



# NWEA Recommendations for Transitioning Students from MPG to MAP 2 – 5

In order to determine which test is more appropriate to administer to your elementary grade students, it is important to consider the purpose of the test in conjunction with the ability and grade level of your students. Northwest Evaluation Association™ (NWEA™) designed Measures of Academic Progress® (MAP®) tests mindful of the amount of learning that occurs in elementary school students and the accelerated rate in which that learning occurs as compared to middle and high school students.

MAP for Primary Grades (MPG) Reading and Mathematics tests assess pre-, emergent, and beginning readers using audio support in order to provide information regarding the student's achievement in those subjects. The content and the manner in which the tests are constructed are appropriate for students from kindergarten up to second grade. As of fall 2012, MPG tests aligned to the Common Core were added to the standard MPG Survey with Goals tests.

MAP 2 – 5 Reading and Mathematics tests assess students who can read connected text. They provide information regarding the student's achievement in reading comprehension and mathematics. The content of each assessment is in alignment with state and/or Common Core standards and is appropriate for students in grades 2 through 5.

NWEA recommends the following for consideration when making the decision to transition students from MPG to MAP 2 – 5.

- Can the student read with enough fluency to receive an accurate and valid score on the MAP 2 – 5 Reading assessment?
- Has the student been exposed to the content that will be tested in MAP 2 – 5?
- Is the student scoring  $\geq 190$  on the MPG Reading test or  $\geq 200$  on the MPG Mathematics test?

## GENERAL CONSIDERATIONS FOR THE TRANSITION BETWEEN MPG AND MAP

MPG assessments cover content in grades K – 2 and provide audio support so that students can demonstrate their knowledge without having to decode text. As always, NWEA recommends the use of multiple measures to assess subjects like reading, and a fluency measure can be a good complement to a measure of reading comprehension. Students should be able to read text with enough fluency to be able to engage with the MAP 2 – 5 Reading assessment and produce a valid score on that assessment.

Second grade is a transitional period for many students as they learn to read. During kindergarten and first grade, students are exposed to the foundational skills necessary for reading. Practical application of those skills followed. However, many factors beyond those occurring in the classroom impact the degree to which each individual student successfully applies those skills. Reading ability in a single class may vary from the student who has difficulty sounding out the words, to the student who decodes well but doesn't understand what he/she has just read, to a fluent student with good comprehension skills. This is why we recommend that educators consider both the results of MPG assessments and the student's reading fluency when making both instructional decisions and decisions about proper reading test placement.

Exposure to the tested content, particularly in mathematics, is another important factor when considering which assessment to administer to a student. In the area of reading comprehension, exposure to content is generally not a significant problem; once a student reaches second grade, he or she generally shows further growth by building strength in the common skills of comprehension and expanding his or her vocabulary. In mathematics, second graders entering the test should be prepared to engage with some of the mathematics concepts introduced at grade 2. New content is introduced at all RIT levels, and teachers should expect that high-performing students may see some content that goes beyond their grade level curriculum. This is not a bad thing. The information can help teachers know what to teach next, and some students who aren't exposed to these concepts in the classroom are getting exposure to them at home or from other sources (tutoring, for example).

Exposure to grade level content needs to be balanced against the need for students to take an examination that provides enough scale score range to ensure they can demonstrate their real achievement level. MPG tests in both reading and mathematics provide information useful for instruction for students with RIT scores up to 215.

## READING

Our recommendation is that students with an MPG Reading score greater than or equal to 190 transition to the MAP 2 – 5 Reading assessment. We came to that recommendation by determining the range of performance which would be likely to produce an appropriate percentage of correct responses and low standard errors of measurement (SEM) for each test. Figure 1 depicts the percentage of correct responses by RIT score for students taking MPG and MAP 2 – 5 Reading assessments. Ideally, a good adaptive assessment should provide an equal amount of information as to what the child knows and does not yet know. For that reason, the goal on an adaptive test is for students to answer about 50% of the questions correctly. In general, on an adaptive test students should answer somewhere between 40% and 60% of the questions correctly.

For students scoring at or above 190, the results show that 85% of students answered more than 60% of MPG questions correctly while only 3% of the students taking MAP 2 – 5 exceeded that threshold. The results also show that above 190, the percentage of correct responses on MPG exceeds the 60% threshold; in contrast, students performing near—and even well below—that score on MAP 2 – 5 generally had percent correct results within the desired range (40% to 60% correct). Thus for students scoring above 190, the figure indicates that MAP 2 – 5 would generally provide a more accurate estimate of reading achievement.

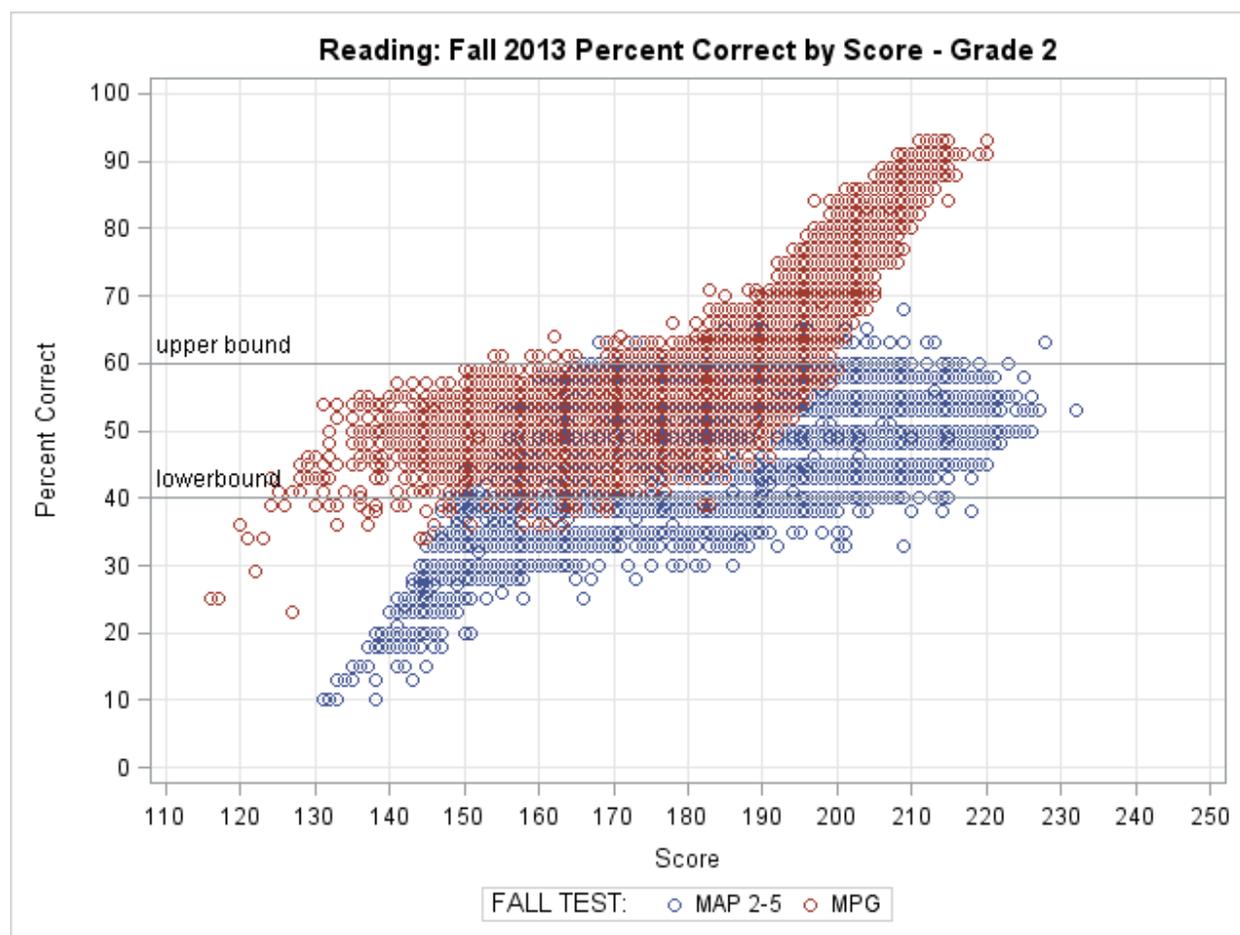
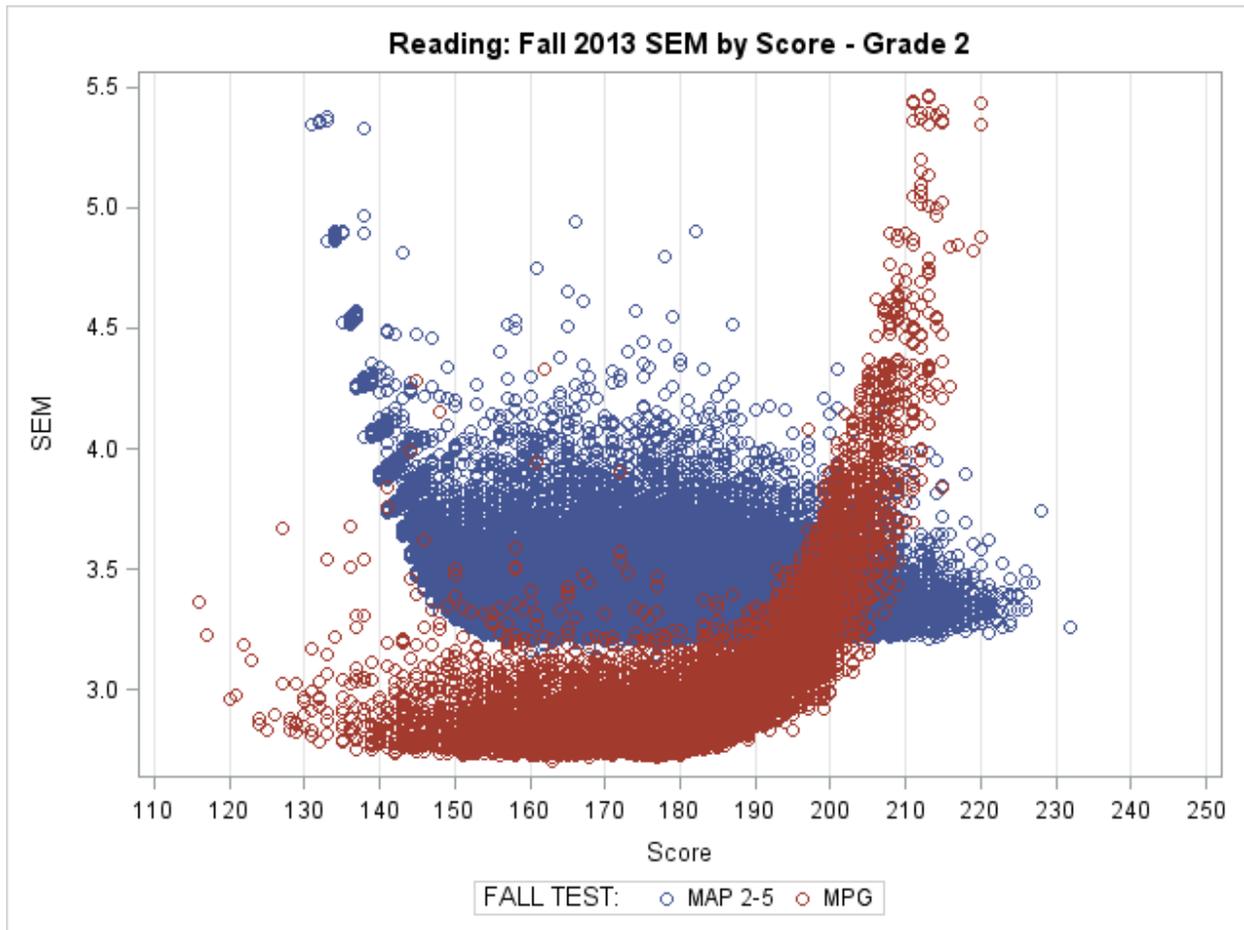
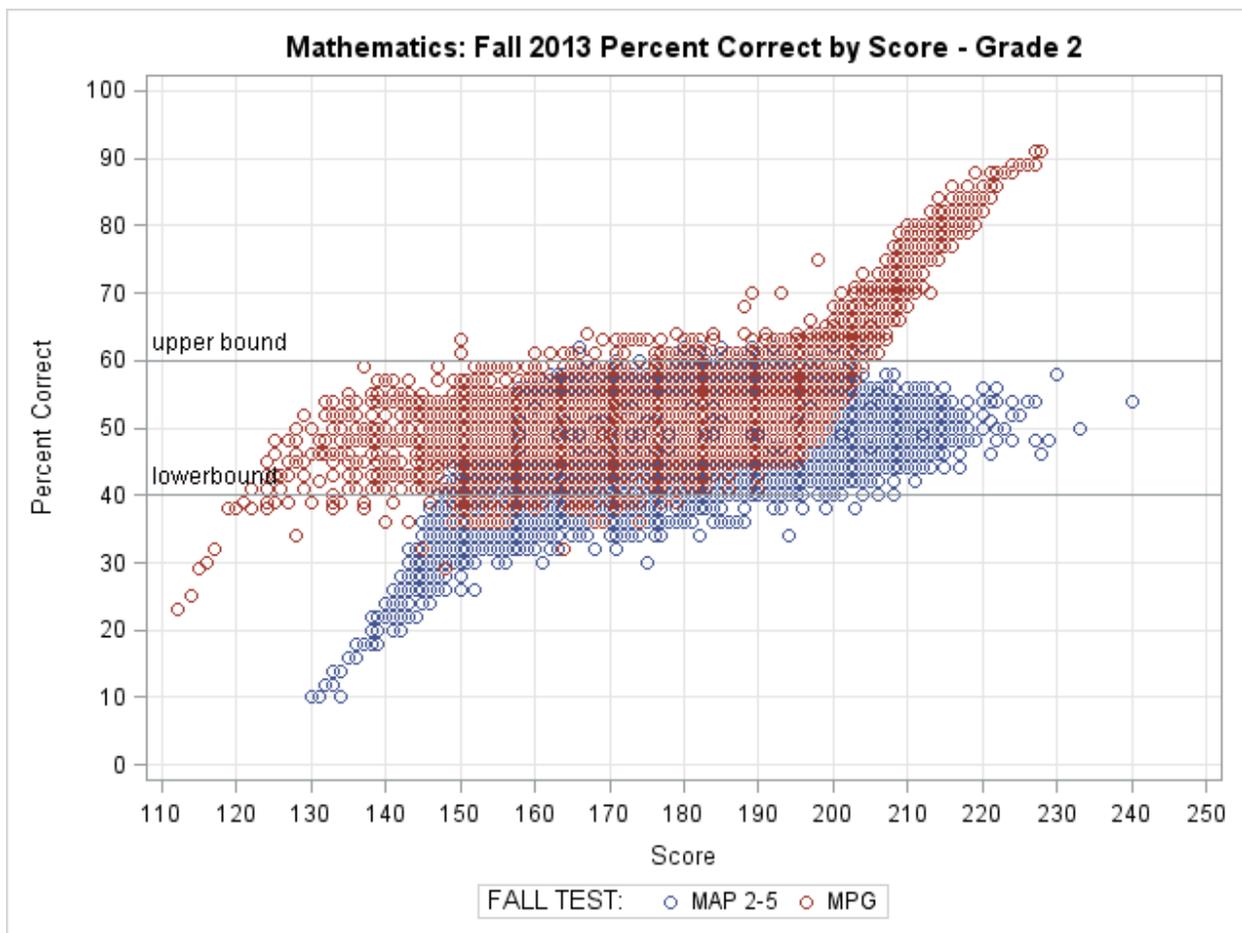


Figure 2 depicts the standard error of measurement for second grade students on MAP 2 – 5 and MPG assessments. The results show that standard errors increase substantially on scores above 190 on the MPG assessment, while standard errors on the MAP 2 – 5 assessment improve as student scores increase. Above a score of 190 on MPG Reading, the data indicate that MAP 2 – 5 provides a measure that is equal to or more accurate than MPG.

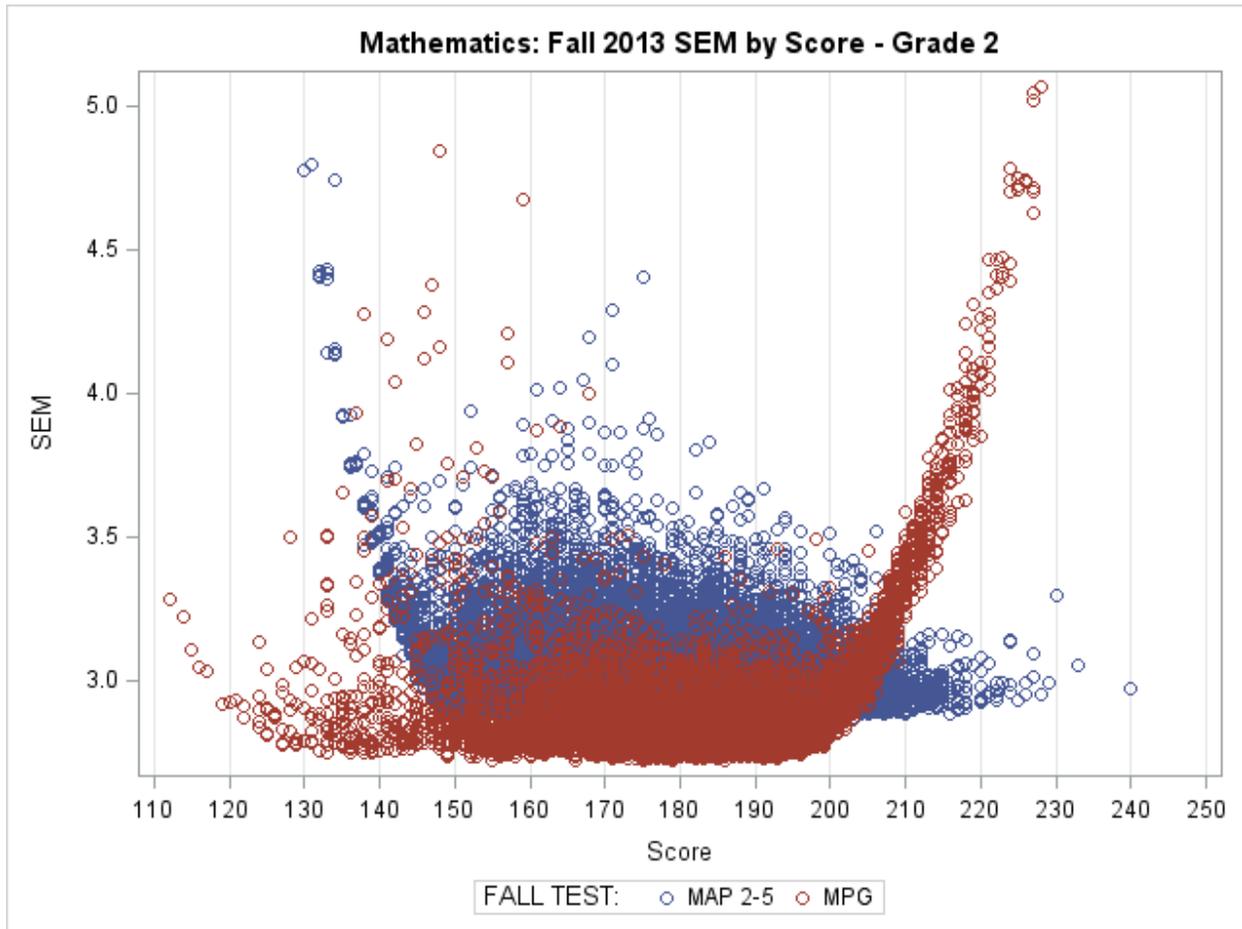


## MATHEMATICS

Our recommendation is that students with an MPG Mathematics score greater than or equal to 200 transition to the MAP 2 – 5 Mathematics assessment, assuming that students are exposed to curriculum at the second grade level or above. At this time, and with the fluency data currently available to us, sufficient fluency appears to have little if any impact in mathematics for transitioning students. This is not unexpected given the lower reading demand associated with most mathematics test items. As was the case for reading, we looked at measures indicating valid scores to determine the test most likely to produce better measurement of student performance. Figure 3 depicts the point at which MPG Mathematics and MAP 2 – 5 Mathematics tests are most appropriately administered based on percent correct. For students scoring  $\geq 200$  on the MPG assessment, 82% exceeded the 60% correct threshold, while only 0.2% of students taking MAP 2 – 5 exceeded that standard.



The standard error of measurement for second grade students also indicated comparable to better measurement in the MAP 2 – 5 Mathematics test for most students at or above 200, while the MPG Mathematics assessment indicated better measurement for most students below this cut point (see Figure 4).



The data indicate that some students experience a drop in score between spring and fall, some of which we would attribute to summer loss when students remain in the same test. However, a greater percentage of students experience a drop in score when transitioning between MPG and MAP 2 – 5 and at a greater magnitude than would normally be attributed to summer loss. Transitioning based on the provided guidelines may reduce both the percentage of those students demonstrating a drop in scores and the magnitude of the drop; additionally, it will provide a better measure of student performance for most students.

## Recommendations for Transition

### STUDENT DECLINES IN SCORE WHEN TRANSITIONING FROM MPG TO MAP 2 – 5

We emphasize that our recommendations in regard to test placement are based on the principle that students should take the measure that provides the most precision rather than the measure that is likely to produce the highest growth score. This approach ensures the student, parent, and teacher have the best available information about student performance, which better supports instructional decision making. Our prior research indicates that the inclusion of audio support in MPG makes most items slightly to moderately easier, thus it is normal for many students to see some reduction in score when moving from MPG to MAP 2 – 5. The current norms are a reflection of general growth in the subject and do not take into account the particular sequence of tests the student may have taken. For that reason, if growth is to be used for any high-stakes decision, we recommend that a value-added model be applied that introduces the test type (MPG or MAP) as a control. This assures that schools are not penalized in the accountability system for drops in score that are attributable to the transition between tests.

Our prior guidance was that students not transition between MPG and MAP between the fall and spring terms. **Based on this new data, our recommendation is that students transition from MPG to MAP once they have crossed our recommended score threshold, regardless of the term in which this occurs.** For example, we are recommending that a student scoring at 200 in MPG Reading in fall (which is above the 190 threshold) be assigned to the MAP 2 – 5 test in spring. This recommendation is based on the principle that schools should administer the test that produces the most accurate result for the student regardless of the term.

**Tables 1 and 2** summarize our transition recommendations for each grade in Reading and Mathematics.

#### KINDERGARTEN

We recommend that all kindergarteners take MPG tests in Reading and Mathematics.

#### GRADE 1

We recommend that spring kindergarten students scoring at or above 190 on the MPG Reading test be offered MAP 2 – 5 Reading in fall. If a fluency measure is available, these students should also demonstrate fluency on an appropriate measure that is equivalent to the end of the first grade norms on that instrument. Students with scores below 190 on MPG Reading should continue to take the MPG assessment. We do not recommend that kindergarten or grade 1 students take the MAP Language Usage test, as very little of the content in Language Usage is introduced at grade 1.

We recommend that all first graders take MPG Mathematics, because they are not likely to have been introduced to a large portion of the content in the grades 2 – 5 Mathematics assessment.

## GRADE 2

In reading, we recommend that all students who scored at or above 190 on their most recent MPG Reading test be offered the MAP 2 – 5 Reading assessment in subsequent terms. If a fluency measure is available, these students should also demonstrate fluency on an appropriate measure that is equivalent to the end of the first grade norms on that instrument. All other students should take MPG Reading.

For mathematics, we recommend that students who tested at or above 200 on MPG Mathematics take the MAP 2 – 5 Mathematics test in subsequent terms. All other students should take MPG Mathematics.

## GRADE 3

We recommend that all students take MAP 2 – 5 Reading and Language Usage tests with the exception of students whose IEP directs that they take MPG Reading. We recommend that all students take the MAP 2 – 5 Mathematics assessment. Students who require accommodation because of reading fluency or comprehension issues may be offered MAP 2 – 5 Mathematics with accommodations if needed.

# NWEA At-a-Glance Recommendations: Transitioning Students from MPG to MAP 2 – 5

TABLE 1 – RECOMMENDATIONS FOR TESTING IN MPG READING OR MAP 2 – 5 READING AND LANGUAGE USAGE

Result of fall or spring assessment	Recommended Placement		
	Grade 1	Grade 2	Grade 3
MPG < 190	MPG Reading	MPG Reading	MAP 2 – 5 Reading (unless MPG Reading is indicated by an IEP)
MPG ≥ 190	MAP 2 – 5 Reading	MAP 2 – 5 Reading	MAP 2 – 5 Reading & Language Usage

TABLE 2 – RECOMMENDATIONS FOR MPG OR MAP 2 – 5 MATHEMATICS

Result of fall or spring assessment	Placement for Fall Mathematics Assessment		
	Grade 1	Grade 2	Grade 3
MPG < 200	MPG Mathematics	MPG Mathematics	MAP 2 – 5 Mathematics with accommodation if an IEP dictates
MPG ≥ 200	MPG Mathematics	MAP 2 – 5 Mathematics	MAP 2 – 5 Mathematics