Algebra Readiness Diagnostic Test (ARDT)
Tests, Reports, and Score Interpretation Information for Teachers

Revised 4.2.2013

Test and Report Information

Grade-level Tests – This is the first diagnostic test administered to each student. These 30-item, computer-adaptive tests assess content mastery for a particular grade level. Computer adaptive tests are tests delivered on a computer where the set of test items administered to students will vary based on how they respond to each item during the test. As a result, the 30-item Grade-level Test may include questions from previous grade levels if the student is not demonstrating mastery at the current grade-level.

Grade-level Test results may assist in determining the need for student intervention and in identifying specific content strands where instructional remediation would be beneficial. Two types of score reports are available for the Grade-level Tests:

- **On Demand Group List Report**
  - Provides individual performance overall and by strand for each student in a group
- **On Demand Student Detail Report (for teachers and parents)**
  - Provides bar graphs of performance overall and by strand for a student
  - Provides data for use in determining need for intervention/remediation
  - Provides specific item information including the SOL assessed by the item, an estimate of item difficulty, and whether the student answered correctly

Strand Tests – Strand Tests can be assigned to a student after he/she has taken the Grade-level Test. The computer-adaptive Strand Tests are 10 items in length and focus on a particular content strand. Strand Test results can be used to determine a student's strengths and areas of challenge within the content strand. Two types of score reports are available for the Strand Tests:

- **On Demand Group List Report**
  - Provides individual performance for a specific grade-level content strand for each student in a group
  - Provides specific item information including the SOL assessed by the item, an estimate of item difficulty, and whether the student answered correctly or incorrectly
  - Provides links for the teacher to view individual items from the strand test
- **On Demand Student Detail Report (for teachers and parents)**
  - Provides individual student performance information found in the Group List Report

General Scoring Information

Grade-level Test Scoring

Grade-level Test Administered	Content included	Possible Grade-level Test Scores	"On Track" Score	
			Beginning of School Year	End of School Year
CAT6	Grades 3-6	1300-1699	1550	1650+
CAT7	Grades 3-7	1300-1799	1650	1750+
CAT8	Grades 3-8	1300-1899	1750	1850+
CATAlg	Algebra I	1900-1999	N/A	1950+

Important General Notes

- The time of year that the ARDT is administered will have a direct impact on the interpretation of ARDT scores.
- A 6th-grade student that scored near 1550 at the beginning of the year is "on track" for the study of 6th-grade content.
- A 7th-grade student that scored near 1650 at the end of grade 6 or at the beginning of grade 7 is "on track" for the study of 7th-grade content.

Sample Grade-level Test Score Interpretation Scenarios

EXAMPLE 1

Sample Grade-level Test Group List Report (6th Grade) – Given on February 15, 2013

Student Name	STI	# attempts	Pre-test Score	Post-test Score	Best Score		
XXXXXXXXX	STI	1	1467	1467	1467	Number & Number Sense	1497
						Computation & Estimation	1396
						Measurement & Geometry	1430
						Probability & Statistics	1520
						Patterns, Functions, and Algebra	1477

Students studying 6th-grade content who are "on-track" for success should have performance levels that vary based on the time of the year that the ARDT was given.

- Beginning of the year – scores near 1550
- Middle of the year – scores between 1550 and 1650, depending upon exposure to content
- End of the year – scores near 1650

Based solely upon this ARDT assessment, possible observations might include:

- The student's scores in each content strand are below grade level. Since the student scored below 1550 (expected at the beginning of the year), he/she may benefit from intervention and remediation.
- Compared to the other content strands, the student's highest scoring strand (but still below grade level) is Probability and Statistics. A question to consider is whether the content assessed in this strand had been taught at this point in the year (February).
- The student's greatest weaknesses are in the Computation and Estimation and Measurement and Geometry strands. Intervention and remediation may target these areas first.

EXAMPLE 2

Sample Grade-level Test (7th Grade) – Given on February 15, 2013

Student Name	STI	# attempts	Pre-test Score	Post-test Score	Best Score		
XXXXXXXXX	STI	1	1705	1705	1705	Number & Number Sense	1742
						Computation & Estimation	1696
						Measurement & Geometry	1698
						Probability & Statistics	1665
						Patterns, Functions, and Algebra	1719

Students studying 7th-grade content should have performance levels that vary based on the time of the year that the ARDT was given.

- Beginning of the year – scores near 1650
- Middle of the year – Middle of the year – scores between 1650 and 1750, depending upon exposure to content
- End of the year – scores near 1750

Based solely upon this ARDT assessment, possible observations might include:

- The student's content strand scores are each near 1700, indicating that the student may be "on track" and may not need intervention based upon this assessment alone.
- In each content strand, this student seems to be "on track," with the exception of Probability and Statistics. A question to consider is whether the content assessed in this strand had been taught at this point in the year (February).
- Depending upon whether instruction in Probability and Statistics has occurred, the teacher may or may not determine that intervention is necessary.