D shape.
17	MCD	B	49.2	45.6	Identifies the median of an unordered data set.
18	AFP	A	30.4	35.9	Applies the distributive law to find an equivalent algebraic expression.
19	AFP	9	24.8	24.9	Calculates the solution to an inequality that meets a given criterion.
20	MCD	15	29.8	32.3	Solves a problem involving a simple rate and elapsed time.
21	AFP	D	40.2	40.1	Identifies the equation that shows the relationship between variables in a given growing pattern.
22	S	28	24.9	23.7	Calculates the number of edges on an irregular 3-D object.
23	N	120	36.7	36.6	Solves a word problem by interpreting data to calculate a fraction of an amount of money.
24	MCD	42	20.9	23.1	Calculates the area of a composite shape based on two isosceles right-angled triangles.
25	AFP	20	17.9	17.8	Uses proportional reasoning to calculate a given term in a growing pattern.
26	S	A	27.5	27.9	Identifies a view of a building from a given direction.
27	AFP	D	18.0	19.1	Interprets a linear graph to approximate an unknown value.
28	N	360	7.2	8.2	Solves a distance problem using given ratios.
29	MCD	A	15.6	16.7	Calculates the volume of a triangular prism.
30	AFP	6	11.2	13.6	Calculates an overall population rate from two given rates.
31	MCD	12	8.5	9.5	Solves a problem involving perimeter and metric conversion.
32	S	104	7.5	7.9	Calculates the length of the diagonal of a rectangle using knowledge of the similarity of shapes.

Key messages for teachers

About the test

The Year 9 Numeracy test consisted of 64 items from four strands of numeracy across two papers — calculator-allowed test (CA) and non-calculator (NC) — each with 32 items. Not all items on the calculator-allowed test required the use of a calculator. The distribution of the 64 items across the strands was as follows: 16 Number, 17 Algebra, function and pattern, 16 Measurement, chance and data and 15 Space.

Approximately 72% of items were presented in a multiple choice format with the remaining 28% requiring students to construct their answers. Most students attempted to answer all items. The percentage of students who do not submit an answer to a question tends to increase towards the end of a test as this is where the most challenging items are positioned. Many of these require a constructed response. Interestingly, the items with the highest omit rates were on the calculator-allowed test.

Performance

The facility rates on items ranged from 92% to 6% with 28 of the 64 items answered correctly by more than 50% of students. The facility rates for Queensland students were equal to, or above, the national rates on 28 of the 64 items.

More than 80% of students were able to match a visual representation of a common fraction, solve a problem involving multiplication with a decimal number, calculate the missing value in an equation, identify the maximum point on a time/frequency graph and calculate a distance using a given map, ruler and scale. Although four of the items from the Space strand were among the most difficult on the tests with facility rates of less than 15%, the results achieved by Queensland students on most Space items were comparable to, or better than, those of the national cohort. Approximately 5% more Queensland students were able to identify the coordinates of a point that completed a 2-D shape. Students in this state also scored more than 3% higher than the national cohort on Measurement, chance and data items involving measures of centre.

At the state level, boys outperformed girls on the majority of items with the average difference being 4.5%. This may not be the case at an individual school level.

Two items for which the Queensland facility rate was more than 4% below the national rate were item 18 on the calculator-allowed test and item 18 on the non-calculator test. Both of these were multiple choice items. On the calculator-allowed test, students were asked to identify part of a model as a percentage of its length. The most common incorrect answer was due to inaccurate rounding. Two other items on this test involving percentage, CA 6 and CA 24, had facility rates of 66% and 16% respectively. Percentage problems continue to challenge students at this year level.

Item 18 on the non-calculator test was an Algebra, function and pattern item that required students to apply the distributive law to find an equivalent algebraic expression. Of the 17 Algebra items on the tests, 10 had facility rates of less than 50%. A number of these items involved proportional reasoning. The ability to think and reason proportionally enables students to identify relationships and make comparisons between quantities or values and to solve problems from all strands of mathematics.

Implications for teaching

Approximately 60% of test items contained a graphic that provided information essential to the task and many of these graphics supported multistep problems. Therefore students need to be able to decode a graphic and accompanying text in order to understand the information they have been given and what they are required to do. One of the most common errors made by students was failing to complete all steps in a problem. Students need to develop a range of problem-solving strategies, including how to translate information into an algebraic equation and to check the reasonableness of answers. The reasonableness of answers is of particular concern when students have access to a calculator. Teaching students estimation strategies, encouraging them to estimate before beginning a calculation and developing systematic ways of working through a multistep problem will improve numeracy skills. Knowledge of the effective use of the available functions on their calculators will also assist students in their problem solving.

Please refer to SunLANDA for a detailed analysis of individual test items, including teaching ideas designed to assist with the development of the understanding and skills required by each item. SunLANDA is available to all schools on the QSA website. SunLANDA materials are also available to Education Queensland schools through *OneSchool*.

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