Star Math Algebra and Geometry Assessments

Along with the Star Math assessment Renaissance offers both Algebra and Geometry specific assessments. These two tests measure content typically instructed in high school courses traditionally labeled Algebra 1, Algebra 2, and Geometry. These assessments are designed for teachers whose students follow the traditional path for math instruction (Grade 9: Algebra 1, Grade 10: Geometry, Grade 11: Algebra 2).

Implementation

The Algebra or Geometry test results reflect placement of the student's achievement within each content domain. A suggestion is to administer the Star Math assessment to determine the overall math achievement of all students and then administer the Algebra or Geometry test to students for whom domain-specific information may be needed. Star Math will provide scores and reports to help teachers understand the student's overall math performance and may be used for screening, measuring growth, and other purposes.

The Algebra and Geometry tests are domain-specific assessments, and are now normed. Norm referenced scores for grades 8-12 can be found in the following documentation. Summary: Star Math High School Algebra and Geometry Norms

Star Math, Algebra, and Geometry Test Comparison

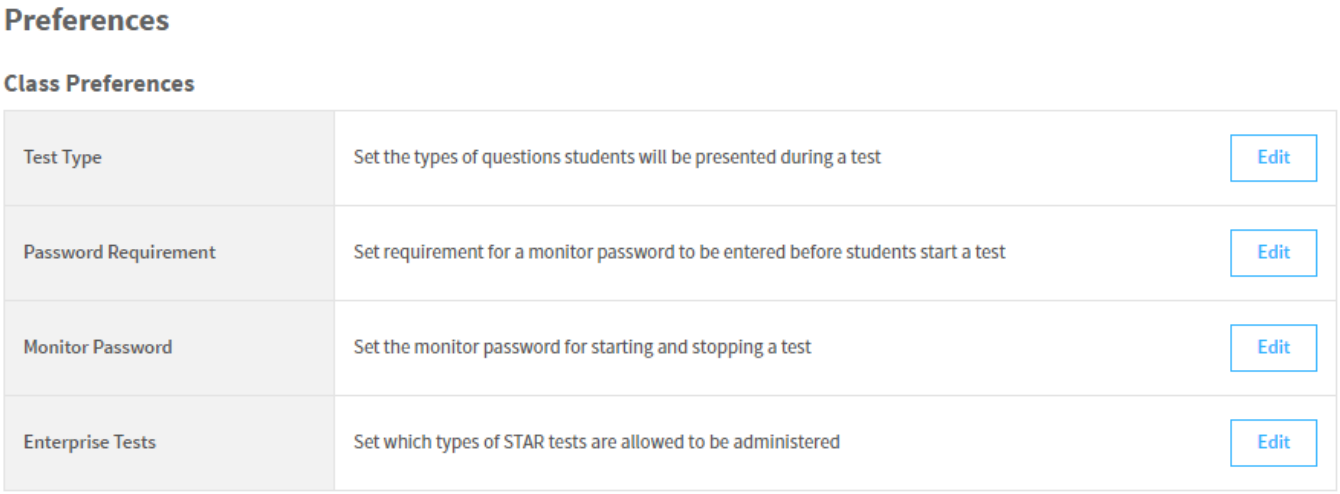
	Use with your state Learning Progression for Instructional Planning	GE Reported	PR Reported	SGP Reported	Scaled Score Reported	Multiple Domain Scores Reported	Use for Frequent Progress Monitoring
Algebra Test	x*	x**	x**		x	x*	
Geometry Test	x*	x**	x**		x	x*	
Star Math Test	x	x	x	x	x	x	x

* Teachers whose students do not follow the traditional path for math instruction (Grade 9: Algebra 1, Grade 10: Geometry, Grade 11: Algebra 2) may use the assessments results to reference skills from your state Learning Progression to help plan instruction based on student performance on the Algebra or Geometry test.
** These scores are not generated in the software. Please view Summary: Star Math High School 2016 Algebra and Geometry Norms to view norm referenced scores

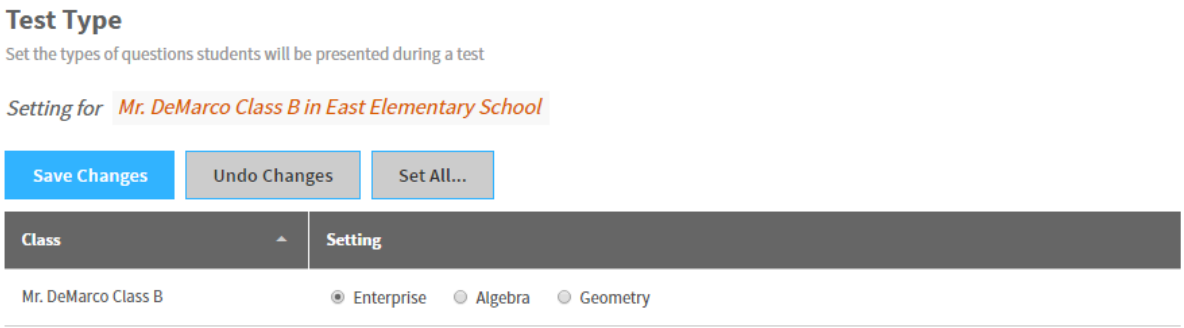
Setting the Test Type Preference

Students can complete more than one version of the test (Star Math, Algebra, and/or Geometry) as suggested. These tests may be taken on a tablet 7"or larger or a computer. The test type preference must be set-up by the teacher. The default setting is the Star Math test.

This feature is located under the Star Math menu, select "Preferences". Under "Class Preferences" choose to edit test type



Next, select the appropriate class and decide between Star Math (Enterprise), Algebra, or Geometry. Once the correct test type is chosen, click "Save Changes"



Score Interpretation

The same ordinal scale (0-1400) as Star Math is used. Please consider the following:

- A Scaled Score of 820 on the Star Math test with a 62 PR does not mean the same as a Scaled Score of 820 on the Geometry test, and therefore most likely will result in a different PR.
- Norm Reference Scores: The Algebra and Geometry tests are designed to be administered to student taking first or second year Algebra/Geometry at any grade. No distinctions are made between grades; hence a single set of norms applies to all. Please see Summary: Star Math High School Algebra Geometry Norms for additional information.

- Student Growth Percentile (SGP): While it is possible for an SGP score to include an Algebra or Geometry assessment, SGP scores are not available exclusively for Algebra or Geometry Assessments. To establish an SGP that is determined based on Star Math assessments please review the following special report which outlines how SGP prioritizes available data points to make the best use of information across time.
  Special Report: Student Growth Percentile in Star Assessments

Interpreting Results

The reports available to assist in interpreting results include: Test Record, Student Growth, Summary, and Diagnostic. Your state learning progression may also be used to identify skills, understand student performance, and to assist with instructional planning.

Diagnostic Report

Example: Student Algebra Score with Domain Scores

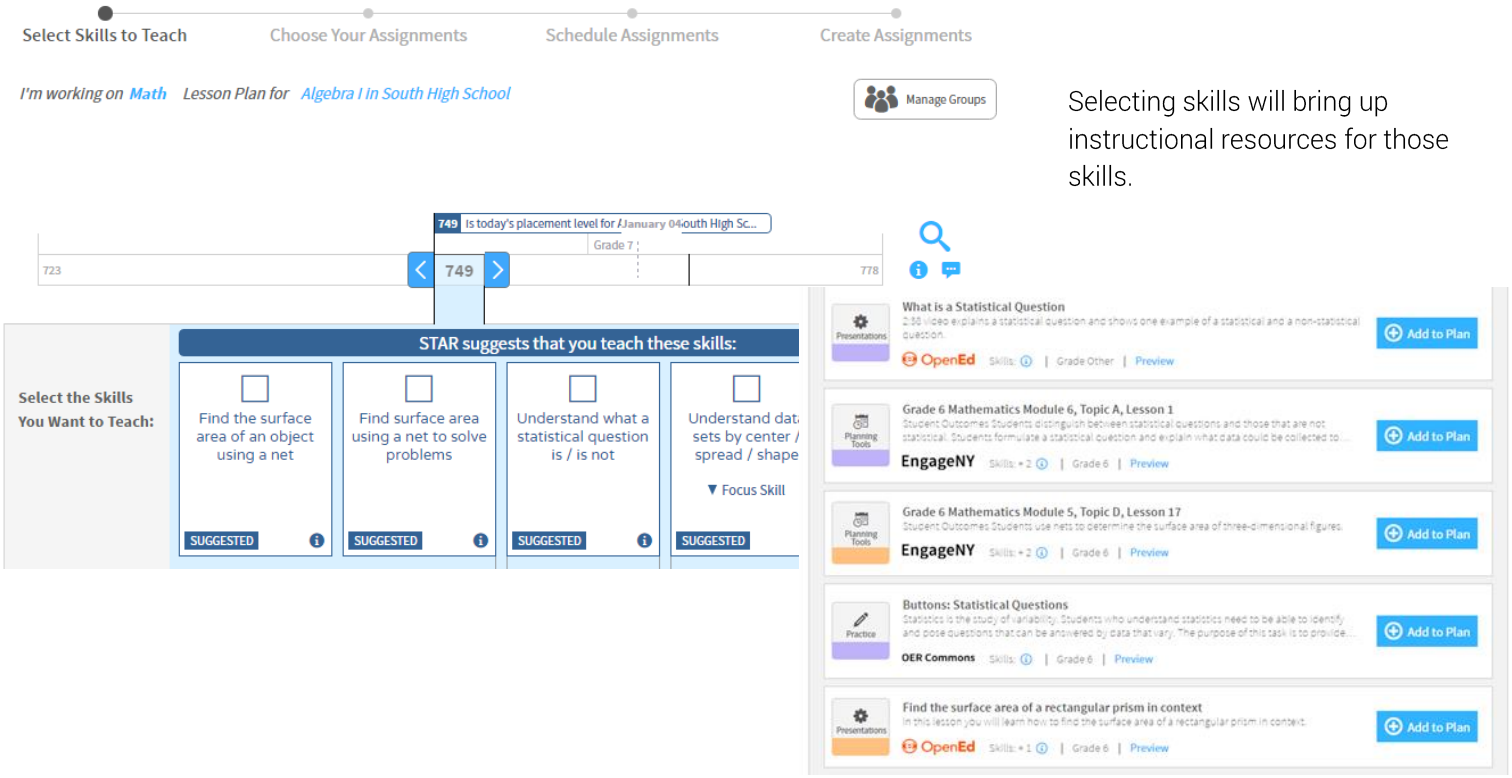
Algebra Score	
SS: 791 (Scaled Score)	Edgar's Scaled Score is based on the difficulty of questions and the number of correct responses.
Domain Scores	
Functions Interpreting Functions: 34 Building Functions: 29 Linear, Quadratic, and Exponential Models: 29 **Algebra** Arithmetic with Polynomials and Rational Expressions: 32 Creating Equations: 32 Reasoning with Equations and Inequalitites: 31 **Number and Operations** The Real Number System: 30	Domain scores, ranging from 0-100, estimate Edgar's percent of mastery on skills in each domain at a ninth grade level.

Domain and skill area scores, ranging from 0-100, estimate the student's percent of mastery of skills in each domain at the grade level assigned. The domain scores express a student's performance in terms of degrees of proficiency in each of the algebra or geometry domains. The scores for a specific domain is a direct estimate of the percentage of algebra or geometry items the student could answer correctly if all of them were administered.

The domain and skill area scores reported at the grade level assigned to the student, following the traditional path for math instruction (Grade 9: Algebra 1, Grade 10: Geometry, Grade 11: Algebra 2), regardless of which test type was administered (Star Math, Algebra, Geometry). Teachers whose students do not follow the traditional path for math instruction may use your state learning progression to view suggested skills to guide instruction.

Using you state Learning Progression

Teachers may access your state learning progression through the Star Math Record Book or the Math Overview view of the Math Dashboard by choosing to “View Skills and Resources” from either place.



Selecting skills will bring up instructional resources for those skills.

Suggested skills can only be viewed at the class or group level. For assistance managing groups, please view the following resource. Manage Groups

The suggested skills will be based on the median scaled score of the most recent test for the class or groups selected, and are not tied to the grade level assigned.
If you have a mixture of test types in your classroom, create a group set and groups based on test type to ensure you’re viewing the median based on the same test type.

You can view the suggested skills based on scaled score for a specific domain (for example, Algebra or Geometry) by choosing the magnifying glass and searching by domain.