

INTERPRETING 2017 NAPLAN RESULTS

Purpose

Years 3, 5, 7 and 9 students completed the NAPLAN tests over a three day period between 9 and 11 May 2017. This document will help you interpret the information presented in the results reports sent to all South Australian schools.

Format of the tests

Table 1 shows that each test domain (or examination) consists of a number of test items (or questions).

Table 1: Number of test items, by test domain and year level, 2017

Test Domain	Year 3	Year 5	Year 7	Year 9
Reading	37	37	48	49
Language Conventions:				
Spelling	25	25	25	25
Grammar & Punctuation	25	25	25	25
Numeracy (non-calculator)	36	42	8	8
Numeracy (calculator allowed)	No test	No test	40	40

The NAPLAN test item formats included:

- Multiple choice – a student had to select the correct answer from several possibilities;
- Short response – a student had to write one word or a few words in response to a question; and
- Extended response – this included writing for which a student wrote an extended text.

The writing test

In the Writing test, Years 3 and 5 students wrote a persuasive text to the prompt 'Which is better?', where students were asked to convince a reader that one thing is better than another. The persuasive prompt for Years 7 and 9 students was 'Don't waste it', where students were asked to persuade a reader that something you care about should not be wasted or thrown away.

Each student's writing was then assessed against ten criteria each with a range of score points. More detailed information can be found in the 2017 NAPLAN Writing marking guide included in the results packages distributed to all South Australian schools. The Persuasive Writing Marking Guide can also be downloaded from the DECD website (www.decd.sa.gov.au/naplan). Table 2 shows the marking criteria and score points for Persuasive writing.

Table 2: Persuasive writing marking criteria and score points

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



Interpreting the Individual Student Report

Scales and scores

NAPLAN results are reported using five scales, one for each of the domains of reading, writing, and numeracy, and two for language conventions domain (one scale for spelling, and one for grammar and punctuation).

The NAPLAN scales are constructed so that any given score represents the same level of achievement over time. For example, a score of 700 in reading will have the same meaning in 2017 as in 2010. This enables changes in literacy and numeracy achievements to be monitored over time.

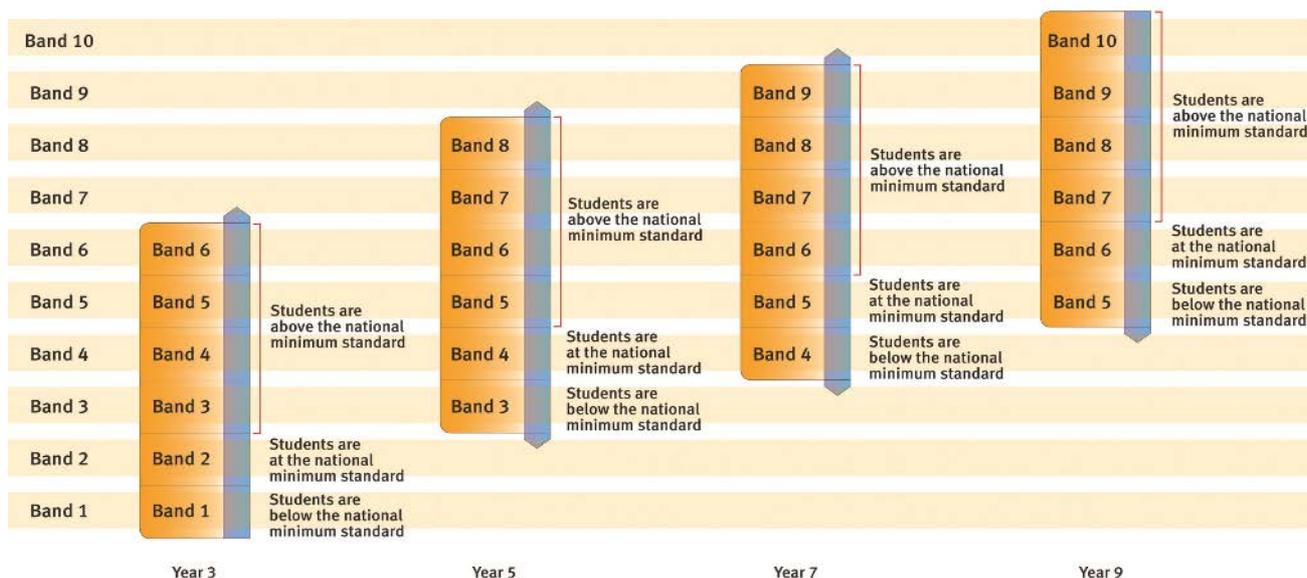
The use of a common scale that spans Years 3, 5, 7 and 9 allows both the status of, and gain in, individual student achievement to be monitored and reported throughout each student's years of schooling. It also enables the achievement of all students and groups of students to be monitored.

For each student and each test an achievement score is calculated based on the number of items the student answered correctly and the difficulty level of the items. This achievement score is then placed on the NAPLAN scale which has a minimum of zero and a maximum of 1000.

Each of the five reporting scales is common across the four year levels and was developed by having several items which were identical in the year 3 and year 5 tests, in the year 5 and year 7 tests and in the year 7 and year 9 tests.

The two Numeracy tests (Calculator allowed and Non-calculator) in Year 7 and Year 9 contribute to a single Numeracy score.

National Assessment Program—Literacy and Numeracy National Assessment Scale



Bands

Each year level uses only a section of the entire achievement scale to report results. The arrow-heads on the top and bottom of the scales in the Individual Student Report (ISR) indicate achievement which is above or below these extremities.

The scale for each domain is divided into ten bands to cover the full range of student achievement in the tests. The bands map the increasing complexity of the skills assessed by NAPLAN. Six of the bands are used for reporting student performance at each year level. The Year 3 report shows bands 1 to 6, the Year 5 report shows bands 3 to 8, the Year 7 report shows bands 4 to 9, and the Year 9 report shows bands 5 to 10.



A “cut-score” separates the scoring bands. These are detailed in the table below:

Table 3: Cut-scores separating bands, 2017

Bands	Cut score	Bands	Cut score
Band 1 and Band 2	270	Band 6 and Band 7	530
Band 2 and Band 3	322	Band 7 and Band 8	582
Band 3 and Band 4	374	Band 8 and Band 9	634
Band 4 and Band 5	426	Band 9 and Band 10	686
Band 5 and Band 6	478		

National minimum standard

For each year level and test a national minimum standard has been set. The number and percentage of questions a student needs to answer correctly to achieve the national minimum standard varies depending on the test domain and year level. The number of test items at or below the national minimum standard can also vary between test years depending on the spread of items in the tests.

A student’s score point on each scale is determined by the student’s total test score rather than the most difficult item correctly answered. Students will be able to correctly answer most of the items that are below their score point and may correctly answer some of the items above their score point.

Students within a minimum standard band will typically be able to display skills in that band and in the band below and display some of the skills in the bands above the minimum standard (see Table 4 below).

Table 4: National minimum standard, by year level and band

Student Year Level	Results designated “below national minimum standard”
Year 3	Band 1 and exempted students
Year 5	Band 3 or lower, and exempted students
Year 7	Band 4 or lower, and exempted students
Year 9	Band 5 or lower, and exempted students

National average, school average, middle 60% of students

On each scale in the national student report, the national average for all students and the range of achievement for the middle 60% of students is shown. The black triangle represents the national average; the unshaded triangle represents the school average and the light blue shaded area the range for the middle 60% of students.

A student whose dot appears in the lightly shaded area is between the 20th and 80th percentile of students. A student whose dot appears in the darkly shaded upper area of the scale is in the top 20% of all students’ performance, while a dot in the darkly shaded lower area indicates the student is in the bottom 20%.

Summary of skills assessed

The matrix of skills on the back page of the student report shows the typical skills tested in each proficiency band. A student will most likely be able to demonstrate the skills and understandings described in their achieved band level and those bands below.

To help explain any queries parents may have, it may be useful to refer them to the Information for Parents brochure and the Frequently Asked Questions on the NAP website (www.nap.edu.au) published by ACARA.



Interpreting school level reporting

Mean and standard deviation

The mean score is the average of the scores for all students in the group.

When numbers in a cohort are small, the mean score can be misleading as it may be affected by a few high or low performing students. Mean scores sometimes obscure real differences within a cohort, even when the student numbers are large. A school with concentrations of high and low achieving students may find that a mean score describes the achievement of very few of its students.

The standard deviation indicates the extent to which student results vary from the mean. A high standard deviation indicates that the scores are spread more widely while a smaller standard deviation indicates that scores are clustered more compactly around the mean score. Therefore, a school with a small standard deviation will find the mean score more useful when analysing their data.

Mean scores and standard deviations are not provided for cohorts of fewer than 5 students.

Analysing individual student achievement

Progress and growth

Individual student growth between the 2015 and 2017 NAPLAN tests for Reading and Numeracy scores can be found in the blue student level reports. Growth is classified as “Low, Medium or Upper” by grouping Lower 25%, Middle 50% and Upper 25% of 2017 scores for all students who achieved the same starting score in the 2015 test.

Individual students normally progress through NAPLAN proficiency bands at a similar rate. Table 5 outlines the average growth rate expected for students progressing from the 2015 tests to the 2017 tests.

Table 5: Guide to expected growth, 2015-2017, by year level

Test Year Levels	Band change
Year 3 to Year 5	About 1½ bands
Year 5 to Year 7	About 1 band
Year 7 to Year 9	About ¾ of a band

Comparing results

Comparisons between individual students, groups of students and between year levels are valid because the tests use common achievement scales.

All of the tests since 2008, with the exception of Writing, use the same scale so comparisons over time can be made. Comparisons of writing results are possible between 2008, 2009 & 2010. ACARA used a new analytical method that enables comparisons of the writing scale from 2011 onward.

Significant change

When comparing two results it can be difficult to determine if the difference between them is important or not important. A small change from a previous NAPLAN test result is commonplace, but a large change is important to note.

As a rule of thumb the difference between two scores, both for individual students or student group averages (mean scores), is worthy of further consideration when the difference exceeds the thresholds described in Table 6 below. Differences of these magnitudes should be investigated further and considered with other data that the school has about these students.



Table 6: Significant differences in NAPLAN test results, by year level

Year Level	Discrepancy
Year 3	21 points or more
Year 5	21 points or more
Year 7	13 points or more
Year 9	13 points or more

2018 NAPLAN test dates

Students in years 3, 5, 7 and 9 will sit NAPLAN paper-based tests between Tuesday 15 and Thursday 17 May 2018. Please note that in 2018 a wider window for NAPLAN assessment may be introduced to accommodate for online delivery of tests, dates for the online tests are to be confirmed in early 2018.

Further information

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