MAP TESTING

MEASURES OF ACADEMIC PROGRESS

MAY 19, 2015



MAP TESTING & WHY WE USE IT...

The NWEA (North West Evaluation Association) Measures of Academic Progress are computerized, adaptive tests of Reading, Language, Mathematics and Science for students in Grades 2-10 taken in Fall and Spring.

The tests are based on a continuous scale, independent of age or grade, allowing us to track student growth and performance trends over time.

The <u>adaptive</u> nature of the tests helps teachers pinpoint optimal instructional levels for students. The system adjusts giving each student a unique test.

As students respond correctly, they are given questions and material that become more challenging; as they respond incorrectly, the material becomes easier.

HOW THE RESULTS ARE USED

NWEA tests are primarily tools to assist teachers in their instruction. Specifically, teachers use these tests to help:

- Understand the diversity of academic ability and achievement in their classes.
- Identify students at risk of not achieving grade-level proficiency.
- Plan for differentiated instruction that addresses all students' learning needs.
- Monitor the progress of selected students or groups throughout the year.
- **Evaluate their success with their classes.**

WHAT IS RIT?

- An equal-interval scale used to measure achievement and growth over time
- Rasch Units start at 100 (Rasch unit = RIT)
- Direct relation to content in each subject area
- Similar to centimeters or inches
- Georg Rasch was a Danish mathematician, statistician and psychometrician, most famous for the development of a class of measurement models known as Rasch models.



Georg Blasch (1901-1900)

Student Score Range

The middle number is the RIT score your child received. The numbers on either side define the score range. If retested, your child would score within the range most of the time.

District Average RIT

This is the average score of students in the same grade taking the same test at GAA

Norm Group Average

This is the average score of students at that same grade level taking the same test in the United States.



Problem Solving

GEMS American Academy

Growth is measured from Fall to S

Math	Mathematics							
Season/ Year	Grade	Student Score Range	Dist. Avg RIT	Norm Group Avg.	Student Growth	Typical Growth	Student %ile Range	
W12 F11 S11 W11 F10 S10 W10	7 7 6 6 6 6 5 5	230- 233 - 236 223- 226 - 229 229- 232 - 235 227- 230 - 233 220- 223 - 226 195- 198 - 201 207- 210 - 213	231 225 232 228 227 218 217	228 226 226 223 220 221 218	9	6	54- 61-68 44-51-58 58-66-72 61-68-74 51-59-66 4-6-9 23-29-37	
	Mathematics Goals Performance - Winter 2012							
	Computation Number Sense & Numeration Geometry Measurement Statistics & Probability Algebraic Concepts						Avg HiAvg HiAvg HiAvg LoAvg HiAvg	



GEMS American A Student Progress Repo GEMS American Academy

Growth is measured from Fall to 5

HiAvg HiAvg

HiAvg

LoAva

HiAvg

Season/ Year	Grade	Student Score Range	Dist. Avg RIT	Norm Group Avg.	Student Growth	Typical Growth	Student %ile Range	
W12 F11 S11 W11 F10 S10 W10	7 7 6 6 6 6 5 5	230- 233 -236 223- 226 -229 229- 232 -235 227- 230 -233 220- 223 -226 195- 198 -201 207- 210 -213	231 225 232 228 227 218 217	228 226 223 220 221 218	9	6	54- 61 -68 44- 51 -58 58- 66 -72 61- 68 -74 51- 59 -66 4- 6- 9 23- 29 -37	
Mathematics Goals Performance - Winter 2012								

Number Sense & Numeration

Geometry

Measurement Statistics & Probability

Algebraic Concepts

Problem Solving

Student Growth*

Growth in RITs your child has made from Fall to Spring.

(F10 223 to S11 232 = 9)

Typical Growth*

The average growth in RITs across students in the United States.

*appear at the end of one whole testing year, Fall to Spring.

Growth is also visible on the graph

Goal Performance – each goal area
included in the test is listed.



GEMS American A Student Progress Repo GEMS American Academy Growth is measured from Fall to \$

Mathematics							
Season/ Year	Grade	Student Score Range	Dist. Avg RIT	Norm Group Avg.	Student Growth	Typical Growth	Student %ile Range
W12 F11 S11 W11 F10 S10 W10	7 7 6 6 6 6 5 5 5	230- 233 -236 223- 226 -229 229- 232 -235 227- 230 -233 220- 223 -226 195- 198 -201 207- 210 -213	231 225 232 228 227 218 217	228 226 228 223 220 221 218	9	6	54- 61-68 44- 51-58 58- 66-72 51- 68-74 51- 59-66 4- 6-9 23- 29-37
	Mathematics Goals Performance - Winter 2012						
	Computation Number Sense & Numeration Geometry Measurement Statistics & Probability Algebraic Concepts Problem Solving						Avg HiAvg HiAvg HiAvg LoAvg HiAvg High

Student Percentile Range

The number in the middle is your child's percentile rank – the percentage of students in the Norm group that had a RIT score less than or equal to your child's score. So in W12, 61% scored 233 or less (and 39% scored 234 or above). If retested, your child's percentile rank would be within this percentile range most of the time.

This is not the same as percentage on a traditional test.

Goal Performance

Low (<21 percentile)

LoAvg (21-40 percentile)

Avg (41-60 percentile)

HiAvg (61 -80 percentile)

High (>80 percentile)(or top 20%)

Reading

Season/ Year	Grade	Student Score Range	Dist. Avg RIT	Norm Group Avg.	Student Growth	Typical Growth	Student %ile Range	
F12 S12 W12 F11	6 5 5 5 5	219- 222-225 211- 214-218 210- 213-216 210- 213-216	214 214 212 211	212 212 210 207	1	5	65-75-81 46-55-66 51-59-67 58-66-73	
	Deading Coals Performance Fall 2012							

Reading Goals Performance - Fall 2012

Word Analysis / Word Meanings Fictional Texts Nonfiction Texts

HIAV High HiAv

Lexile® Range: 897-1047

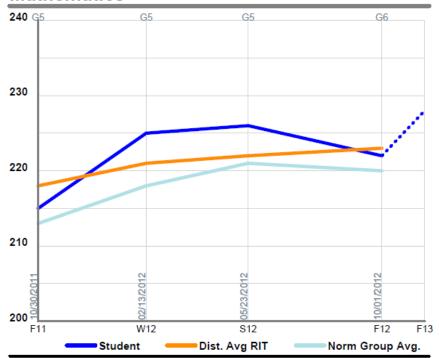
Goals Performance strands

Strength and weakness in specific content areas

Lexile® Range

The difficulty range of text that can be understood by the student 75% of the time. Most books in the library include the Lexile number.

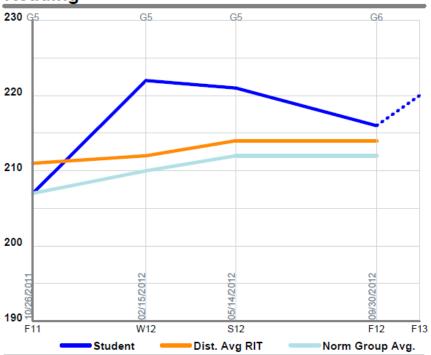
Mathematics



Mathematics Goals Performance - Fall 2012

Number & Number Sense Computation & Estimation Measurement Avg LoAvg HiAvg Avg HiAvg Geometry Probability & Statistics Algebra HiAvg

Reading



Reading Goals Performance - Fall 2012

Avg

Word Analysis / Word Meanings Fictional Texts HiAvg Avg Nonfiction Texts

WHAT IF THERE IS AN AREA OF LOW ACHIEVEMENT?

- All people have areas of strengths and weakness
- This could be a section of the curriculum that has yet to be taught
- Look for ways to practice

Reading Goals Performance - Winter 2013					
Word Analysis / Word Meanings Fictional Texts Nonfiction Texts	Low Avg Low				
Lexile® Range: 483-633					

Ways to help your child with reading

- Provide many opportunities for your child to read books or other materials. Children learn to read best when they have books and other reading materials at home and plenty of chances to read. Read aloud to your child. Research shows that this is the most important activity that parents can do to increase their child's chance of reading success. Keep reading aloud even when your child can read independently.
- Make time for the library.
- Play games like Scrabble[®], Spill and Spell[™], Scattergories[®], and Balderdash[™] together.

Ways to help your child with language

- Talk to your child and encourage him or her to engage in conversation during family activities.
- Give a journal or diary as a gift.
- Help your child write a letter to a friend or family member. Offer assistance with correct grammar usage and content.
- Have a "word of the week" that is defined every Monday. Encourage your child to use the new word throughout the week.
- Plan a special snack or meal and have your child write the menu.
- After finishing a chapter in a book or a magazine article, have your child explain his or her favorite
 event.

Ways to help your child with mathematics

- Spend time with kids on simple board games, puzzles, and activities that encourage better attitudes and stronger mathematics skills. Even everyday activities such as playing with toys in a sandbox or in a tub at bath time can teach children mathematics concepts such as weight, density, and volume. Check your television listings for shows that can reinforce mathematics skills in a practical and fun way.
- Encourage children to solve problems. Provide assistance, but let them figure it out themselves.
 Problem solving is a lifetime skill.
- The kitchen is filled with tasty opportunities to teach fractional measurements, such as doubling and dividing cookie recipes.
- Point out ways that people use mathematics every day to pay bills, balance their checkbooks, figure
 out their net earnings, make change, and how to tip at restaurants. Involve older children in projects
 that incorporate geometric and algebraic concepts such as planting a garden, building a bookshelf, or
 figuring how long it will take to drive to your family vacation destination.
- Children should learn to read and interpret charts and graphs such as those found in daily newspapers. Collecting and analyzing data will help your child draw conclusions and become discriminating readers of numerical information.

EXAMPLES OF QUESTIONS

- The Math and language tests have 52 questions, Reading 42 and Science 45.
- Here are some examples:

Read the paragraph.

Claire was putting up artwork on the bulletin board in her room when her box of thumb tacks fell off her desk. The sharp tacks tumbled all over her bedroom rug. Claire stopped putting up her artwork, carefully knelt on the floor, and picked up all the tacks.

Why did Claire stop putting up artwork?

- 1. her mother called her to dinner
- 2. she was finished putting up her artwork
- 3. the box of thumb tacks fell off her desk
- 4. it was time to go to school

Solve for x.

$$|2x + 4| = 20$$

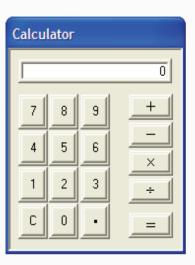
$$\bigcirc$$
 A. $x = 8 \text{ or } x = -12$

OB.
$$x = -8 \text{ or } x = 12$$

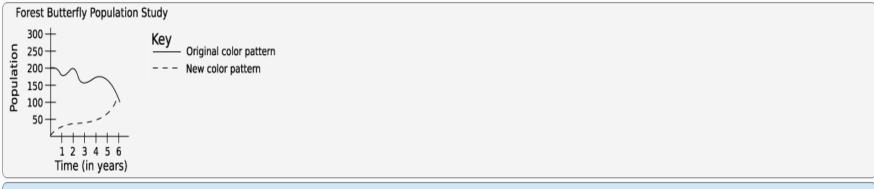
OC.
$$x = 8 \text{ or } x = -8$$

OD.
$$x = 12$$
 or $x = -12$

OE.
$$x = 4 \text{ or } x = -8$$



Study the graph.



Which prediction can be made based on the data in the graph?

- OA. The population of butterflies with the new color pattern will decrease and disappear.
- OB. The populations of butterflies with the new and original color patterns will be parallel.
- OC. The populations of butterflies with the new and original color patterns will increase at the same rate.
- OD. The population of butterflies with the new color pattern will surpass the population of butterflies with the original color pattern.
- © E. The population of butterflies with the new color pattern will grow continuously while the population of butterflies with the original color pattern will remain unchanged.

LANGUAGE & READING WEBSITES

- <u>www.scholastic.com</u> Reading Egg to learn & practice reading skills
- <u>www.lexile.com</u> Lexile framework Select reading material according to Lexile and interests
- www.funbrain.com Games
- www.raz-kids.com Reading
- http://www.brainpopesl.com/ ESL username: gemsaaad password: abudhabi

MATH WEBSITES

- www.aaamath.com
- www.coolmath.com
- www.mathisfun.com
- www.mathletics.com
- www.khanacademy.com

Practice & activities

Interactive games

Background information & practice

For Grades 1-5

For Grades 6 and up: video tutorials and interactive practice

SCIENCE WEBSITES

http://www.brainpop.co.uk
 and for juniors http://www.brainpopjr.com
 Username: gemsaaad Password: abudhabi for both

THANK YOU FOR COMING TO THIS PRESENTATION. HOPE IT WAS HELPFUL!

