

# STAR READING™ SCORE DEFINITIONS

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STAR Reading scores represent how students performed on the test compared with the performance of a nationally representative sample of students, called the norms group. These scores present a snapshot of achievement at a specific point in time. As with any test, it is important to remember that many factors can affect a student's test scores. STAR Reading test scores give only one picture of how a student is doing in school.

**Scaled score (SS)** is useful for comparing student performance over time and across grades. A scaled score is calculated based on the difficulty of questions and the number of correct responses. Because the same range is used for all students, scaled scores can be used to compare student performance across grade levels. STAR Reading scaled scores range from 0 to 1400. All norm-referenced scores are derived from the scaled score.

**Percentile rank (PR)** is a norm-referenced score that provides a measure of a student's reading ability compared to other students in the same grade nationally. The percentile rank score, which ranges from 1 to 99, indicates the percentage of other students nationally who obtained scores equal to or lower than the score of a particular student. For example, a student with a percentile rank score of 85 performed as well as or better than 85 percent of other students in the same grade.

**Percentile rank range (PR Range)** indicates the statistical variability in a student's percentile rank score. For example, a student with a percentile rank range of 32–59 is likely to score within that range if the STAR Reading test is taken again within a short time (i.e., four to six weeks).

**Normal curve equivalent (NCE)** is a norm-referenced score that is similar to percentile rank, but is based on an equal interval scale. This means the difference between any two successive scores on the NCE scale has the same meaning throughout the scale. NCEs are useful in making comparisons between different achievement tests and for statistical computations—for example, determining an average score for a group of students. NCE scores range from 1 to 99 and are mostly used for research.

**Student growth percentile (SGP)** is a norm-referenced quantification of individual student growth derived using quantile regression techniques. An SGP compares a student's growth to that of his or her academic peers nationwide. SGPs range from 1–99 and interpretation is similar to that of Percentile Rank scores; lower numbers indicate lower relative growth and higher numbers show higher relative growth. For example, an SGP of 70 means that the student's growth from one test to another exceeds the growth of 70% of students nationwide in the same grade with a similar beginning (pretest) STAR Reading score.

**Grade equivalent (GE)** is a norm-referenced score that represents how a student's test performance compares with other students nationally. For example, a fifth-grade student with a GE score of 7.6 performed as well as a typical seventh-grader after the sixth month of the school year. This score doesn't necessarily mean that the student is capable of reading seventh-grade material—it only indicates that the student's reading skills are well above average for the fifth grade.

**Grade placement (GP)** is a numeric representation of a student's grade level, based on the specific month in which a student takes a STAR Reading test. STAR Reading considers the standard school year to run from September through June and assigns increment values of 0.0 through 0.9 to these months. The software automatically assigns grade placements using a student's grade level and the month in which a STAR Reading test was taken. GP is important because PR and NCE values are based not only on the Scaled Score but also on the grade placement of the student at the time of the test.

**Functional Grade Level (FGL)** places students into one of three broad categories based on their STAR Reading scaled scores: Below Grade Level, On Grade Level, or Above Grade Level. Students in the On Grade Level category have attained scaled scores that indicate they have equaled or surpassed the Common Core State Standards (CCSS) end-of-year grade level expectations for the previous grade. Students Below Grade Level have not reached those same expectations; students Above Grade Level have exceeded the CCSS end-of-year grade level expectations for the *current* grade.

**Instructional reading level (IRL)** is a criterion-referenced score that indicates the highest reading level at which a student is at least 80 percent proficient at recognizing words and understanding material with instructional assistance. For example, a seventh-grade student with a score of 8.0 reads eighth-grade words with 80 percent accuracy or better. IRL scores are Pre-Primer (PP), Primer (P), grades 1.0 through 12.9, and Post-High School (PHS).

**Zone of proximal development (ZPD)** is a range of readability levels from which a student should select books to read. It is a range that is neither too hard nor too easy, within which students can experience optimal growth. Students' individual ZPDs are reported on the STAR Reading Diagnostic, Parent, Reading Range, and Summary reports. Remember that ZPDs are approximate and professional judgment should be used to adjust the range to fit the ability level of each student.

**ATOS** is a readability formula that estimates the reading difficulty levels of books and other texts. ATOS uses four factors to determine the readability of a text: average sentence length, average word length, vocabulary grade level, and the number of words in a book.

**ATOS 2000 scale** reported by Renaissance Learning is a transformation of a book's ATOS level to a scale that is similar—but not identical—to the Lexile scale. The transformation was derived by analyzing ATOS and Lexile data on more than 19,000 books. Because ATOS uses four characteristics (average sentence length, average word length, vocabulary grade level, and the number of words in a book) to estimate reading difficulty, as opposed to only two measures used by Lexile (sentence length and word frequency), Renaissance Learning expects ATOS to be somewhat more accurate than Lexile. The ATOS 2000 scale information should be useful to anyone who is accustomed to using Lexiles, because its values are reasonable approximations in most cases. For the conversion chart, please see the Conversion Chart to ATOS 2000 Scale. *Lexile and the Lexile Framework are registered trademarks of MetaMetrics, Inc.*

**ATOS 2000** is the scaled score converted to Renaissance Learning's ATOS 2000 scale that is similar—but not identical—to the Lexile scale. Since Lexile uses BR (beginning reader) to indicate scores less than zero, the ATOS 2000 scale must also report some scores as BR. *Lexile and the Lexile Framework are registered trademarks of MetaMetrics, Inc.*

**ZPD 2000** is a student's ZPD converted to Renaissance Learning's ATOS 2000 scale that is similar—but not identical—to the Lexile scale. For the conversion chart, please see the Conversion Chart to ATOS 2000 Scale. *Lexile and the Lexile Framework are registered trademarks of MetaMetrics, Inc.*

**Estimated oral reading fluency (Est. ORF)** is an estimate of a student's ability to read words quickly and accurately in order to comprehend text efficiently. Students with oral reading fluency demonstrate accurate decoding, automatic word recognition, and appropriate use of the rhythmic aspects of language (e.g., intonation, phrasing, pitch, and emphasis). Est. ORF is reported in correct words per minute, and is based on a known relationship between STAR Reading performance and oral reading fluency.