Assessment Instrument Description: NWEA Colorado Academic Standards-Aligned MAP Growth

Element	Description	MAP Growth for grades K-12
Instrument Name	Name of specific instrument (more than vendor name).	MAP® Growth™ (formerly known as Measures of Academic Progress®) assessments for grades K-12 are aligned to the Colorado Academic Standards (CAS). MAP Growth Mathematics, Reading, and Language Usage tests are appropriate for students in grades 2-12. NWEA also offers MAP Growth Mathematics and Reading tests for students in grades K-2, and MAP Growth Science tests for grades 3-9.
Vendor	Name of the company or organization that produces the instrument.	NWEA® (formerly known as Northwest Evaluation Association™)
Purpose (Intended Use)	The described purpose and appropriate uses of the instrument.	MAP Growth assessment data can be used in numerous ways to support student growth and achievement. NWEA supports the use of MAP Growth scores to: • Monitor student achievement and growth both within the school year, from fall to winter to spring, and across school years, from kindergarten to high school • Plan instruction for individual students and groups of students at the classroom, grade, school, and district levels • Compare student performances within normed groups • Make universal screening and placement decisions within a response to intervention (RTI) framework or for gifted and talented programs • Predict student performance on external measures of academic achievement, such as the ACT®, SAT®, and on statewide summative achievement tests • Evaluate programs and conduct school improvement planning • Summarize scores for district- or school-level resource allocation • Combine RIT scores with other information (e.g., homework, classroom tests, state assessments) to make educational decisions
Content area and Student Population	Who (which students) could be assessed using the instrument.	MAP Growth in Mathematics, Reading, and Language Usage tests are appropriate for students in grades 2-12. NWEA also offers MAP Growth Mathematics and Reading tests for students in grades K-2, and MAP Growth Science tests for grades 3-9.

When? How frequently? How much time?	How frequently the instrument can be administered in a school year, and recommended or required administration windows.	MAP Growth assessments can be administered up to four times per year, enabling all schools to test all students: in the fall at the beginning of the school year, again in winter and spring, and an optional administration in the summer. On average, each assessment takes forty to sixty minutes to complete.
Content Area(s)	Content area or areas being assessed.	Reading, Language Usage, Mathematics, and Science

Learning Objectives	Specific learning objectives being assessed, at as detailed a level as is provided. This may be categories (strands or domains) or actual learning objective statements.	Reading – K-2 Instructional Areas and Sub-Areas:
		• Reading for All Purposes, Research and Reasoning
		  ○ Literary Text; Informational Text, Research and Reasoning
		• Print Concepts, Decoding, Vocabulary
		  ○ Print and Book Concepts; Phonics, Spelling; Vocabulary, Word Meaning
		• Oral Expression and Listening
		  ○ Phonemic Awareness; Listening Comprehension and Oral Language
		• Writing and Composition
		  ○ Writing Process; Conventions: Sentence Structure; Conventions: Grammar and Usage; Conventions: Capitalization, Punctuate and Spelling
		Reading – Grades 2-5 and 6+ Instructional Areas and Sub-Areas:
		• Literary Text
		  ○ Literary Text: Key Ideas and Details; Literary Text: Craft and Structure
		• Informational Text
		  ○ Informational Text: Key Ideas and Details; Informational Text: Craft and Structure
		• Vocabulary Acquisition and Use
		  ○ Context Clues and Reference; Word Relationships and Nuance
		
		Language Usage – Grades 2-12 Instructional Areas and Sub-Areas:
		• Writing: Plan, Organize, Develop, Revise, Research
		  ○ Plan, Organize - Create Cohesion, Use Transitions; Provide Support - Develop Topics; Conduct Research; Establish and Maintain Style: Use Precise Language; Purpose and Audience

- Language: Understand, Edit for Grammar, Usage
    - Parts of Speech; Phrases, Clauses, Agreement, Sentences
- Capitalize, Punctuate, Spell Correctly
    - Capitalization; Punctuation; Spelling

Mathematics – K-2 Instructional Areas and Sub-Areas:

- Number Sense, Properties, and Operations
    - Number Sense and Properties; Whole Number Systems and Foundations for Algorithms; Whole Number Operations
- Data Analysis and Statistics
    - Constructing and Using Visual Displays of Data
- Shape, Dimension, and Geometric Relationships
    - Geometric Figures and Shapes; Measurement

Mathematics – Grades 2-5 Instructional Areas and Sub-Areas:

- Number Sense, Properties and Operations
    - Number Sense and Properties; Whole Number, Decimal, and Fraction Operations
- Algebraic and Data Relationships
    - Patterns, Functions, and Algebraic Structures; Constructing and Using Visual Displays of Data
- Shape, Dimension, and Geometric Relationships
    - Geometric Figures and Shapes; Measurement Tools, Units, and Systems

Mathematics – Grades 6+ Instructional Areas and Sub-Areas:

- Number Sense, Properties, and Operations
    - The Real and Complex Number Systems; Quantitative and Proportional Reasoning; Formulate, Represent, and Use Algorithms
- Patterns, Functions, and Algebraic Structures
    - Use Functions to Model Relationships; Expressions and Properties of Operations; Solve Problems and Use Equations and Inequalities
- Data Analysis, Statistics, and Probability
    - Visual Displays and Summary Statistics; Probability Models
- Shape, Dimension, and Geometric Relationships
    - Transformation, Similarity, and Indirect Measurement; Model, Analyze, and Measure Objects

Science – Grades 3-5 Instructional Areas and Sub-Areas:

- Physical Science

		○ Matter; Forces, Motion, and Energy • Life Science ○ Structure and Function; Ecosystems • Earth Systems Science ○ Weather; Earth's Surface and Resources; Solar System Science – Grades 6+ Instructional Areas and Sub-Areas: • Physical Science ○ Matter: States, Chemical and Physical Changes; Matter: Structure and Properties; Force and Motion, Newton's Laws; Energy: Forms, Transfer, Transformation, Waves • Life Science ○ Cells, Organisms Structure and Function; Organisms Reproduce, Transmit Genes; Evolution; Ecosystem Interactions, Survival, Matter, Energy • Earth Systems Science ○ Earth Materials, Weather, Climate, Water; Earth's Surface; Plate Tectonics; Geologic Time; Earth, Moon, Sun, Solar System, and Universe
Individual Metrics	The scores provided at the individual (student) level.	• **Overall RIT Score:** A RIT (for Rasch Unit) score is an objective estimate of a student's overall achievement level in a subject. • **Observed or RIT Growth:** The growth in RIT points made between two terms in a growth comparison period. • **Projected Growth:** The amount the student's RIT score is predicted to change, based on student growth norms. The student's initial score plus projected growth equals projected RIT. This score establishes a baseline growth target for each student, based on normative growth. • **Projected Proficiency Status:** Data from our linking studies reports how students are projected to perform on state summative assessments. • **Lexile® Range:** NWEA partnered with MetaMetrics®, Inc., the developer of the Lexile® Framework, to correlate our RIT scale for Reading to the Lexile scale. MAP Growth Reading assessments report a Lexile range between -400L and 1825L, displayed as a 150-point range. This range is shown on many reports and can be used to identify appropriately challenging books, periodicals, and other text for each student. • **Standard Error of Measurement (SEM):** The SEM is a measure of the precision of the RIT score. Scores that are more precise have a smaller SEM. • **RIT Range:** A range of RIT scores defined by the student's RIT score ±1 SEM. If the student took the test again relatively soon, one could expect his or her score to fall within this range about 68 percent of the time. • **Instructional Areas:** The students' performance in the instructional area strands tested in a subject. Data will display either by instructional area strand RIT ranges or descriptors if students took a MAP Growth test.

		• **Percentile Rank:** The percentile rank is a normative statistic that indicates how well a student performed in comparison to students in the norm group. The most recent norm sample used a pool of approximately ten million students. A student's percentile rank indicates that the student scored as well as, or better than, the percent of students in the norm group. • **Mean RIT:** The RIT score that indicates the average achievement status of a group. An individual student's RIT can be compared to the overall Mean RIT of a class, grade level, school, or district. • **Percentile Range:** The percentiles from the national norm group that correspond to the scores given in the RIT range. • **Observed Growth Standard Error:** Amount of measurement error associated with the term-to-term growth. If the student could be tested again over the same period with comparable tests, there would be about a 68% chance that growth would fall within a range defined by the term-to-term growth, plus or minus the standard error. • **Growth Index**: The difference between observed and projected growth. A zero indicates the student met projection exactly and achieved the normative growth expectation. • **Conditional Growth Index (CGI):** This index allows for growth comparisons between students. It incorporates conditions that affect growth, including weeks of instruction before testing and students' starting RIT scores. A value of zero corresponds to mean growth, indicating growth matched projection. • **Conditional Growth Percentile (CGP):** Translates the Conditional Growth Index to U.S. national percentile rankings for growth. An index of 0 equates to 50th percentile. • **Met Projected Growth**: Indicates *Yes* if the student's term-to- term growth equaled or exceeded the growth projection or *No* if growth was less than projected. A ‡ means that the student's observed and projected growth is less than the observed growth standard error.
Individual Comparison Points (cut scores) Vendor	Information provided regarding how good is good enough performance on the instrument. Comparison information should be available for every individual metric. This may be	All MAP Growth individual status scores and growth scores are accompanied by appropriate standard errors. In addition, both status and growth scores are referenced national norms for each content area that are conditioned on time of testing in instructional weeks (not just seasons) and grade level. Growth norms are furthered conditioned on starting RIT score and on the length of the interval between tests. Among the points above that could be used for comparisons are the: • **Growth Index** • **Conditional Growth Index** • **Percentile rank for status** • **Conditional Growth Percentile** • **Projected Proficiency Status**

	performance level ratings with specific cut scores.	

Aggregate Metrics	Scores provided at the group level. The group could be a grade level, school, district, or disaggregated groups (e.g. race/ethnicity, gender, IEP status, FRL status) Specify the group(s) and the score(s) provided.	Aggregate metrics are provided at the classroom, school (over-all and by grade), district (by grade and by school), and within schools or within districts by disaggregated groups (gender, ethnicity, or program). Aggregate metrics include the following:
		
		Achievement at the classroom, grade level, school level by grade, district by grade:
		• **Mean RIT:** Average scale score of students in the district/school/class/grade level/disaggregated group for the content area; available for content area overall and by Instructional Area (strand/domain).
		• **Standard Deviation:** A measure of the variability of RIT scores within the group. A larger standard deviation generally reflects a wider range of scores and achievement within a class/school/district.
		• **Median RIT:** Middle scale score of students in the class/school/district/disaggregated group for the content area.
		• **Student Count:** Number of students with valid test events for each test period included in the metric.
		• **Overall Performance:** Count and percentage of students with overall scores in the following categories:
		  ○ Low: Below the 21st percentile
		  ○ LoAvg: Between the 21st and the 40th percentiles
		  ○ Avg: Between the 41st and 60th percentiles
		  ○ HiAvg: Between the 61st and 80th percentiles
		  ○ High: Above the 80th percentile
		• **Mean RIT Range:** The middle number is the mean RIT score for this grade. The numbers on either side indicate the standard error of measure. The mean RIT and standard deviation are suppressed if the Small Group Display is not selected and the number of valid tests is less than ten. This range is provided for the overall grade level means and for each Instructional Area mean at the grade level.
		• **Projected Proficiency Level Count:** Total number of students who scored in the proficiency category (proficiency categories estimated to correspond to state assessment performance levels).
		• **Projected Proficiency Percent:** Percentage of student count that scored in the proficiency category (proficiency categories estimated to correspond to state assessment performance levels).
		
		Growth at the classroom, grade level, school level by grade, district by grade:
		• **Count:** Number of students with valid growth test events in the beginning and ending terms.
		• **Mean RIT Growth:** Average change in RIT scores from starting term to ending term (ending RIT minus starting RIT).

<table>
<tr><td></td><td></td><td>

Standard Deviation (Growth): Measures variability of growth within the group. A larger standard deviation reflects a wider range of growth within a group.
Median Conditional Growth Percentile: The middle growth percentile rank of the group being summarized.
Standard Error of Measurement: Growth standard error associated with term-to-term growth for the group. If these students tested again over the same period with comparable tests, term-to-term growth would fall within a range defined by the observed growth, plus or minus the growth sampling error, about 68% of the time.
Count with Projection: Number of students in the growth count population with available growth projections.
Percent of Projected Growth Met: The total student growth divided by the total projected RITs, expressed as a percentage. Performance of 100% is considered average, meaning the overall student growth equaled the projections.
Percentage of Students Who Met or Exceeded Their Projected RIT/Growth: On the Achievement Status and Growth Summary Report, the percentage of students with second-term RIT scores that met or exceeded their individual growth projections. On the Student Growth Summary Report, the percentage of students with second-term RIT scores that met or exceeded their grade's growth projection.
Count Meeting Projection: Number of students in the group that met or exceeded their individual growth projections.

</td></tr>
<tr><td>Aggregate Comparison Points (cut scores) Vendor</td><td>Information provided by the vendor regarding how good is good enough performance at the group level.</td><td>NWEA provides the following comparison points for aggregate metrics (some comparisons are included in the definition of the metric):
<table>
<tr><th>Metric</th><th>Comparison Points</th></tr>
<tr><td rowspan="2">Mean RIT</td><td>Norm Grade Level Mean RIT: The mean RIT score of the norm group students who were in the same grade and who tested in the same test window as observed in the most recent NWEA norms study. Available by assessment period (i.e., begin-year, mid-year, end-year). See tables below.</td></tr>
<tr><td>District Mean RIT: Average RIT score of students in this grade for the district. A comparison point for school grade-level Mean RIT scores</td></tr>
<tr><td>Mean RIT Growth</td><td>Norm Grade Level Mean RIT Growth: The mean RIT growth score of the norm group of students who were in the same grade and who tested in the same test windows as observed in the most recent NWEA norms study. Available by assessment period (i.e., begin-to-mid year, mid-to-end year, begin-to-end year). See tables below.</td></tr>
<tr><td>Growth Index</td><td>Average of RIT points by which the students in the group exceeded their projected RIT growth (positive values), fell short of their projected RIT growth (negative values), or exactly met their projected RIT growth (0). The comparison point is included in the definition of the metric.</td></tr>
</table>
</td></tr>
</table>

		Percent of Projection	Total student growth divided by the total of projected RIT growth scores expressed as a percentage. This measure shows the proportion of the overall RIT growth projections achieved by the students. Performance of 100 percent is considered average; the student growth equaled the projections. The comparison point is included in the definition of the metric.
		Count Meeting Projection	The number of students in the group that met or exceeded their individual growth projections. All students should meet their projected growth target. Use in combination with Percent of Projection. The comparison point is included in the definition of the metric.
		Percent Meeting Projection	The percentage of students in the group that met their individual growth projections. 100% of students should meet their projected growth target. Use in combination with Percent of Projection. The comparison point is included in the definition of the metric.
Aggregate Comparison Points (cut scores) CDE	Cut scores identified by CDE for requests to reconsider for 2014-15	CDE provides comparison points for the **Mean RIT score**. The following table includes Mean RIT scores for fall and spring administrations based on the 2015 MAP Growth Norms to which educators could compare their Mean RIT scores.	

READING NORMS		
	Fall Mean RIT Scores	Spring Mean RIT Scores
Grade		
K	141.0	158.1
1	160.7	177.5
2	174.7	188.7
3	188.3	198.6
4	198.2	205.9
5	205.7	211.8
6	211.0	215.8
7	214.4	218.2
8	217.2	220.1
9	220.2	221.9
10	220.4	221.2
11	222.6	222.3

LANGUAGE USAGE NORMS		
	Fall Mean RIT Scores	Spring Mean RIT Scores
Grade		
2	174.5	189.7
3	189.4	200.0
4	198.8	206.7
5	205.6	211.5
6	210.7	215.3
7	214.0	217.6
8	216.2	219.0
9	218.4	220.4
10	218.9	220.1
11	221.5	222.1
MATHEMATICS NORMS		
	Fall Mean RIT Scores	Spring Mean RIT Scores
Grade		
K	140.0	159.1
1	162.4	180.8
2	176.9	192.1
3	190.4	203.4
4	201.9	213.5
5	211.4	221.4
6	217.6	225.3
7	222.6	228.6
8	226.3	230.9
9	230.3	233.4
10	230.1	232.4
11	233.3	235.0

SCIENCE NORMS		
	Fall Mean RIT Scores	Spring Mean RIT Scores
Grade		
3	187.5	195.4
4	194.6	201.0
5	200.2	205.7
6	204.3	208.6
7	207.2	210.9
8	210.3	213.5

Data Reports

Description of data reports that are provided/available at the individual and aggregate level(s).

MAP Growth reports are available at various levels and in many formats. Each report helps educators gain insight into student achievement and growth.

List of MAP Growth Reports

Name	Description
Student-Level Reports	
Student Profile	Brings together data needed to advise each student and support growth, with the ability to develop learning paths, evaluate growth, and track growth goals.
Student Progress	Shows a student's overall progress from all past terms to the selected term so educators can communicate about the student's term-to-term growth.
Student Goal Setting Worksheet	Shows a student's test history and growth projections in the selected subject areas for a specific period of time so educators can discuss the student's goals and celebrate achievements.
Class-Level Reports	
Class Report	Shows class performance for a term, including normative status rankings, so educators can analyze student needs.
Achievement Status and Growth	Shows three pictures of growth, all based on national norms: ▪ Projections so educators can set student growth goals ▪ Summary comparison of two terms so educators can evaluate efforts ▪ An interactive quadrant chart for visualizing growth comparisons.

		Class Breakdown by RIT	Shows at a glance the academic diversity of a class across basic subject areas so educators can modify and focus the instruction for each student.
		Class Breakdown by Goal	Shows academic diversity for specific instructional areas (formerly called goals) within a chosen subject so educators can modify and focus instruction for each student.
		Class Breakdown by Projected Proficiency	Shows students' projected performance on state and college readiness assessments so educators can adjust instruction to address student weaknesses.
		Grade-, School-, and District-Level Reports	
		District Summary	Summarizes RIT score test results for the current and all historical terms to help inform district-level decisions and presentations.
		Student Growth Summary	Shows aggregate growth in a district or school compared to norms for similar schools, so school and district leaders can adjust instruction and use of materials.
		Projected Proficiency Summary	Shows aggregated projected proficiency data so school and district leaders can determine how a group of students is projected to perform on state tests such as the State Summative Test Short and college readiness tests such as the ACT and SAT.
		Grade	Shows students' detailed and summary test data by grade for a selected term so school and district leaders can set goals and adjust instruction.
		Grade Breakdown	Provides a single spreadsheet of student achievement (both subject and goal area) so school and district leaders can flexibly group students from across a school.
		Data Exports	
		Data Export Scheduler	Exports test results to .csv files to enable importing into a database, creating custom reports, and more.
Alignment	Information provided by the vendor about alignment of the instrument(s) to standards, other instruments, etc.	MAP Growth assessments are aligned to the Colorado Academic Standards, and our item pools are regularly updated to reflect the standards. As part of the test development process, our Content Specialists reviewed the CAS and organized them into reporting frameworks. This work consists of linking the grade-level expectations across grades to create a two-tier framework consisting of instructional areas and sub-areas. Creating tests in this manner means that they align tightly to the standards and provide an accurate measure of student achievement. The MAP Growth frameworks of MAP Growth assessments for Colorado are available at https://cdn.nwea.org/state-information/index.html.	

		MAP Growth assessments have been demonstrated to be highly accurate predictors of students' proficiency on high-stakes summative assessments. NWEA researchers conduct regular studies examining the correspondence between MAP Growth and state summative tests used to measure student achievement. Each study identifies the specific RIT scale scores from MAP Growth that correspond to the various proficiency levels for each subject and grade. MAP Growth assessments can also predict student achievement on college and career readiness benchmarks, including the ACT® and SAT®. Please see https://www.nwea.org/content/uploads/2015/08/MAP-College-Readiness-Benchmark_Study-AUG15-Revised.pdf and https://www.nwea.org/content/uploads/2017/07/MAP-SAT-CR-Benchmarks_JUL17.pdf for our most recent research studies linking grades 5–9 MAP Growth performance to the ACT and SAT exams, respectively. These studies estimate benchmarks for MAP Growth Mathematics and Reading at different grade levels and testing seasons to help teachers evaluate whether their students are on track to be college ready. With such early indications from MAP Growth, educators can intervene when necessary to prepare their students for college.
Technical Quality	Information about the technical quality of the instrument. Reference to technical analysis if available electronically.	We adhere to the *Standards for Educational and Psychological Testing*,[1] including in the development and reporting of reliability coefficients and in our routine reporting of estimates of standard error of measurement along with test scores. We conduct research-based studies regularly to analyze and confirm the continued validity and reliability of our tests. The March 2019 MAP Growth Technical Report is available upon request. Unique in its depth and scope, the 2015 MAP Growth Norms study employs longitudinal student data in a manner that apportions the available evidence appropriately to support inferences for students and schools so as to provide achievement status and growth norms for individual students as well as schools seamlessly. Our norms study is among the largest in existence, with data from more than ten million students used to create an accurate description of student achievement and growth over time. For information about the 2015 MAP Growth Norms Study, visit: https://www.nwea.org/resource-library/research/2015-normative-data-3.

[1] American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (NCME). (2014). *Standards for Educational and Psychological Testing*. Washington, DC: AERA.

2015 READING STUDENT STATUS NORMS

	BEGIN-YEAR		MID-YEAR		END-YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
K	141.0	13.54	151.3	12.73	158.1	12.85
1	160.7	13.08	171.5	13.54	177.5	14.54
2	174.7	15.52	184.2	14.98	188.7	15.21
3	188.3	15.85	195.6	15.14	198.6	15.10
4	198.2	15.53	203.6	14.96	205.9	14.92
5	205.7	15.13	209.8	14.65	211.8	14.72
6	211.0	14.94	214.2	14.53	215.8	14.66
7	214.4	15.31	216.9	14.98	218.2	15.14
8	217.2	15.72	219.1	15.37	220.1	15.73
9	220.2	15.68	221.3	15.54	221.9	16.21
10	220.4	16.85	221.0	16.70	221.2	17.48
11	222.6	16.75	222.7	16.53	222.3	17.68

2015 MATHEMATICS STUDENT STATUS NORMS

	BEGIN-YEAR		MID-YEAR		END-YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
K	140.0	15.06	151.5	13.95	159.1	13.69
1	162.4	12.87	173.8	12.96	180.8	13.63
2	176.9	13.22	186.4	13.11	192.1	13.54
3	190.4	13.10	198.2	13.29	203.4	13.81
4	201.9	13.76	208.7	14.27	213.5	14.97
5	211.4	14.68	217.2	15.33	221.4	16.18
6	217.6	15.53	222.1	16.00	225.3	16.71
7	222.6	16.59	226.1	17.07	228.6	17.72
8	226.3	17.85	229.1	18.31	230.9	19.11
9	230.3	18.13	232.2	18.62	233.4	19.52
10	230.1	19.60	231.5	20.01	232.4	20.96
11	233.3	19.95	234.4	20.18	235.0	21.30

2015 LANGUAGE USAGE STUDENT STATUS NORMS

	BEGIN-YEAR		MID-YEAR		END-YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
2	174.5	16.58	184.9	15.34	189.7	15.47
3	189.4	15.20	196.8	14.24	200.0	14.11
4	198.8	14.66	204.4	13.83	206.7	13.64
5	205.6	13.87	209.7	13.23	211.5	13.19
6	210.7	13.79	213.9	13.30	215.3	13.38
7	214.0	13.82	216.5	13.52	217.6	13.70
8	216.2	14.17	218.1	13.92	219.0	14.26
9	218.4	14.15	219.7	13.98	220.4	14.50
10	218.9	15.04	219.7	14.99	220.1	15.74
11	221.5	14.96	222.1	14.85	222.1	15.80

2015 GENERAL SCIENCE STUDENT STATUS NORMS

	BEGIN-YEAR		MID-YEAR		END-YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
3	187.5	11.74	192.6	10.92	195.4	11.01
4	194.6	11.16	198.7	10.75	201.0	10.92
5	200.2	11.06	203.7	10.80	205.7	11.07
6	204.3	11.54	207.1	11.40	208.6	11.73
7	207.2	11.92	209.5	11.87	210.9	12.23
8	210.3	12.28	212.3	12.19	213.5	12.63
9*	212.4	12.83	213.9	12.78	214.8	13.32
10*	213.4	13.76	214.5	13.72	215	14.29

*Only status norms are provided for grades 9 and 10 general science. These status norms describe the distributions of achievement in general science academic skills and content knowledge for the relevant student populations for these grades and are useful for screening and placement purposes. Test results should not be used to evaluate performance where science content is more specialized, such as in topically differentiated high school science courses (e.g., biology, chemistry, physics).

2015 READING STUDENT GROWTH NORMS

	BEGIN-TO-MID YEAR		MID-TO-END YEAR		BEGIN-TO-END YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
K	10.3	6.01	6.81	5.46	17.1	8.11
1	10.8	6.00	5.99	5.46	16.8	8.09
2	9.5	6.05	4.52	5.49	14.0	8.20
3	7.3	5.79	3.02	5.33	10.3	7.59
4	5.4	5.56	2.33	5.19	7.8	7.05
5	4.2	5.60	1.97	5.21	6.1	7.15
6	3.2	5.62	1.54	5.22	4.8	7.19
7	2.5	5.58	1.25	5.20	3.7	7.11
8	1.9	6.05	0.99	5.49	2.8	8.19
9	1.1	6.35	0.60	5.68	1.7	8.87
10	0.6	6.72	0.17	5.91	0.7	9.66

2015 MATHEMATICS STUDENT GROWTH NORMS

	BEGIN-TO-MID YEAR		MID-TO-END YEAR		BEGIN-TO-END YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
K	11.4	5.56	7.67	5.03	19.1	7.59
1	11.4	5.50	6.97	4.99	18.4	7.45
2	9.5	5.35	5.72	4.90	15.2	7.11
3	7.8	5.08	5.19	4.73	13.0	6.47
4	6.8	5.05	4.78	4.72	11.6	6.41
5	5.8	5.22	4.13	4.82	9.9	6.80
6	4.4	5.20	3.26	4.80	7.7	6.75
7	3.5	5.11	2.47	4.75	6.0	6.55
8	2.9	5.59	1.78	5.05	4.6	7.66
9	2.0	5.81	1.17	5.19	3.1	8.15
10	1.5	6.18	0.85	5.42	2.3	8.92

2015 LANGUAGE USAGE STUDENT GROWTH NORMS

	BEGIN-TO-MID YEAR		MID-TO-END YEAR		BEGIN-TO-END YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
2	10.4	6.61	4.74	5.70	15.2	9.83
3	7.4	5.61	3.14	5.06	10.6	7.69
4	5.6	5.26	2.28	4.84	7.9	6.90
5	4.1	5.21	1.76	4.81	5.8	6.78
6	3.2	5.23	1.32	4.83	4.5	6.84
7	2.5	5.14	1.10	4.77	3.6	6.61
8	1.9	5.40	0.96	4.93	2.9	7.22
9	1.4	5.65	0.65	5.08	2.0	7.79
10	0.8	6.03	0.42	5.32	1.2	8.61

2015 GENERAL SCIENCE STUDENT GROWTH NORMS

	BEGIN-TO-MID YEAR		MID-TO-END YEAR		BEGIN-TO-END YEAR	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD
3	5.1	6.28	2.88	5.85	8.0	8.02
4	4.2	5.94	2.27	5.64	6.4	7.19
5	3.5	5.92	2.04	5.63	5.5	7.13
6	2.8	5.92	1.59	5.63	4.3	7.14
7	2.3	5.91	1.39	5.62	3.7	7.10
8	2.0	6.09	1.24	5.73	3.2	7.56