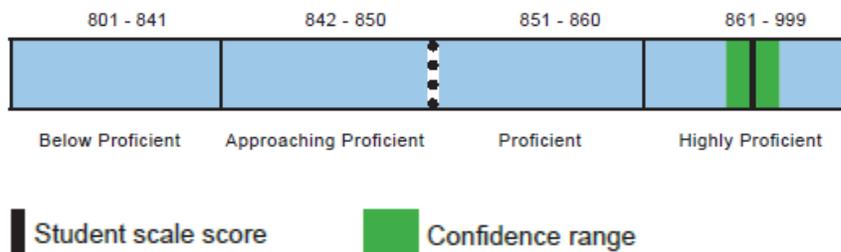


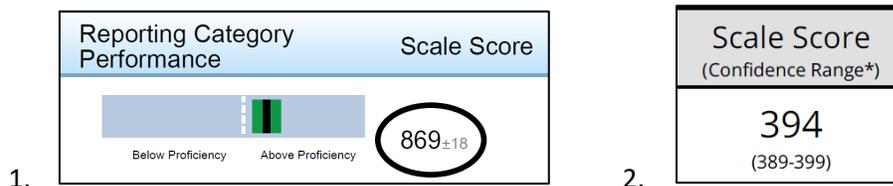
## Confidence Range

The Confidence Range, also referred to as the standard error of measurement, represents the level of precision of the assessment or the probable range of where the students' 'true' score likely falls. To better understand what the confidence range represents on score reports, it is important to understand a little more about theoretical assumptions around Classical Test Theory. Classical Test Theory is a widely-used theory of testing that assumes that each person has a 'true' score that represents a perfect or 'true' measure of a specific trait or characteristic (e.g. student math knowledge). However, classical test theory also recognizes that all observed scores include some measurement error. Error comes from various factors such as guessing, misreading a question, the student doesn't feel well, or because of random conditions that exist when each test was administered. Generally, this error can be reduced through multiple administrations of an assessment or by having an individual answer multiple questions that measure the same construct. However, it can be impractical or even unethical to administer the same assessment multiple times. Therefore, based on the number of items on the test and how the student responds to each item, the confidence range is a measure of precision of the assessment. Based on one administration of the assessment, it is likely that the students' true score is within this range.

Example: This bar chart shows the span of the Confidence Range in green. The observed score is the solid black line in the middle of the green section.



The Confidence Range can also be reported as a + or – after the observed score, or reported as a range of scores:



In the first example, the student's observed score is 869 and the Confidence Range is +/- 18. This means the student's 'true' score is probably between 851 and 887. In the second example, the student's observed score is 394, but the student's 'true' score is probably between 389 and 399.