

Secondary Math Updates ♦ July 25, 2019

Math Adoption/Non-Adoption

- Math Adoption canceled due to the Governor's Executive Order 19-32.
- Schools were provided a reduced budget to make instructional materials purchases to just fill the gap until the next math adoption (2022-2027). Schools were to focus on Grade 7 Math up through Geometry.

Purchasing Options

Middle School Level Math Courses:

HMH GoMath or Carnegie Learning

High School Level Math Courses – Algebra 1, Geometry:

Algebra 1 & Honors – HMH ACE (MS), HMH Core (HS), or Algebra Nation/Study Edge

Algebra 1A/1B – Big Ideas or Algebra Nation/Study Edge

Geometry Honors – McGraw-Hill or Geometry Nation/Study Edge

Progress Monitoring

- MAP Growth – what students know and what they're ready to learn next
- Adaptive; adjusts to each student's responses to measure understanding.

Training

- Teachers of BPS middle school math, Algebra 1, and Geometry students (August 6 PDD)
- BPS Math Department Chairs and CC's (August 22 CC Meeting)

Monitoring Schedule

- 1st Window: August 26 – September 20
- 2nd Window: November 18 – December 20
- 3rd Window: March 23 – April 24

Class-time Impact

- Approximately 45 minutes. Students are not limited to a set time so some may need additional time.

Other

- Links to Khan Academy for online exercises useful for independent classroom work, skill-based small group instruction, and at-home learning

Reports

- Variety of reports for teachers, school and district administrators, and students and parents (See attached)

Learning Continuum Test View

Mathematics 6+, Grouped by Standard

Learning Continuum - Test View ²²

Growth: Math 6+ CCSS 2010 V2

Edit Display Options

← 181-190 191-200 201-210 211-220 221-230 231-240 241-250 251-260 261-270 271-280 281-290 →

Operations and Algebraic Thinking

Expressions and Equations [^]

← 221-230 Reinforce skills & concepts 231-240 Develop skills & concepts 241-250 Introduce skills & concepts →

CCSS.Math.Content.HSA-REI.B.3: Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • Solves for a missing value in a proportion ²³ • Solves two-step linear equations with negative rational numbers • Solves two-step linear equations with positive rational numbers • Solves two-step linear inequalities | <ul style="list-style-type: none"> • Solves for a missing value in a proportion • Solves multi-step linear equations with positive and negative rational numbers • Solves two-step linear equations with negative rational numbers • Solves two-step linear equations with positive rational numbers • Solves two-step linear inequalities | <ul style="list-style-type: none"> • Represents the solutions of a compound linear inequality on a number line • Represents the solutions of a two-step linear inequality on a number line • Solves multi-step linear equations with positive and negative rational numbers • Solves multi-step linear inequalities • Solves two-step linear equations with negative rational numbers • Solves two-step linear equations with positive rational numbers • Solves two-step linear inequalities |
|---|---|--|

CCSS.Math.Content.HSA-REI.C.6: Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Solves a system of linear equations graphically • Writes and solves a system of linear equations involving a real-world or mathematical context | <ul style="list-style-type: none"> • Solves a system of linear equations algebraically • Solves a system of linear equations graphically • Writes and solves a system of linear equations involving a real-world or mathematical context | <ul style="list-style-type: none"> • Solves a system of linear equations algebraically • Solves a system of linear equations graphically • Writes and solves a system of linear equations involving a real-world or mathematical context |
|--|---|---|

²² The Learning Continuum Test View report: Shows skills and concepts to reinforce, develop, and introduce, based on students' RIT scores in each instructional area.

²³ Learning statements: Statements that define learning objectives to help guide instruction.

Achievement Status and Growth Summary With Quadrant Chart



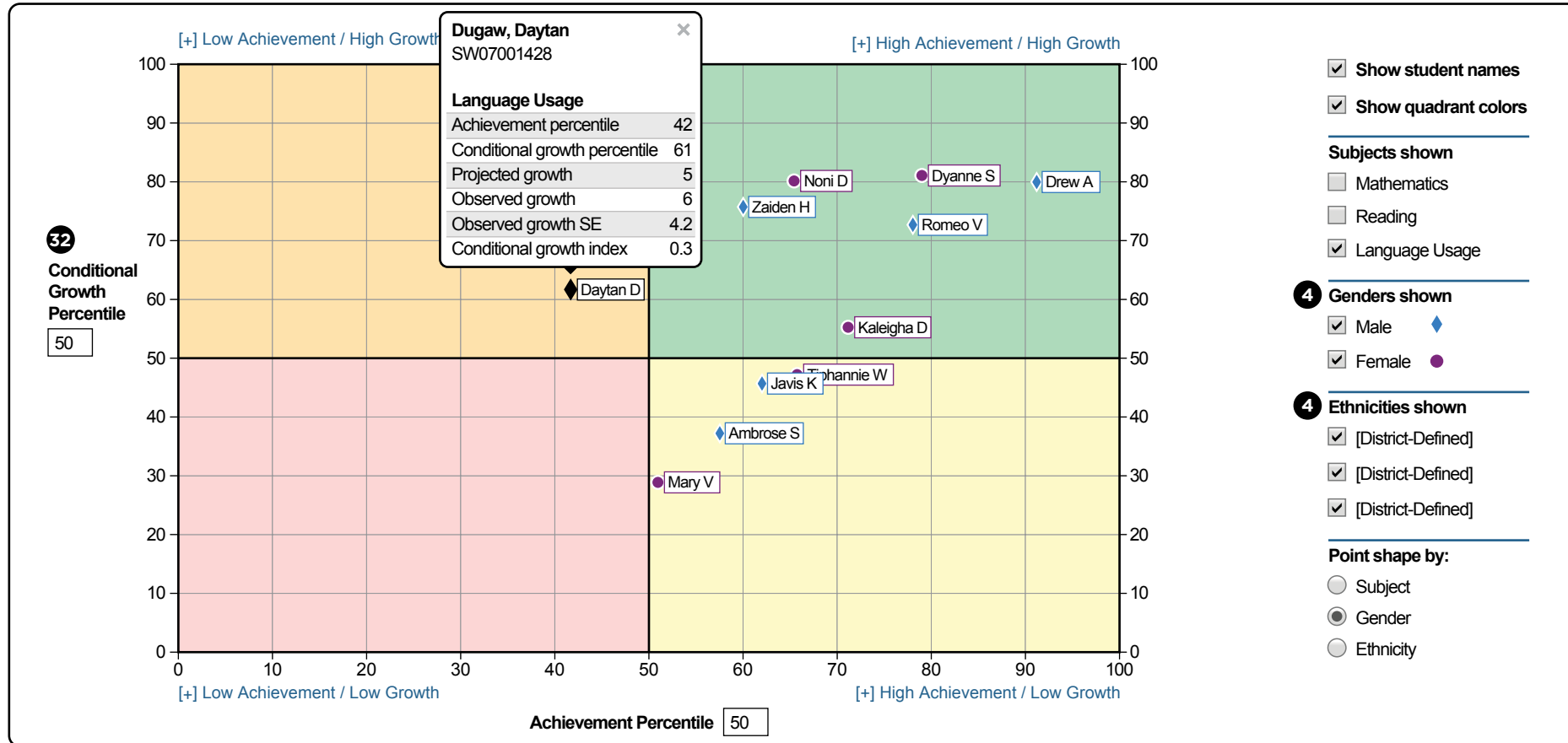
Achievement Status and Growth Summary with Quadrant Chart

Kotifani, Jenisha
5th Grade Homeroom

[Edit Report Criteria](#)

Term Tested: Winter 2015–2016
Term Rostered: Winter 2015–2016
District: NWEA Sample District 3
School: Three Sisters Elementary

1 Norms Reference Data: 2015
2 Growth Comparison Period: Fall 2015 – Winter 2016
3 Weeks of Instruction: Start – 4 (Fall 2015)
End – 20 (Winter 2016)
5 Small Group Display: No



- 1 Norms reference data:** Indicates which NWEA norming study your report data draw upon.
- 2 Growth comparison period:** The two terms for which you wish to receive student growth data.
- 3 Weeks of instruction:** The number of instructional weeks before testing, as set by your school or district administrator.
- 4 Optional grouping:** You may choose to view results by gender or ethnicity. If your district submitted a program file, you may also view summary results by special program.
- 5 Small group display:** Summary groups of fewer than 10 students will display when you select this option while generating reports.
- 14 Percentile:** The percentage of students in the NWEA national norm sample, for this grade and subject area, that this student's score (or group of students' mean score) equaled or exceeded. Percentile range is computed by identifying the percentile ranks of the low and high ends of the RIT range (see entry 13, RIT range).
- 32 Conditional growth percentile:** The conditional growth index (see entry 31) translated into national percentile rankings for growth.

Student Progress Report

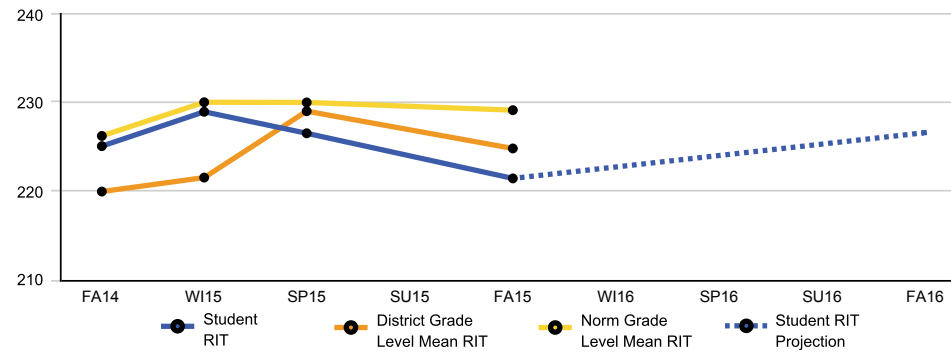


Student Progress Report

McRay, Marcus
Student ID: 100023123

1 Norms Reference Data: 2015
2 Growth Comparison Period: Fall to Fall
 District: NWEA Sample District 3
 School: Mt. Bachelor Middle School
 Term Rostered: Fall 2015–2016

Mathematics

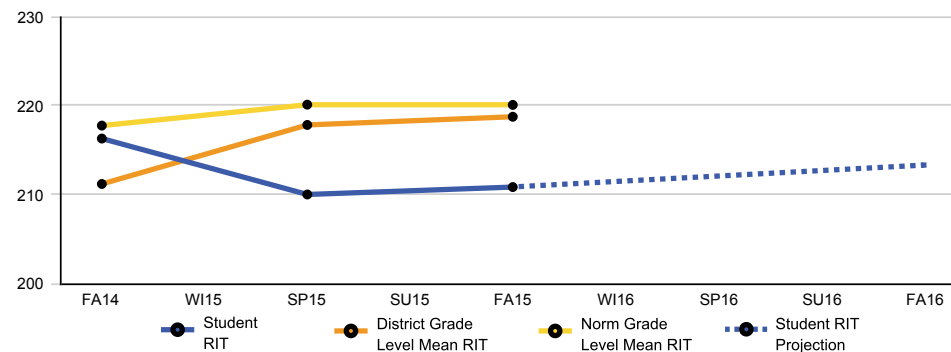


Mathematics Goals Performance - Fall 2015-2016

11 Real and Complex Number Systems 224-238
 Geometry 226-241
 Statistics and Probability 194-211
 Algebraic Thinking 217-231

Term/Year	Grade	RIT (+/- Std Err)	RIT Growth	Growth Projection	Percentile Range
FA15	9	219-222-225	-3	4	28-34-40
SP15	8	223-226-229			34-40-46
WI15	8	225-228-231			41-48-54
FA14	8	222-225-228	3	6	41-47-54
SP14	7	218-221-223			27-33-39
FA13	7	219-222-225	8	7	41-48-55
SP13	6	222-225-228			41-49-56
WI13	6	212-215-218			26-32-39
FA12	6	212-214-217	2	6	33-40-48
SP12	5	212-215-218			28-34-41
FA11	5	209-212-215	8	10	43-51-59
SP11	4	205-208-211			28-36-43
FA10	4	201-204-207	9	11	47-56-65
WI10	3	190-193-196			27-34-43
FA09	3	192-195-198			55-63-72

Reading



Reading Goals Performance - Fall 2015-2016

Literature 207-219
 Vocabulary Acquisition and Use 210-222
 Informational Text 199-210
 Lexile® Range 699-849L **15**

Term/Year	Grade	RIT (+/- Std Err)	RIT Growth	Growth Projection	Percentile Range
FA15	9	208-211-214	-5	3	23-29-36
SP15	8	206-210-213			20-26-32
FA14	8	212-216-219	6	4	39-47-54
SP14	7	208-211-214			25-31-39
FA13	7	207-210-213	6	5	31-38-46
SP13	6	213-217-220			45-53-61
WI13	6	201-205-208			20-26-33
FA12	6	201-204-207	13	6	25-32-39
SP12	5	199-202-205			19-25-32
FA11	5	188-191-195	-4	7	12-16-22
SP11	4	191-195-198			17-23-30
FA10	4	192-195-198	14	10	34-42-49
WI10	3	180-183-186			12-16-22
FA09	3	179-181-184			23-29-36

- 1** Norms reference data: Indicates which NWEA norming study your report data draw upon.
- 2** Growth comparison period: The two terms for which you wish to receive student growth data.
- 11** Goal performance area or instructional area: A learning area (e.g., geometry) within a subject (e.g., math). On the *Class Breakdown by Goal Report*, click the instructional area to access the *Learning Continuum Class View*.
- 13** RIT range: A range of RIT scores defined by the student's RIT score plus and minus one standard error of measurement. If the student took the test again relatively soon, you could expect their score to fall within this range about 68% of the time.
- 14** Percentile: The percentage of students in the NWEA national norm sample, for this grade and subject area, that this student's score (or group of students' mean score) equaled or exceeded. Percentile range is computed by identifying the percentile ranks of the low and high ends of the RIT range (see entry 13, RIT range).
- 15** Lexile: A measure of the text complexity that helps you identify level-appropriate reading material for individual students.
- 26** Projected growth, growth projection, or typical growth: The change in RIT score that about half of US students will make over time, based on student growth norms. The student's initial score plus projected growth equals projected RIT. The *Student Growth Summary Report* shows grade-level growth projections, which are based on school growth norms.
- 27** Observed growth or RIT growth: The change in a student's RIT score during the growth comparison period. On the *Student Growth Summary Report*, observed growth is the end-term mean RIT minus the start-term mean RIT.

Student Goal Setting Worksheet



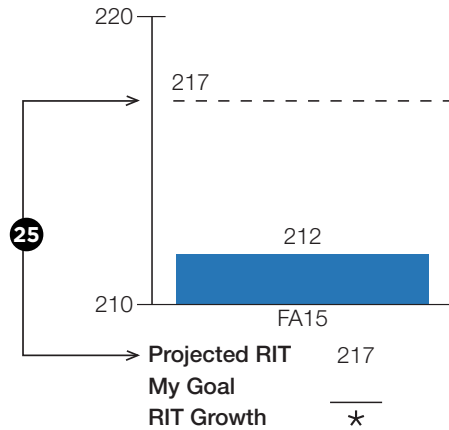
Student Goal Setting Worksheet

Carter, Jasmine
Student ID: 889905

Term Tested: Fall 2015–2016
District: NWEA Sample District 3
School: St. Helens Middle School

1 Norms Reference Data: 2015
2 Growth Comparison Period: Fall 2015–Spring 2016
3 Weeks of Instruction: Start – 4 (Fall 2015)
End – 32 (Spring 2016)

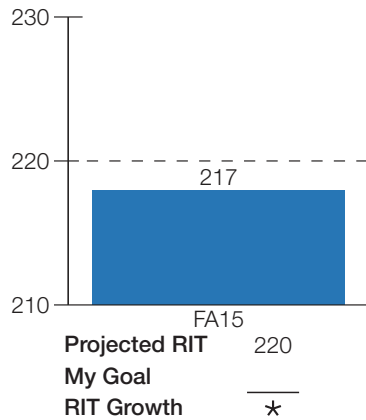
Mathematics (Growth: Math 6+ CCSS 2010 V2)



	FA15	
Overall RIT Score	212	12
Goal Performance		
Real and Complex Number Systems	211–225	
Algebraic Thinking	212–226	16
11 Statistics and Probability	198–211	
Geometry	201–215	17

Student Action Plan:

Reading (Growth: Reading 6+ CCSS 2010)



	FA15	
Overall RIT Score	217	
Goal Performance		
Literature	210–222	
Informational Text	203–215	
Vocabulary Acquisition and Use	218–230	15
Lexile® Range	807–957L	

Student Action Plan:

- 1 Norms reference data: Indicates which NWEA norming study your report data draw upon.
- 2 Growth comparison period: The two terms for which you wish to receive student growth data.
- 3 Weeks of instruction: The number of instructional weeks before testing, as set by your school or district administrator.
- 11 Goal performance area or instructional area: A learning area (e.g., geometry) within a subject (e.g., math). On the *Class Breakdown by Goal Report*, click the instructional area to access the *Learning Continuum Class View*.
- 12 RIT score: A student's overall scale score on the test for a given subject.
- 15 Lexile: A measure of the text complexity that helps you identify level-appropriate reading material for individual students.
- 16 Area of relative strength: Chosen relative to the whole subject score, plus or minus the standard error. Relative strengths appear in **bold** in the *Class Report*.
- 17 Area of relative weakness or suggested area of focus: Chosen relative to the whole subject score, plus or minus the standard error. Relative weaknesses appear in *italics* in the *Class Report*.
- 25 Projected RIT or RIT projection: The predicted future score for a student who makes typical growth, based on NWEA national growth norms. Projections take into account the student's initial score, grade level, and time between tests.

Family Report

map GROWTH

Ciara Albert

Winter 2019 Family Report

Grade: 10 ID: 123 456 7890
Wilbur & Orville Wright Middle School

Designed specifically for parents

What is this report? The Family Report shows how your child performed on the MAP Growth assessment.

What is MAP? MAP Growth is a computer-adaptive test taken up to 4 times a year.

Why is my child taking MAP Growth? Teachers use MAP Growth scores to help evaluate student performance, individualize their instruction, and set goals for students.

What does MAP Growth measure?

MAP Growth measures both achievement and growth on a Rasch unit (RIT) scale, which is used to determine your child's RIT score in each subject.

ACHIEVEMENT is how well your child has learned skills in each subject, compared nationally to more than 10 million students.
GROWTH is your child's progress throughout the school year.

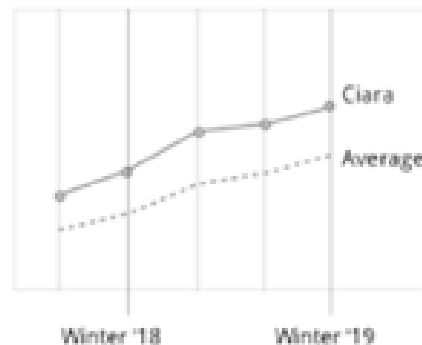
Mathematics

RIT Score: 212

ACHIEVEMENT

98th percentile

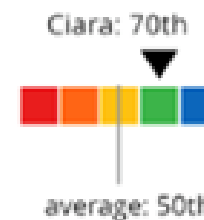
Ciara is showing high achievement.



GROWTH

Ciara's growth from fall to winter is in the 70th percentile.

Ciara is showing high growth.



Grade



Grade Report

Grade 7

Term: Fall 2015–2016
District: NWEA Sample District 3
School: Mt. Bachelor Middle School

1 Norms Reference Data: 2015
3 Weeks of Instruction: 4 (Fall 2015)
4 Grouping: None
5 Small Group Display: No

Mathematics

Growth: Math 6+ CCSS 2010 V2/Math 2-12 CCSS 2010

Summary	
6 Total Students with Valid Growth Test Scores	16
6 Mean RIT	232.9
8 Standard Deviation	16
District Grade Level Mean RIT	230
Students At or Above District Grade Level Mean RIT	7
Norm Grade Level Mean RIT	222.6
Students At or Above Norm Grade Level Mean RIT	10

	Lo %ile < 21		LoAvg %ile 21-40		Avg %ile 41-60		HiAvg %ile 61-80		Hi %ile > 80		Mean RIT (+/- Smp Err) 10	Std Dev
	count	%	count	%	count	%	count	%	count	%		
Overall Performance												
Growth: Math 6+ CCSS 2010 V2/Math 2-12 CCSS 2010	1	6%	3	19%	5	31%	2	13%	5	31%	229- 233 -237	16
Goal Area												
Real and Complex Number Systems	1	6%	4	25%	5	31%	1	6%	5	31%	227- 231 -236	16.5
11 Algebraic Thinking	3	19%	2	13%	3	19%	3	19%	5	31%	227- 232 -238	21.2
Statistics and Probability	1	6%	1	6%	5	31%	4	25%	5	31%	232- 236 -240	16.9
Geometry	1	6%	4	25%	2	13%	4	25%	5	31%	229- 233 -237	15.3

- 1 Norms reference data:** Indicates which NWEA norming study your report data draw upon.
- 3 Weeks of instruction:** The number of instructional weeks before testing, as set by your school or district administrator.
- 4 Optional grouping:** You may choose to view results by gender or ethnicity. If your district submitted a program file, you may also view summary results by special program.
- 5 Small group display:** Summary groups of fewer than 10 students will display when you select this option while generating reports.
- 6 Mean RIT:** The group's average score for the subject in the given term.
- 8 Standard deviation:** The variability of scores within a group. A larger standard deviation reflects a wider range of scores.
- 10 Sampling error:** An estimate of the amount of error in an aggregate statistic (commonly the mean) attributed to calculating the statistic on a population sample rather than on the entire population. The larger the group, the lower the sampling error.
- 11 Goal performance area or instructional area:** A learning area (e.g., geometry) within a subject (e.g., math). On the *Class Breakdown by Goal Report*, click the instructional area to access the *Learning Continuum Class View*.

This image shows an excerpt from the larger Grade Report. The full report includes individual student data.