

What Do My Child’s Test Scores Mean?

Understanding what your child’s test scores really mean can be a daunting challenge in today’s society, as a maze of different types of assessments are utilized across multiple grades. Additionally, media reports tend to focus exclusively on state and school level results that don’t always provide meaningful information about what a score for a particular student might mean. This handout is an attempt to explain in simplified terms what the various scores you might encounter from the most common assessments your child may take during the course of their career really mean.

Two Types of Tests

One of the first things that must be grasped to truly understand a test score is what the test is measuring and how it measures it. Most tests are fairly easy to understand what they are assessing (Reading, Math, etc.) but understanding how they measure it can be tricky. To simplify, there are two major types of tests that can be administered. They are Norm-Referenced Tests and Criterion Referenced Tests. The chart below shows the tests used in Barrow County and which category they fall into. For information as to what these tests measure and how they are used please refer to the handout “Assessments Used in Barrow County” available on the testing website.

Norm-Referenced Tests	Criterion Referenced Tests
Iowa Tests of Basic Skills (ITBS)	Criterion Referenced Competency Test (CRCT)
Cognitive Abilities Test (COGAT)	Georgia High School Graduation Test (GHSGT)
Individual IQ/Achievement Tests used in a Psychological Evaluation (only affects a handful of students in the Special Education evaluation process)	End of Course Tests (EOCT)
SAT	3rd/5th/8th Grade Writing Tests
	Georgia Kindergarten Inventory of Developing Skills (GKIDS)
	ACCESS for ELL’s (Only affects English Language Learners)

Criterion Referenced Tests (CRT) are the simplest to understand. On Criterion Referenced Tests a committee (usually consisting of educators, content area specialists, and state administrators) look at a battery of questions matched to the curriculum and for each question they determine if a “minimally competent” student in that subject area would get the question correct or incorrect. After all the items have been examined the committee’s recommendations are taken and used to create “cut scores.” These scores

will mark the difference between a student who “Meets” standards or “Does not Meet.” As an example, a math test might have 60 questions with a cut score of 33. This would mean that a student who gets 33 out of 60 questions correct would “Meet” standards while a student who correctly answers 32 out of 60 questions would be classified as “Does Not Meet.” For Criterion Referenced Tests the State of Georgia commissions committees each year to set the cut scores for each assessment. The cut score for a given test might be different depending on the subject, grade, and year.

Norm-Referenced Tests (NRT) measure similar skills to Criterion Referenced Tests, but do so in a radically different way. Norm-Referenced Tests do not have cut scores and students do not “pass” or “fail” a Norm-Referenced Test. A NRT compares how a particular student’s performance on a skill compares with every other student of his/her age and grade in the country. For example, a particular student might be found to have skills in reading that are superior to 57% of students in the U.S. of his same age and grade. This doesn’t tell us anything about how strong the skill is or how it might match up to the expectations a state curriculum places on a student, but it does offer a comparison to similar students. The comparison groups for NRT’s are created by sampling (much the same way political polls are created by polling a representative sample of U.S. citizens), which on NRT’s are known as “norming.” Norm-Referenced tests are re-normed about every 5-10 years.

Once the two types of tests are understood it should be easier to understand what the various scores that these tests typically provide.

Scores on an NRT Test

Norm-Referenced Tests typically yield many scores, but the most important three are percentiles, standard scores, and grade equivalents. For parents, the percentile rank is probably the most important statistic to look at when evaluating how well a student performed on a NRT.

Percentiles are the easiest to understand. A percentile rank simply tells you compared to other students of similar age and grade where the performance on that skill ranks. So for example a student with a percentile rank of 37% on Math Calculation has performed equal to or stronger on that skill than 37% of students on the test.

Standard Scores are extremely complicated, but in simplistic terms they can be viewed as extensions of percentiles. Much like percentiles they tell you how well a student compares to other students of a similar age. Standard Scores attempt to correct a problem with percentiles, which is that they do not have equal intervals between them. For example the difference between a student at the 5th Percentile and the 10th Percentile is likely quite larger than the difference between a student at the 45th Percentile and the 50th Percentile. Standard Scores offer scales that are comparable. For example, if the average Standard Score for a 3rd Grader in reading comprehension on the ITBS is 180 an individual Standard Score of 160 or 200 would be equally different from the average score.

Grade Equivalents can be extremely misleading and thus should be interpreted with caution. A Grade Equivalent is basically a score that expresses the average performance of student at a particular grade level. For example a student with a Grade Equivalent of 3.5 could be interpreted to have skills comparable to an average 3rd grader halfway through the third grade year. One thing that should be understood that often confuses parents and educators. If a fourth grade student has a reading Grade Equivalent of 7.5 it does **not** mean that she is reading at seventh grade level. It means she has the same score as an average seventh grader would have reading fourth grade material. This distinction, while seemingly trivial, is extremely important and should be taken into consideration when a student is being considered for retention or acceleration.

Scores on a CRT

Criterion Referenced tests also yield numerous scores, but the most important are raw scores, Scaled Scores, and performance levels.

Raw Scores are extremely easy to understand. If a test has 60 items and a student gets 43 correct their raw score is 43. A raw score is simply the number of items a student correctly answered. Raw scores are important as while the students overall performance on a test will yield other scales, a specific domain (for example vocabulary within a Reading Test) will yield only raw scores. As such a parent could use raw scores to see that a student correctly answered, for example, 55% of questions on the Geometry section of the Math CRCT correctly.

Scaled Scores are similar to the Standard Scores discussed in the NRT section. The simplest way to understand them is to remember the discussion on cut scores for CRT's. If a test has 60 items and a student needs at least 27 correct to "meet" standards then 27 becomes the "cut score" and would become the minimum passing Scaled Score. Scaled Score ranges are somewhat arbitrary. On the Georgia High School Graduation Test the cut score is set to convert to Scale Score of 200, while on the CRCT the cut score is converted to 800, but the differences are not important. What is important is that after the cut score is set and associated with the passing scale score all of the other possible raw scores will be given corresponding scores. So for example on the test discussed above (with a cut score of 27) a raw score of 23 might yield a 785 while a raw score of 31 might yield 815. This helps parents to gauge how far above or below the cut score their student was. As the CRCT passing score is always 800 regardless of test a parent can know that if their child had an 803 in reading but an 874 in math that their child is just above standards in reading while they are extremely advanced in math proficiency.

Performance Levels are simply labels that are provided on certain ranges of performance on CRT tests. Just as a cut score is set for defining "minimally competent" cut scores are also set to determine a student who has "exceeded standards." So for example on a 60 item test a student who gets 45 or more questions correctly might be said to be "exceeding" on the test (this cut score will vary depending on grade/subject as well). These two cut scores will yield three groups which are Does Not Meet, Meets

Standards, and Exceeds Standards. It should be noted that as there are only three performance groups the groups can often contain a wide range of skill levels. For example the “Does Not Meet” group might contain students who only missed “Meeting” on the test by one item along with students who only correctly answered a few questions. As such they are somewhat poor methods of understanding how well a particular student is performing. While the Performance Levels obviously are critically important for schools and students due to the No Child Left Behind law parents would probably be better off understanding their child’s performance by looking at raw score and scale scores.

The chart below outlines the typical scale score ranges for the performance levels on three common Georgia tests. It should be noted that while the minimum “cut” scores for DNM/Meets/Exceeds will always be the same, the range of possible scores will differ depending on the grade, test, and academic subject. So this chart should be viewed as showing “typical” ranges.

Performance Level	CRCT	GHS GT	EOCT	Writing Assessments
Does Not Meet	740-799	150-199	350-399	100-199
Meets	800-849	200-234	400-449	200-249
Exceeds	850-960	235-274	450-550	250-350

Grade Conversions are a relatively rare type of score that in Georgia are exclusively on the End of Course Tests (EOCT). The reason for this score is that the EOCT constitutes 15% of a student’s final grade in an EOCT course. As a result a grade conversion score is needed that is similar to the types of grades a classroom teacher typically provides. So on the EOCT a student’s scale score is converted to a 0-100 scale on which a 70 would be the minimum score for “passing” the test. Much as with classical grading procedures a score of 70-79 would be a “C”, an 80-89 a “B”, and 90 and above an “A”. These scores are derived solely for the purposes of grade calculation.