PATs
PROGRESSIVE ACHIEVEMENT TESTS

PAT Pāngarau Item report

Available in static and adaptive reports

NZCER
Rangahau Mātauranga o Aotearoa

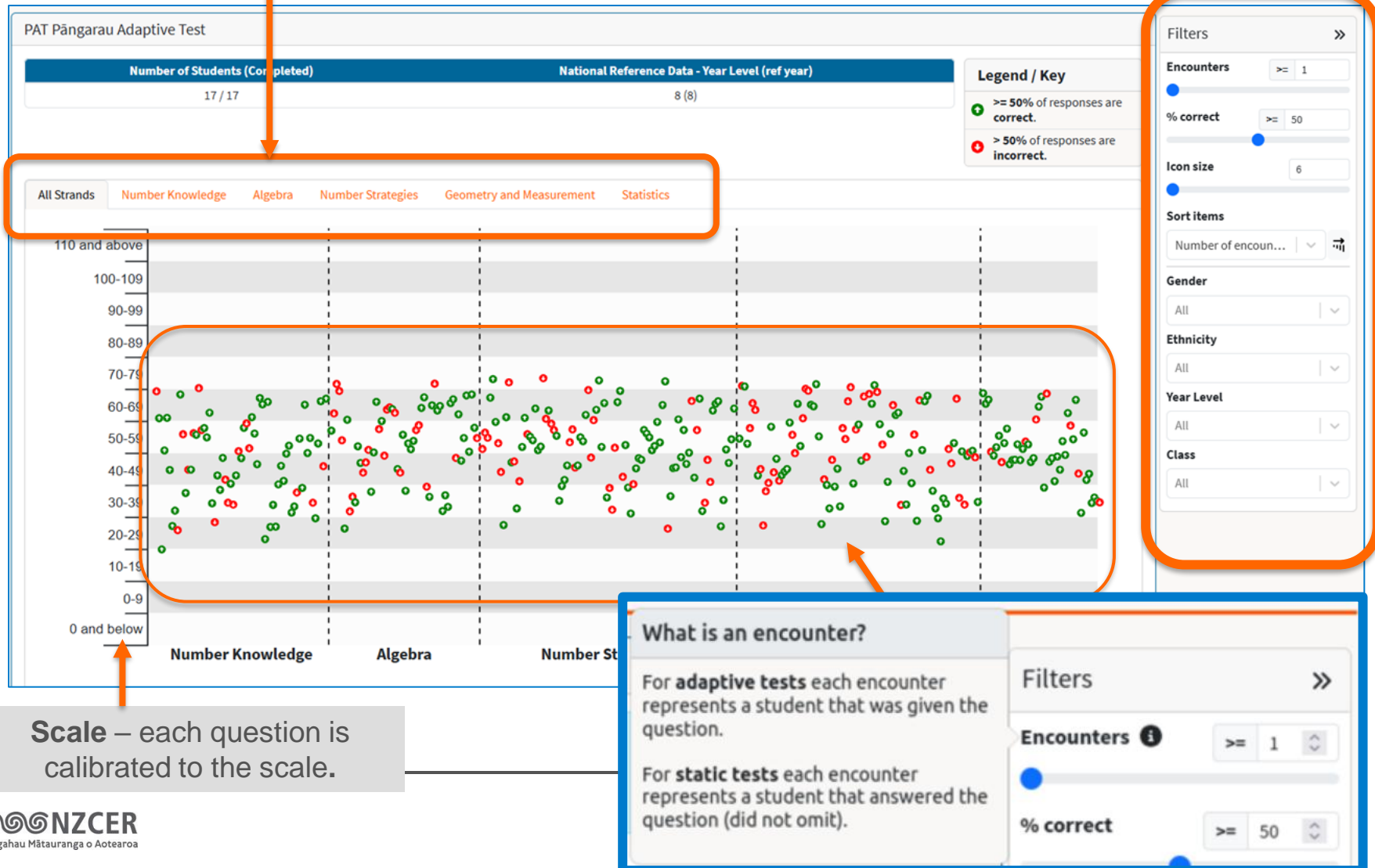# PAT Pāngarau Item report

✓ The item report is now available for static and adaptive tests on NZCER Assist.

✓ The new filters allow teachers and leaders to investigate and analyse the data in different ways.

✓ Classes with multiple year levels sitting the adaptive test can be displayed on the same report.

✓ This document and the video provide insight into the new filters and report features.

✓ The item report can be accessed via the dashboard and the reports tab.

Report layout

Search by **strand**

Scale – each question is calibrated to the scale**.**

New filters

The filters give you the flexibility to analyse the data in different ways. Ask questions of the data and change the filters to discover the story about student learning in your class, team or year level.
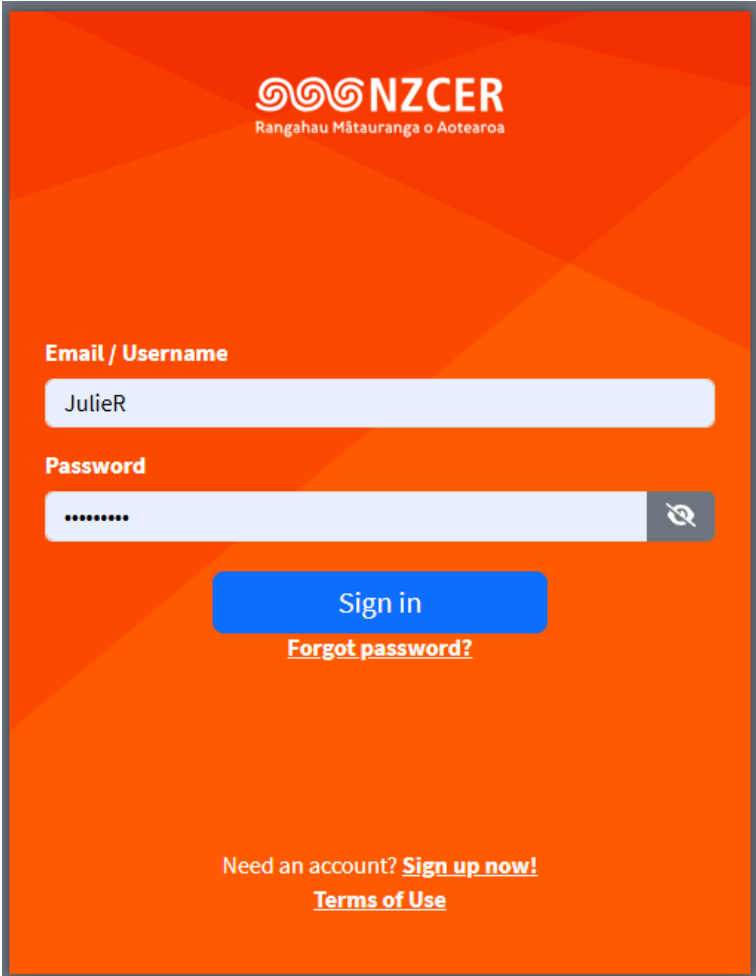
Filter	Purpose	Ways to use
Encounters	Each icon represents the questions seen by students in the test.	Initially set at '1' encounter' Move the filter to the right to identify questions seen more commonly.
% correct	Percentage of items correct.	Move to a higher or lower percentage correct. Legend changes as it's moved.
Sort items feature	Allows different ways to show the data on the chart.	• Number of encounters • % correct • Item difficulty

Table details

- Scroll down to locate the data table below the 'Encounter chart'.

- The table displays:
  - question descriptions
  - strands
  - scale score level of difficulty
  - how many students answered the question correctly.

- Click on the report icon on the left to go to an individual question.

- The table adjusts to show a strand-only view when you've clicked on a strand tab at the top of the report.

Report Link	Strand	Question Description	Scale Score	Correct (%)
⊫ Report	Number Strategies	Calculate 806 + 159 + 350	51.2	0.00% (0/1)
⊫ Report	Algebra	Solve [ ] × 1 = 5	22.9	50.00% (1/2)
⊫ Report	Geometry and Measurement	Select the time shown on a clock	31.2	100.00% (1/1)
⊫ Report	Statistics	Identify the likelihood of a chance event	39.1	100.00% (5/5)
⊫ Report	Statistics	Show how to record 5 on a tally chart	23.0	50.00% (1/2)
⊫ Report	Number Knowledge	State the meaning of 7 in 756	19.8	66.67% (2/3)

Let's explore the filters through a couple of scenarios.

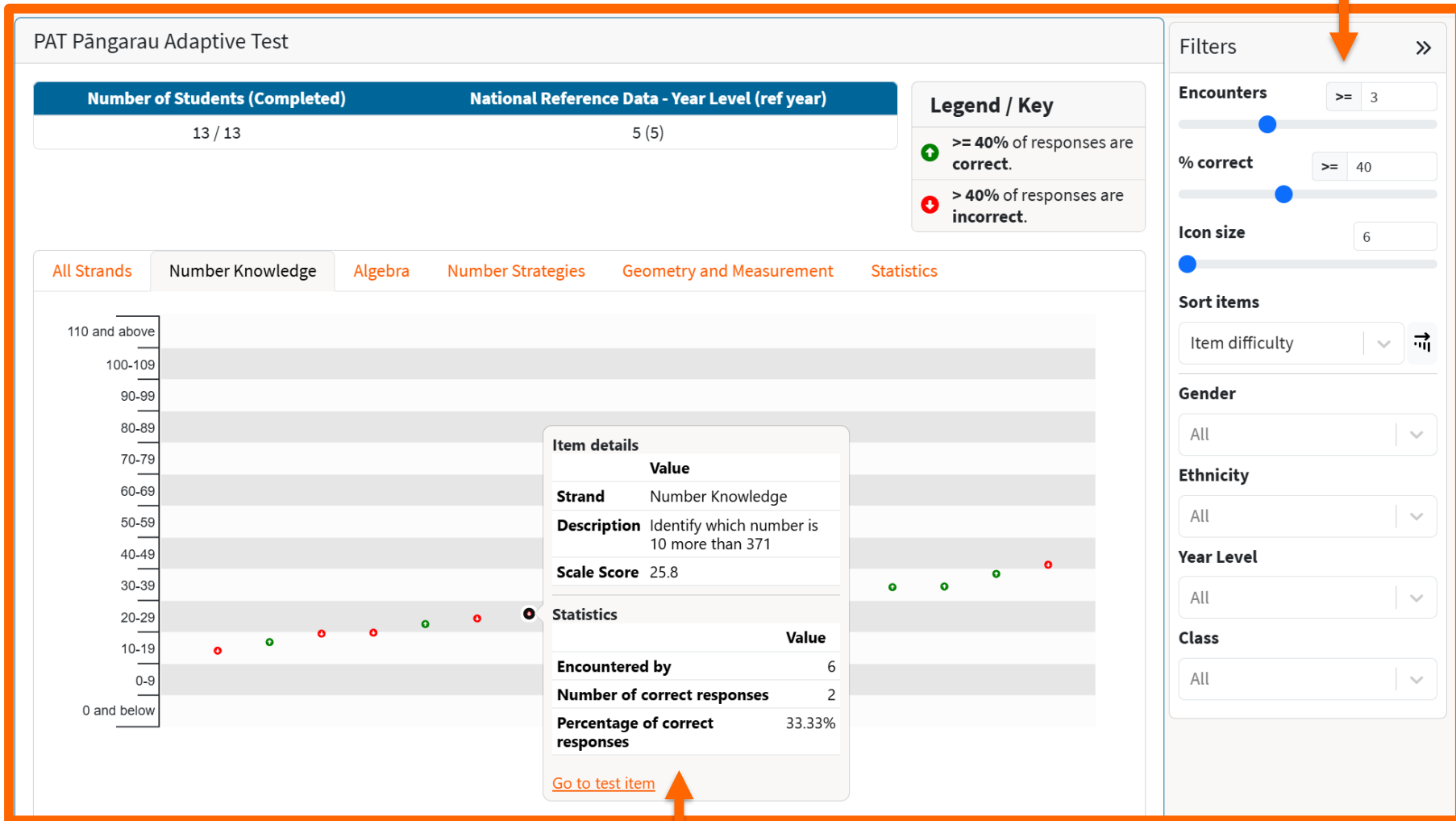# The following two scenarios are modelled on the video.

Scenario 1

Strand focus – Number knowledge: wondering what the key concepts are I need to reinforce with my Year 7 – 8 students.

Search	Filters	Findings
1	Encounters = 1 % correct = 50% Number of encounters	36 questions 1 - 7 encounters of questions for the class.
2	Encounters = 2 % correct = 40% Sort % correct	24 questions If I increase the encounters there will be less questions but I will get a more reliable picture of student responses?
3	Encounters = 3 % correct = 40% Item difficulty	17 questions, sorted in table by scale score (range of 14.1 – 41.3 patm) 11 questions related to identify, order and place value of 3- and 4-digit numbers 3 questions on fractions and 1 on decimals.
Next steps	• Increase the emphasis on number structure, particularly place value understanding. Push the number up before four digits to work towards curriculum expectations. • Use accelerated strategy of front loading before class/group lesson required to support a small group of 3 - 4 students needing support to work with numbers less than 1000 (multiple questions incorrect)	

Item report - Search 3

Question data table
Click on icon and data table appears.
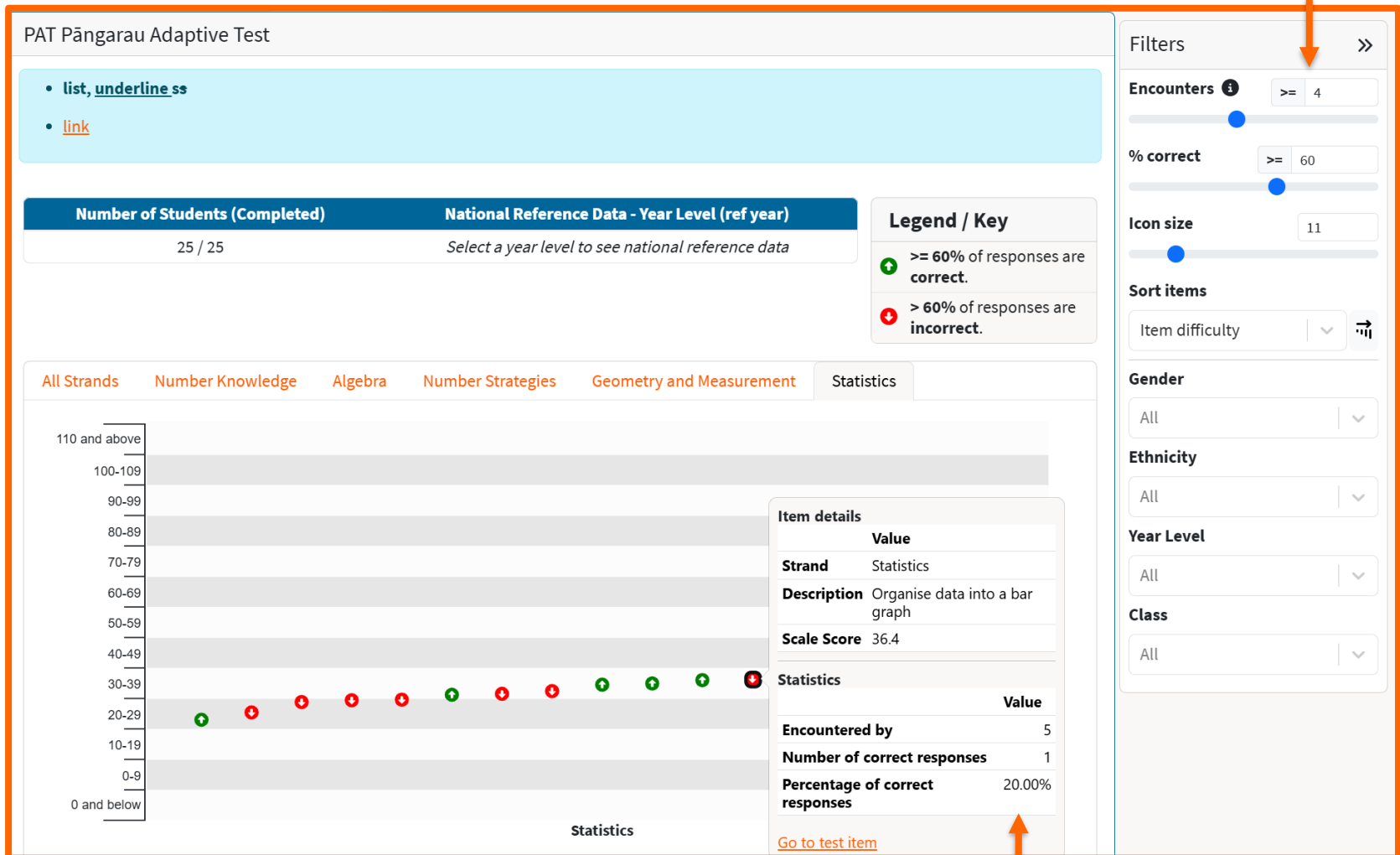Click to the test item – question.

Scenario 2

Strand focus – Statistics and probability: wondering if there are some key concepts I need to revisit during the next unit of work?

Search	Filters	Findings
1	Encounters = 1 % correct = 50% Number of encounters	42 questions (1 – 7 encounters) I wonder which questions have more incorrect responses? Order questions by level of difficulty. What does probability vs statistics look like?
2	Encounters = 2 % correct = 60% Sort Item difficulty	27 questions (range of 11.2 – 56.4 patm) 19 statistics: 8 probability questions. 8 statistics questions lower than 32 patm and could be simple errors in reading the information. I wonder what happens if I increase the encounters what questions will pop out more?
3	Encounters = 4 % correct = 60% Sort Item difficulty	17 questions, viewed table, sorted by scale score. 11 statistics: 6 probability questions 5 questions about interpreting graphs and includes language in the question (e.g. fewer)
Next steps	• Identifying the features of graphs (key, scale, labels, tables, tally charts) across a range of graphs (pictogram, bar, line, tally, pie chart) • discussNdefend starter activities that focus on interpreting a range of graphs, making statements about what they notice and modelling the language of more, less, fewer, greater.	

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Item report - Search 3

PAT Pāngarau Adaptive Test

- **list, <u>underline</u> ss**
- <u>link</u>

Number of Students (Completed)	National Reference Data - Year Level (ref year)
25 / 25	*Select a year level to see national reference data*

Legend / Key

🟢 **>= 60%** of responses are **correct**.

🔴 **> 60%** of responses are **incorrect**.

All Strands	Number Knowledge	Algebra	Number Strategies	Geometry and Measurement	Statistics

Item details

	Value
Strand	Statistics
Description	Organise data into a bar graph
Scale Score	36.4

Statistics

	Value
Encountered by	5
Number of correct responses	1
Percentage of correct responses	20.00%

<u>Go to test item</u>

Filters »

Encounters ⓘ   >= 4

% correct   >= 60

Icon size   11

Sort items
Item difficulty

Gender
All

Ethnicity
All

Year Level
All

Class
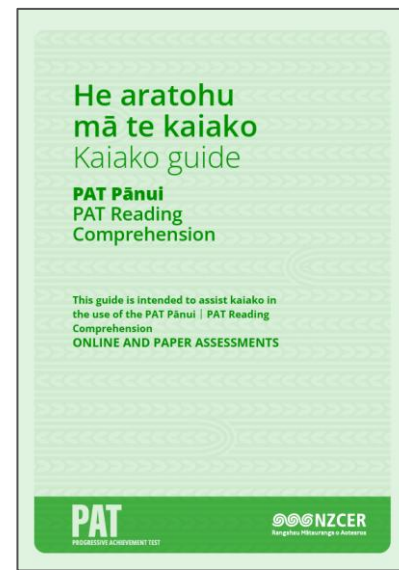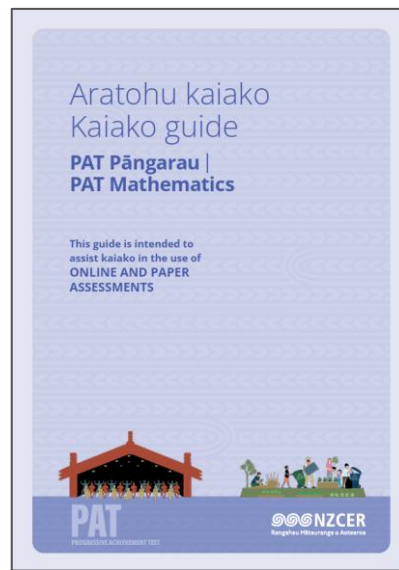All

Question data table
Click on icon and data table appears.
Click to the test item – question.

Kaiako Guides

Pāngarau and Pānui Kaiako Guides have been updated.

These are available at this [link](https://www.nzcer.org.nz/assessments/pats/equity-focused-resources):
https://www.nzcer.org.nz/assessments/pats/equity-focused-resources

Feedback

NZCER is taking an iterative approach to the new functionality in the item report.

We'd welcome your feedback.

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