

Standardised Assessments: PTM and PTE Results and How to Use Them Effectively

Information for teachers and parents.

WHY ARE STUDENTS ASSESSED?

They help teachers and others to:

- evaluate and improve the authority as a whole
- evaluate and improve the individual school
- identify a child's academic strengths
- identify areas where a child may need to improve

An assessment programme is only one of several tools you use to evaluate children's performance. Children are never measured on the basis of one assessment alone.

WHAT ARE THE DIFFERENT TYPES OF SCORES?

You can help parents and others to better understand test scores by helping them understand that they can compare their child's assessment scores to the scores of one or more groups of students. The different kinds of scores offered by the PTE and PTM include: Standard Age score (SAS), Lexile measure, Stanine, National Percentile Rank, Group Rank, Raw Score and estimated National Curriculum Reading and Writing Levels.

WHAT ARE STANDARD AGE SCORES (SAS)?

Standard age scores are used to compare one student's performance on a test to the performance of other students of his or her age, and therefore one can estimate whether a student's scores are above average, average, or below average compared to same-aged peers. These scores are most often put on a normal distribution for standard scores, where the mean is 100, and the standard deviation is usually 15.

WHAT ARE LEXILE SCORES?

A Lexile measure is a valuable piece of information about either an individual's reading ability or the difficulty of a text, like a book or magazine article. The Lexile measure is shown as a number with an "L" after it — 880L is 880 Lexile.

A student gets his or her Lexile reader measure from a reading test or program. For example, if a student receives an 880L on her end-of-grade reading test, she is an 880 Lexile reader. Higher Lexile measures represent a higher level of reading ability. A Lexile reader measure can range from below 200L for beginning readers to above 1600L for advanced readers. Readers who score at or below 0L receive a BR for Beginning Reader.

A book, article or piece of text gets a Lexile text measure when it's analyzed by MetaMetrics. For example, the first "Harry Potter" book measures 880L, so it's called an 880 Lexile book. A Lexile text measure is based on two strong predictors of how difficult a text is to comprehend: word frequency and sentence length. Many other factors affect the relationship between a reader and a book, including its content, the age and interests of the reader, and the design of the actual book. The Lexile text measure is a good starting point in the book-selection process.

Lexile text measures are rounded to the nearest 10L. Text measures at or below 0L are reported as BR for Beginning Reader.

The idea behind The Lexile Framework for Reading is simple: if we know how well a student can read and how hard a specific book is, we can predict how well that student is likely to understand the book.

How to Help Pupils with Reading

When used together, Lexile measures help a reader find books and articles at an appropriate level of difficulty (visit [Find a Book](#)), and determine how well that reader is likely to understand a text. You also can use Lexile measures to monitor a reader's growth in reading ability over time.

Teachers and parents can best serve a student's literacy needs when they treat him or her as a unique individual, rather than as a test score or a grade-level norm or average. The reading abilities of young people in the same grade at school can vary just as much as their shoe sizes. When a Lexile text measure matches a Lexile reader measure, this is called a "targeted" reading experience. The reader will probably encounter some level of difficulty with the text, but not enough to get frustrated. This is the best way to grow as a reader—with text that's not too hard but not too easy.

When you receive a Lexile measure, try not to focus on the exact number. Instead, consider a reading range around the number. A person's Lexile range, or reading comprehension "sweet spot," is from 100L below to 50L above his or her reported Lexile measure. Use this Lexile range in the [Find a Book](#) search. And don't be afraid to look at books above and below someone's Lexile range. Just know that a reader might find these books particularly challenging or simple.

If a student tackles reading material above his or her Lexile range, consider what additional instruction or lower-level reading resources might help. Ask him or her to keep track of unknown words, and look them up together. Or take turns reading aloud to each other to chop up the reading experience into smaller portions. Likewise, you can reward students with books that fall below his or her Lexile range for an easier reading experience.

WHAT ARE STANINE SCORES?

Stanine is short for standard nine. The name comes from the fact that stanine scores range from a low of 1 to a high of 9. For instance, a stanine score of

- 1, 2, or 3 is below average
- 4, 5, or 6 is average
- 7, 8, or 9 is above average

If a child achieved a stanine score that was **below average** in a particular area, the test revealed an area in which the child needs improvement. If the child achieved an average stanine score, the test indicated that he or she performed at **about the same level** as other students who took the test. If the child achieved a stanine score that is above average, the test results mean that he or she performed **better** in that area than other students who took the test.

WHAT ARE NATIONAL PERCENTILE RANK SCORES?

In contrast to stanines, percentiles give parents and others a more detailed description of how their children compare with other students who took the test by showing scores that range from 1 to 99.

For example, if a student scored in the 66th percentile on a test, that student achieved a score that is higher than 66% of the other students who took the test. So, if 1,000 students took the test, the student in the 66th percentile scored higher than 660 students.

Do not confuse percentile scores with percentage correct scores. Percentile scores allow you to compare one student's scores with a group of students who took the test. Percentage correct scores simply reveal the number of items that a student answered correctly out of the total number of items.

WHAT IS A RAW SCORE?

A raw score is the actual score an individual receives on any given assessment.

HOW CAN YOU HELP PARENTS TO INTERPRET THEIR CHILD'S TEST SCORES?

The most pressing question parents ask is, "What do the scores mean?" As their child's teacher, you are in a unique position to answer this question. Because you have seen their child's work every day, you should have a firm impression of their child's capabilities.

Before you talk with parents, compare each of your students' test scores with their daily class work. Is there a large difference between the test results and your impression of how each student should have scored? If there is no difference, the test confirmed your impression of each child's skills.

If there is a large difference, however, look closely at the scores and the child's in-class performance. What do you think causes the difference? There is no easy way to determine the reason, but sub-skill scores can help you identify problem areas. Check to see if any one sub-skill score lowered the overall test score. For example, the PiE offers sub-skill areas including: spelling, grammar, reading – narrative, and reading-non-narrative, and others. Parents may believe that a child with an overall score in the 75th percentile has few reading difficulties. However, if the vocabulary sub-skill showed that the child was in the 65th percentile, he or she may need to improve vocabulary skills.

USEFUL TABLES AND CHARTS

Below is a description of each Table from the PiE and PiM tests which can be used to answer questions relating to individual pupil achievement, group achievement and error analysis.

Table 1- 'Student Listing'

Section A: Progress in Maths 13 - Student Listing																
School:	Group:										No. of Students 12					
Name of Student	Age at test (yrs: mths)	Standard Age Score (95% Confidence Bands)						Stanine	Percentile Rank	Group Rank*	Raw Score	Maths Level**	Percentage Correct - Curriculum Content Categories***			
		70	80	90	100	110	120						N	S	D	A
		[Visual representation of confidence bands]														
	13:06	115						7	84	1	33	6b	93	47	50	75
	14:03	113						7	80	2	33	6b	73	47	75	75
	13:10	108						6	70	3	28	6c	60	47	67	50
	14:03	107						6	68	4	29	6c	40	47	75	88
	13:05	106						6	66	5	24	5a	47	60	33	50
	14:00	103						5	58	6	23	5a	40	40	50	63
	13:06	101						5	53	7	20	5b	60	20	42	38
	13:06	99						5	48	8	18	5b	33	27	42	50
	14:00	92						4	30	9	14	4a	27	40	25	13
	13:05	92						4	30	9	12	4a	20	20	33	25
	13:11	91						4	28	11	13	4a	33	27	8	38
	13:11	87						3	20	12	10	4b	20	13	25	25

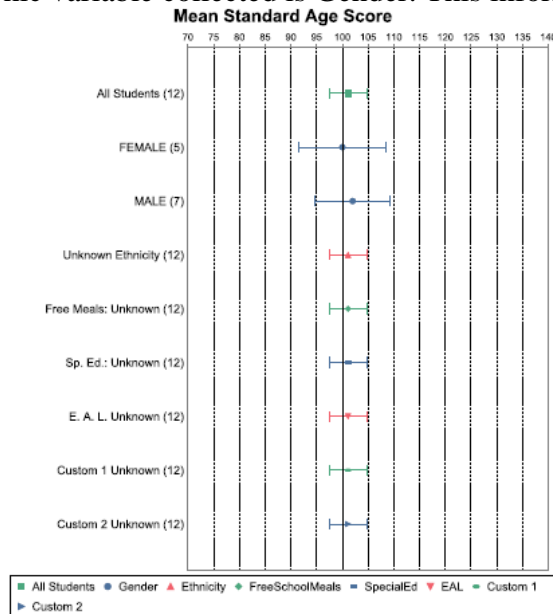
This table allows a comparison of individual pupil performance within the school group as well as comparison with the national sample. It also provides an indication of how well the child performed in broad areas of the curriculum. Although it provides a 'maths level' this relates to the National Curriculum in England.

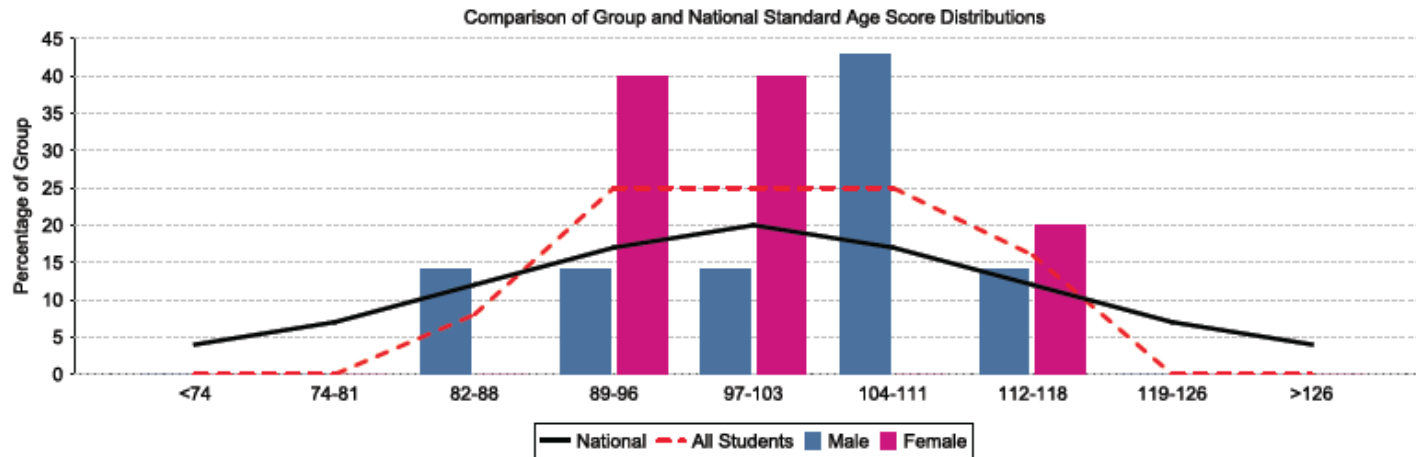
Tables relating to ‘Group and National Comparisons’

Comparison of Gender category score					
Gender	Number of Students	Standard Age Scores		Raw Scores	
		Mean Score	Standard Deviation	Mean Score	Standard Deviation
Males	7	102.0	9.4	22.6	8.4
Females	5	100.0	9.8	19.8	8.6
All Students	12	101.2	9.1	21.4	8.2

Comparison of Ethnic Group category score					
Ethnic Group	Number of Students	Standard Age Scores		Raw Scores	
		Mean Score	Standard Deviation	Mean Score	Standard Deviation
Not known	12	101.2	9.1	21.4	8.2

The tables relating to Group and National Comparisons provide an indication of how different groups scored within the school. Currently the only demographic variable collected is Gender. This information is also depicted visually in the table below.

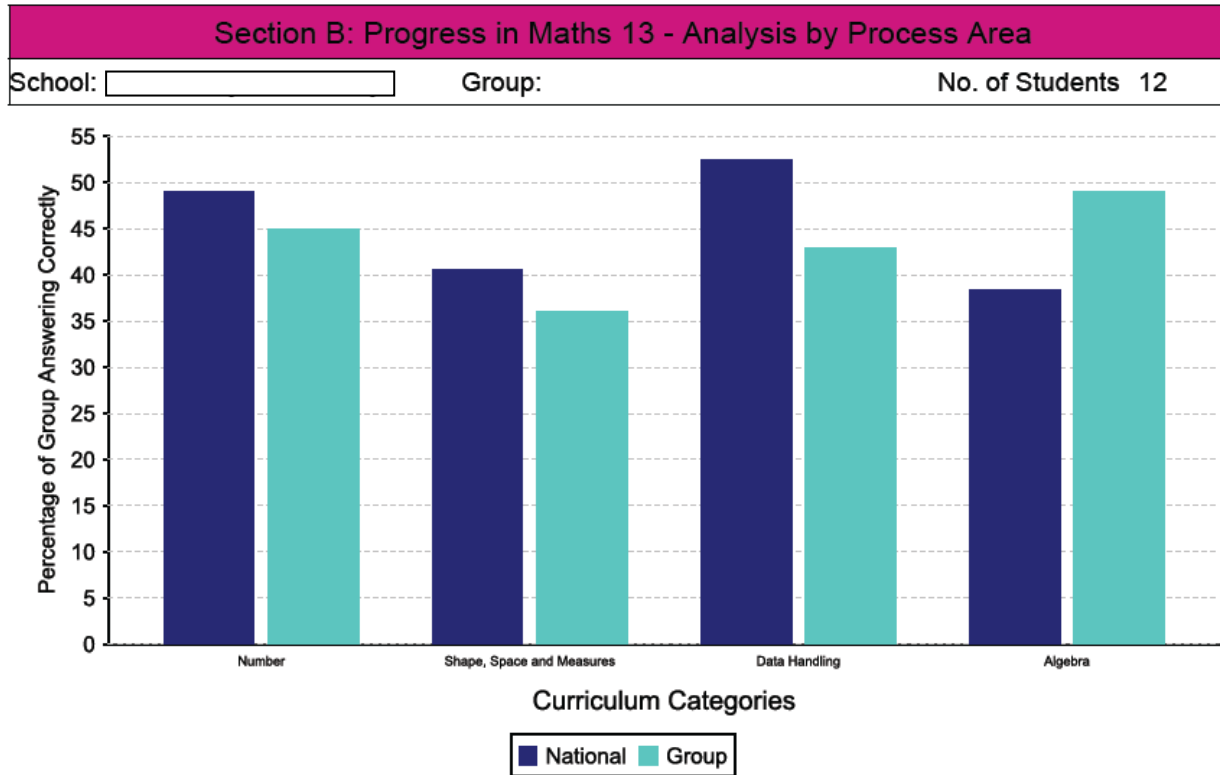




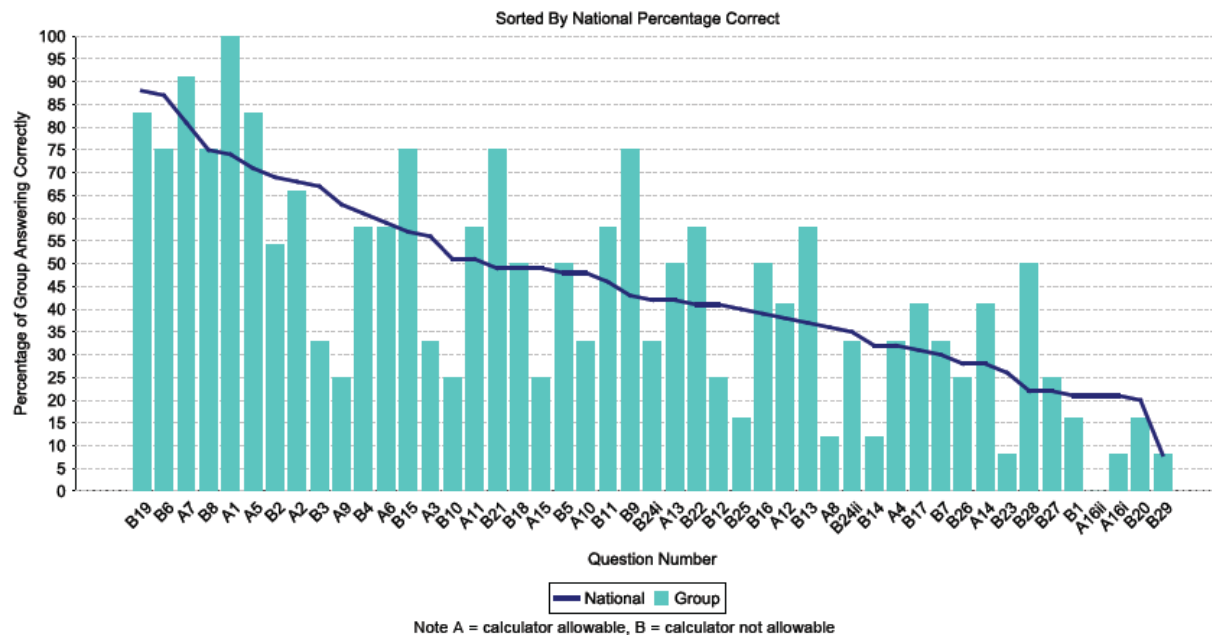
	<74	74-81	82-88	89-96	97-103	104-111	112-118	119-126	>126
Stanine	1	2	3	4	5	6	7	8	9
Male	0%	0%	14%	14%	14%	43%	14%	0%	0%
Female	0%	0%	0%	40%	40%	0%	20%	0%	0%
All Students	0%	0%	8%	25%	25%	25%	17%	0%	0%
National	4%	7%	12%	17%	20%	17%	12%	7%	4%

This table allows a comparison of how the gender groups within the school (and the school as a whole) performed in relation to the national sample.

Tables relating to Analysis by process areas.



The tables within this section allow a scrutiny of the how well the children performed in different areas of the curriculum. They also provide national comparison data so that this performance data can be viewed within a national context. This type of analysis is broken down further in the following tables which give information in relation to each question.



Questions sorted by National Percentage Correct						
Question Number	Category*	Category**	Question Content	Group	National	Group - National Difference
B19	D	R	Which one of these bar charts could show how much money the cafe made each day?	83	88	-5
B6	A	UC	How many sweets in the bag t+4	75	87	-12
A7	D	RP	After how many years will the value of Dan's car be approximately half its original price?	92	81	11
B8	D	R	Draw lines to match each graph to a sentence to explain why it is misleading.	75	75	0
A1	N	RP	6 pupils in a team, 11.4 km in a race. How far does each pupil run?	100	74	26
A5	S	RP	Angle turn	83	71	12
B2	N	UC	Write the words 'odd' and 'even' in these number facts.	54	69	-15
A2	N	RP	Put a cross on the number line to show where 4834 is	67	68	-1

Tables relating to ‘Score breakdown’

Score Breakdown by Process Categories					
Category Area	Category Code	Number of Marks	Group %	National %	Difference
Knowing Facts and Procedures	FP	1	75	43	32
Using Concepts	UC	7	58	56	2
Solving Routine Problems	RP	27	41	46	-5
Reasoning	R	15	37	40	-3

Score breakdown by Curriculum Content Categories					
Category Area	Category Code	Number of Marks	Group %	National %	Difference
Number	N	15	46	49	-3
Shape, Space and Measures	S	15	36	41	-5
Data Handling	D	12	44	53	-9
Algebra	A	8	49	38	11

These last tables provide national comparison data relating to process categories and curriculum content.