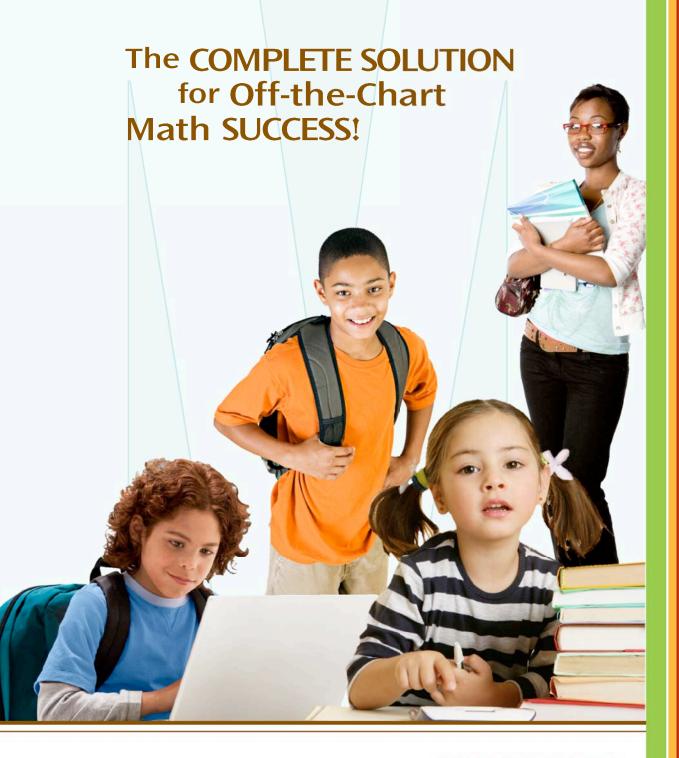
GMADE



SAMPLER

Grades K-12





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Individual Results with a Group Math Assessment

Assessment is the key to instruction and intervention. It helps educators understand students' performance, determine if they are meeting expectations, and provide students with necessary instruction and intervention.

GMADE™ (Group Mathematics Assessment and Diagnostic Evaluation) is a normative diagnostic mathematics assessment that determines what developmental skills students have mastered and where they need instruction or intervention. With correlated follow-up instruction, GMADE offers a total solution for mathematics assessment and instruction.





GMADE's accurate, in-depth, and easy-to-use evaluation will:

- **Save time** through whole-group administration.
- Lead directly to instruction and intervention with on-site scoring that provides assessment results immediately.
- Track student growth from Kindergarten to Grade Twelve with two parallel forms and Growth Scale Values (GSVs).
- Communicate assessment data in a variety of meaningful ways with four group reports and four individual student reports.
- Move through the assessment cycle easily and quickly to show progress using related products that provide focused instruction.

"Assessment is a valuable tool for making instructional decisions...When assessment is an integral part of mathematics instruction, it contributes significantly to all students' mathematics learning."

National Council of Teachers of Mathematics (2000).
 Principles and Standards for School Mathematics. Reston, VA: NCTM.

GMADE Snapshot

Grades:

Kindergarten – High School

Administration:

Teacher administered 50–90 minutes flexibly managed

One session or multiple, shorter sessions

Scores & Interpretations:

Stanines

Percentiles

Grade Equivalents

Age Equivalents

Standard Scores

Normal Curve Equivalents

Growth Scale Values

Developed by:

Author Kathleen T. Williams, Ph.D., NCSP

GMADE Total Solution:

Complete Solution for Grades K-12

Lead your K–12 students through the instructional cycle with GMADE while meeting NCTM standards. This complete solution will allow you to understand students' abilities, teach according to their needs, and evaluate their progress.

Assess NCTM Standards and Build Confidence

Results from classroom testing pinpoint the critical skills students need. *GMADE* uses the standards set by the National Council of Teachers of Mathematics (NCTM) and is correlated to the NCTM Focal Points to ensure that core skills are represented in three main areas: Concepts and Communication, Operations and Computation, and Process and Application. More detailed information on these areas is provided on pages 14–16.

Although *GMADE* was developed before the Focal Points were established by NCTM, *GMADE*'s content aligns to the Focal Points. In addition, the connected intervention

programs, *Math Resource Libraries, Head for Success*, and *Building Math Success* can be used to accentuate the Focal Point strategies. Test content is designed to build students' confidence and help them demonstrate their knowledge. Subtests are not timed. Difficult items are grouped between sections of easier items. This allows students to work at their own pace and finish each subtest with a sense of accomplishment, rather than feel frustration over difficult problems.

Because the test allows students to demonstrate their true grasp of math concepts, educators can build a reliable picture of instructional success.

Content Standards	Concepts & Communication	Operations & Computation	Process & Application
Number and Operations	✓	✓	✓
Algebra	✓	✓	✓
Geometry	✓		✓
Measurement	✓		✓
Data Analysis and Probability	✓		✓
Process Standards			
Problem Solving			√
Reasoning and Proof		✓	✓
Communication	✓		✓
Connection			✓
Representation	✓	✓	✓



Instructional Cycle: From Assessment through Instruction for Success

The GMADE suite of products provides everything needed to assess, plan, and deliver focused instruction in math and leads to reportable success. The cycle is simple and effective.

STEP 1: ASSESS

Assess students to gauge baseline skills and observe progress each year. Score the tests by hand or by using convenient *GMADE* Scoring & Reporting Software.

STEP 2: ANALYZE

Analyze student results using a variety of diagnostic reports to pinpoint students' strengths and weaknesses and to plan targeted instruction.

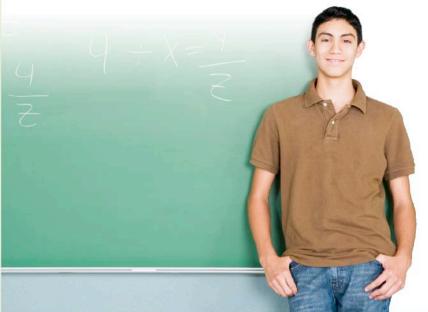
STEP 3: INTERVENE

Intervene with correlated materials to seamlessly address skill areas where students need extra practice using the activities and exercises from the *GMADE Resource Library CD*, *Head for Success*, and *Building Math Success*.

STEP 4: REASSESS

Reassess with *GMADE* parallel forms to measure progress.





Proven to Work

Highly reliable and based on scientific research, GMADE provides the components educators need to accurately and efficiently assess all mathematical competencies. GMADE is based on the following rationales and corresponding research.

GMADE was carefully developed to provide a broad sampling of appropriate mathematical tasks. The design for the test was generated from a yearlong, internal research study of state standards, curriculum benchmarks, the scope and sequence plans of various commonly used math textbook series, and a review of research on best practice for the teaching and learning of mathematical concepts and skills. From all this material, each of the three *GMADE* subtests was created and items written.

The cornerstone for the standards of learning document was the Principles and Standards for School Mathematics as set forth by the National Council of Teachers of Mathematics (NCTM). The NCTM Standards include five content and five process standards. The content standards include Number and Operations, Algebra, Geometry, Measurement, and Data Analysis and Probability. The process standards include Problem Solving, Reasoning and Proof, Communication, Connection, and Representation. NCTM's Focal Points take these one step farther, offering more focused help in the earlier grades.

These content and process standards are covered in the three subtests of *GMADE* as shown in the chart on page 4. The following bibliography lists some of the components of research used to design *GMADE*.



Bibliography

A distillation of subject-matter content for the subject areas of language arts, mathematics, and science. Kendall et al., 1999.

Basic Math Skills. AGS Publishing, 2003.

Everyday Mathematics. Everyday Learning Corporation, 1997.

Houghton Mifflin Mathematics. Houghton Mifflin, 1995.

KeyMath—Revised/Normative Update: A Diagnostic Inventory of Essential Mathematics. Connolly, 1998.

Mathematics in Action (Grades 6-8). Macmillian/McGraw-Hill, 1996.

Math in My World. McGraw-Hill School Division, 1999.

Principles and Standards for School Mathematics. National Council of Teachers of Mathematics (NCTM), 2000.

Standards from the following State Departments of Education: Arkansas, California, Georgia, Idaho, Michigan, Minnesota, New York, North Carolina, Oregon, South Carolina, Texas, Virginia.



GMADE Author

Kathleen T. Williams, Ph.D.

Dr. Kathleen T. Williams has been a classroom and remedial reading teacher, speech pathologist for both PreK and K–12, and school psychologist for K–12. She has also taught at the graduate and undergraduate levels. For more than 16 years, she has been engaged in the development and publishing of assessment and curriculum materials. She is currently at the College Board.

Dr. Williams has authored tests, including the *Reading Fluency Indicator*, the *Group Mathematics Assessment and Diagnostic Evaluation*, the *Math-Level Indicator*, the *Group Reading Assessment and Diagnostic Evaluation*, the *Reading-Level Indicator*, and the *Expressive Vocabulary Test*. She has served as a technical consultant for several large government studies on early childhood development and is a frequent presenter of continuing education workshops in the areas of reading, oral language, vocabulary development, and writing assessment and intervention.



Standardized Measure of Assessment

GMADE was standardized and normed using the most up-to-date methodology. It provides raw scores from each of the subtests that can be converted to stanines. Composite and total test raw scores can be converted to stanines, standard scores, percentiles, normal curve equivalencies, and grade equivalencies. Reliability coefficients for alternate form and test-retest were in the .90 range. Concurrent and predictive validity was assessed using a variety of standardized mathematics assessments, including *TerraNova*, *lowa Test of Educational Development*, *Texas Assessment of Knowledge and Skills*, and others.

The nationwide standardization sample of more than 26,000 students was collected in the spring and fall. Selection was made to be representative by enrollment, gender, race/ethnicity, region, community type, and socioeconomic status as measured by free-lunch participation.

"Assessment should not merely be done to students; rather, it should also be done for students, to guide and enhance their learning."

 National Council of Teachers of Mathematics (2000).
 Principles and Standards for School Mathematics. Reston, VA: NCTM. Find more details about *GMADE*'s background, development, standardization, and norming process in the Technical Manual.

Assess

Accurate, in-depth, and easy-to-use diagnostic assessment data

GMADE is a developmental-based, group-administered assessment of math for kindergarten to high school students. Each level contains multiple sections or subtests. Each subtest contains questions or items designed to measure specific skills that are developmentally appropriate for that level. With GMADE's rich assessment data, educators can:

- Determine group or individual math placement.
- Analyze math strengths and weaknesses by classroom or individual.
- Identify students who need remedial or enrichment programs.
- · Plan classroom instruction.
- Develop Individual Education Plans (IEPs).

- Determine mathematical skills.
- · Quickly get to know transfer students.
- · Help with vocational and postsecondary educational planning.
- Measure growth from grade to grade.
- Monitor progress during remediation.

Full GMADE Coverage

GMADE covers a wide range of ages, from kindergarten through grade 12.

LEVEL R

Kindergarten and beginning first grade Hand-Scored (or) Hand-Entry Software

LEVEL 1

First grade

LEVEL 2 Second grade

LEVEL 3 Third grade Hand-Scored, Hand-Entry Software (or) Scannable Booklets

LEVELS 4-5-6 Fourth, fifth, sixth grades respectively

LEVEL M

Middle school (5th - 9th)

LEVEL H High school (9th - 12th) Hand-Scored. Hand-Entry Software (or) Scannable **Answer Sheets**





Out-of-Level Testing

Each *GMADE* level contains questions or items that cover a wide range of difficulty. At any particular grade level, this range of difficulty should be sufficient to reliably measure low, average, and high-performing students. Occasionally, you may need to give a test out-of-level by administering the level recommended for the previous grade or the next grade. The following tables show what levels are recommended for most children and also the levels and ages where norms are available if out-of-level testing is done.

G•MADE Test Levels with Age-Based Norms

The G•MADE Supplementary Norms Book will contain the age-based norms as listed in the following table. Please note that 5-year-olds have age-based norms for Level R only.

	G•MADE Test Levels													
Age Band	R	1	2	3	4	5	6	M	н					
5-0-5-5														
5-6-5-11														
6-0-6-5														
6-6-6-11														
7-0-7-5														
7-6-7-11														
8-0-8-5														
8-6-8-11														
9-0-9-5														
9-6-9-11														
10-0-10-5														
10-6-10-11														
11-0-11-5					55000									
11-6-11-11														
12-0-12-5														
12-6-12-11														
13-0-13-11														
14-0-14-11														
15-0-15-11														
16-0-17-11														
18-0 & above														

How to Use This Table

Each G•MADE level can be administered to a specific age range of students if age-based norms are the preferred reporting metric. To determine which levels are applicable for a student of a certain age, find his or her chronological age in the first column, and read across to see what G•MADE levels could be

administered. For example, a student who is 14-8 could be given should consider any special circumstances when selecting one of may include sporadic school attendance or previous poor perfor To derive a profile of strengths and needs, the examiner should sexperience some success.

Tables show examples of Test Levels with Age-Based Norms, left, and with Grade-Based Norms, below.

art 1									Level
				G•N	IADE Lev	els			
Grades	R	1	2	3	4	5	6	М	н
Kdg.	To the same	Spring							1
1	Fall	100	Spring						
2	1-1-	Fall	SES	Spring					
3			Fall	EXTENSION OF	Spring				
4				Fall	The little	Spring			
5					Fall	10 To A -1	Spring		
6						Fall		Spring	
7							Fall		
8								100 / 100	Spring
9	$\overline{}$	Black Recon	monded Cales	DE level for an	adata) dall as a	oden.		Fall	
10	Shade		nmended G•MA udents suspect						200
11			udents who are						5
12									103138

Everything You Need to Assess with Success

GMADE's complete solution for math assessment and instruction encompasses the following materials.

Classroom Sets

Provide everything needed for accurate assessment of 30 students, including the following:

- **Teacher's Manual: Administration, Scoring, & Interpretation:** Scripts for giving tests, step-by-step instructions, and detailed diagnostic information help teachers implement a smooth assessment and plan focused lessons based on results. Color coded according to level, each manual provides detailed information and examples for all parts of *GMADE* administration, answer keys, norm tables, and diagnostic analysis worksheets for both forms.
- **Student Booklets:** Designed for maximum convenience and ease of use, these booklets are consumable at Levels R-3 and reusable at Levels 4 and up. Separate booklets are available for Forms A and B. Booklets are color coded to match the corresponding teaching materials. Student booklets are scannable at Levels 1–3.
- **Answer Sheets:** For Levels 4–H, scannable sheets save time and make scoring tests more efficient.

Components are available for individual purchase.

Also available:

- **Hand-Scoring Templates:** For Levels 4–H, these templates simplify the scoring process and ensure accurate scoring of student answer sheets.
- **Technical Manual:** Covering all *GMADE* levels, this manual details the scientific basis of *GMADE* and the standardization/norming process, providing extra background information for reports to districts and state education agencies.
- Age-Based Norms & Grade-Based Out-of-Level Norms Supplement: Norm tables throughout these supplements help convert scores when students have been given a level of *GMADE* above or below their current grade of enrollment.



Math-Level Indicator

Use this screener to quickly determine students' placement within *GMADE*. In approximately 30 minutes, learn the math ability of a whole class, with problems based on the NCTM content and process standards and correlated to the NCTM Focal Points.

Math Resource Libraries

These CD Libraries provide a direct link between test results and intervention. Hundreds of reproducible activities and worksheets reinforce critical math skills directly correlated to skills assessed in *GMADE*. Learn more on page 26.

Head for Success

Students can work independently with this workbook series correlated to *GMADE*, targeting specific math skill areas and meeting curriculum standards. Learn more on page 27.

Building Math Success

Available for Levels K–12, the *Building Math Success* Workbook Series, correlated to *GMADE*, reinforces and reviews specific math areas. Built to be used in small groups or individually, this workbook series addresses concepts and communication, operations and computation, and process and applications. Learn more on page 27.

GMADE Scoring & Reporting Software

Easy-to-use software offers added flexibility and efficiency for scoring large numbers of tests and provides clear, in-depth reports. It is available for hand-entry or scanning and is networkable.

Technical Requirements for GMADE Scoring & Reporting Software

System Requirements:

Windows - 2000, XP, Vista, or later; Pentium II, 300 MHz or Higher Macintosh - OS v10.3x (Panther) or later; PowerMac G3.

RAM:

128 MB available without scanning 512 MB available with scanning*
*Scanning software compatible with PC only.
Note: Faster configurations provide faster installation and enhance software performance.

Available Hard-Drive Space:

100 MB with Java virtual machine; 60 MB without virtual machine

Monitor Settings:

24-bit

Supported Scanners:

insight TM 2, insight TM 4, Opscan® 6, Opscan® 8, Opscan® 10, ScanMark ES2260TM, ScanMark ES2800TM, Opscan 2*, Opscan 3*, Opscan 4*, Opscan 4U*, Opscan 5*, Opscan 7*, Opscan 21*, ScanMark 2250*, ScanMark 2500*, Scantron 8200, 8400 and 8600*

*compatible, but no longer sold

Server Compatibility:

The Client/Server version of the Scoring and Reporting Software uses Microsoft SQL Server 2000 as its

backend database. Your organization must have a registered copy of SQL Server 2000 or 2005 in order for the software to function across a network. Although other database options are listed during database selection, only SQL Server 2000 and 2005 have been tested and approved for use with the *GMADE* Client/Server Scoring and Reporting software.

Data Compatibility:

A numeric ID system for students, teachers, classes, and schools must be in place to use the software.

GMADE Scope & Sequence

Confidently assess essential math skills and measure AYP.

Number of							GM.	ADE	∃ by	/ Le	vel	and	d Fo	orm					
Items by			R	:	L	2	2	3	3		4	į	5	(6	r	VI .	H	4
Level and Subtes		Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
Concepts and Communication	Algebra Comparison Geometry Measurement	4 4 1	4 4 1	3 2 1	3 2 1	4	4	3 2 4	3 2 4	1 2 4	1 2 4	4	4	7 5	7 5	4 2	4 2	2 7 3	2 7 3
	Money Numeration Quantity Sequence	5 11 2	5 11 2	1 7 6 7	1 7 6 7	5 8 6 3	5 9 5 4	12	12	3 6 2 5	3 6 2 5	14	14 2	14	14	16 3 3	16 3 3	9	9
	Statistics Time Addition Whole Numbers	1	1	1 12 12	1 12 12	2 12 12	1 12 12	4 7 7	4 7 7	5 6 5	5 6 5	1 3 5 1	1 3 5 1	2 4	2 3	5	5	1 4 3	1 4 3
Operations and Computation	Fractions Decimals Percents Exponents			12	12	12	12	7	/	1	1	2 2	2 2	1 2	1 2	2	2	1	1
	Signed Numbers Square Roots Algebra													1		1	1	1	1
	Subtraction Whole Numbers Fractions Decimals Percents			12 12	12 12	12 12	12 12	8	8	6 4 1 1	6 4 1 1	5 2 1 2	5 2 1 2	5 2 2 1	6 2 2 1	5 1 1 1	5 1 1 1	5 2 1	5 2 1
	Exponents Signed Numbers Square Roots Algebra														1	1	1	2	2
	Multiplication Whole Numbers Fractions Decimals Percents Exponents Signed Numbers Square Roots Algebra							6	6	6	6 6	6 2 1 3	6 2 1 3	5 1 1 2 1	5 1 1 2 1	1 1 1 1 1	1 1 1 1 1 1	1 2 2	1 2 2
	Division Whole Numbers Fractions Decimals Percents Exponents							3	3	6	6	3	6 3 3	7 2 1 2 1	7 2 1 2 1	7 1 1 2 2	7 1 1 2 2	1 2 2 2	8 1 2 2 2
	Signed Numbers Square Roots Algebra													1	1	1	1	1	1
	Multiple Operations Whole Numbers Fractions Decimals Percents Exponents Signed Numbers Square Roots											2	2	3	1	1	1	1	1
	Algebra													2	2	1	1	1	1



Nember							C 1.4	4.5.											
Number of											vel								
Items by			R	1	L	2	2	3	3		4		5	(6	P	/I	- 1	4
Level and Subte	st	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
Process and	Algebra One-Step Multiple-Step Process			1	1							1	1	3 2 1	3 2 1	2	2		
Application	Comparison One-Step Multiple-Step Process	9	10			3	2	2	2			3 3 3	3 2 1			3	3	1	1
	Geometry One-Step Multiple-Step Process	1	1	1	1			3 2 1	3 2 1	2 1 1	2 1 1			4	4	2 1 1	2 1 1	4 3 1	4 3 1
	Measurement One-Step Multiple-Step			2	2	2 2	2 2	1	1	5	5 4 1	4	5 4 1	3 2 1	3 2 1	2	2	5 3 2	5 3 2
	Process Money One-Step		3	4 3	4	1	1	2	2 3	4	4					2	2	3	3
	Multiple-Step Process Numeration	5	1 5	6	5	17	2	2	1	13	13	14	14	12	12	2	2	2 1 5	2 1 5
	One-Step Multiple-Step Process	5	5	6	5	13	14	9 5	9 5	8 5	8 5	11 3	10	9	8	5 1 2	5 1 2	5	5
	Quantity One-Step	7 7	6	5	6		1	1	1			1	1	1	1	4 3 1	4 3 1	2	2
	Multiple-Step Process Sequence	5	5	4	4	2	3			1	1					1	1	2	
	One-Step Multiple-Step Process	5	5	4	4	2	3			1	1								
	Statistics One-Step Multiple-Step Process			3	3	1	1	1	1	1 1	1 1 1	1	1	6 5 1	6 4 2	3 2 1	3 2 1	9 3 3 3	9 3 3 3
	Time One-Step Multiple-Step	1	1	2	2	2 2	1	4	4	2 1 1	2 1 1	6 3 3	5 4 1	1	1	4 3 1	4 3 1	1	1
	Process									1	1	3	1	1	1	1	1	Т	1

Bold indicates total number of items per skill.

Concepts and Communication

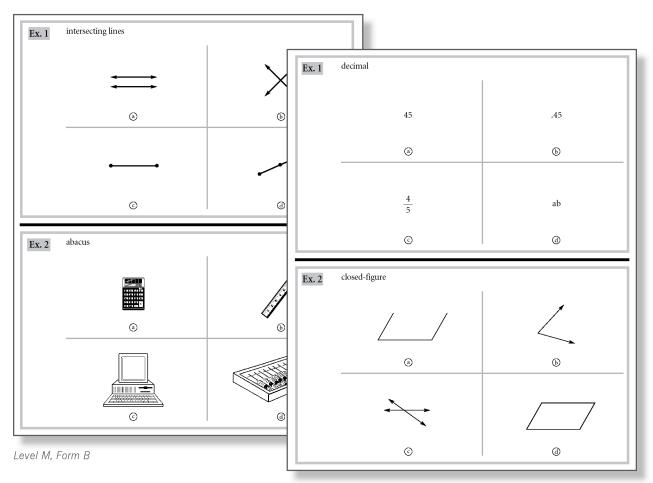
Assess student understanding of math symbols and language.

Students demonstrate their mastery of the language, vocabulary, and representations of mathematics. Items contain a symbol, word, or short phrase and are presented with four choices. The four choices may be pictures, symbols, or numbers. All levels contain two examples and 28 items that assess:

- Algebra
- Comparison
- Geometry
- Measurement
- Money
- Numeration
- Quantity
- Sequence

- Statistics
- Time

For Levels R and 1, the teacher reads the questions to the students and administers the subtest item by item. For the other seven levels, students work on their own after the subtest is explained and illustrated with the two examples.



Level 4, Form A

Items for "Concepts and Communication" subtests



Operations and Computation

Gauge student mastery of addition, subtraction, multiplication, and division.

Students demonstrate their ability to use basic operations by completing a variety of equations in many mathematical representations. Since the skills tested during this subtest require specific, direct teaching, Level R does not include Operations and Computation items. Starting at Level 1, students at each level work independently after the subtest is explained and illustrated with two examples to complete 24 items that assess:

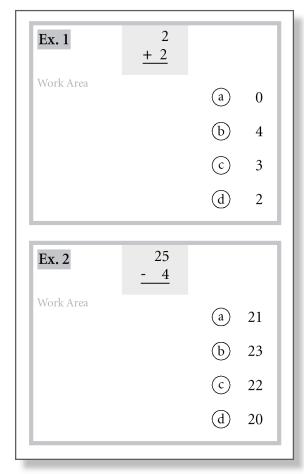
- Addition
- Subtraction
- Multiplication

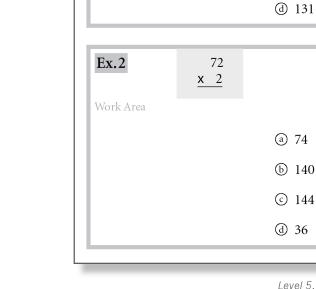
- Division
- · Multiple Operations

Ex. 1

Work Area

At Levels 1 and 2, students are only expected to add and subtract whole numbers. Beginning with Level 3, students are tested on all four operations, but only with whole numbers. In the upper levels, items will include fractions, decimals, percents, exponents, and signed numbers as developmentally appropriate.





Level 5, Form B Items for "Operations and Computation" subtests

943812

(a) 136

(b) 132

© 135

Process and Application

Reveal student ability to answer word problems and reason mathematically.

Students solve word problems, demonstrating their ability to take the language and concepts of mathematics and apply needed skills to problem-solve. Success on this subtest requires students to apply appropriate strategies when solving problems and to reason and/or estimate an answer that makes sense. Each item consists of a short passage of one or more sentences and four choices. A work area is provided. As always, two examples are provided. There are 28 questions per level for Levels R–4 and 30 for Levels 5–H. These address:

- · Algebra
- Comparison
- Geometry
- Measurement
- Money
- Numeration

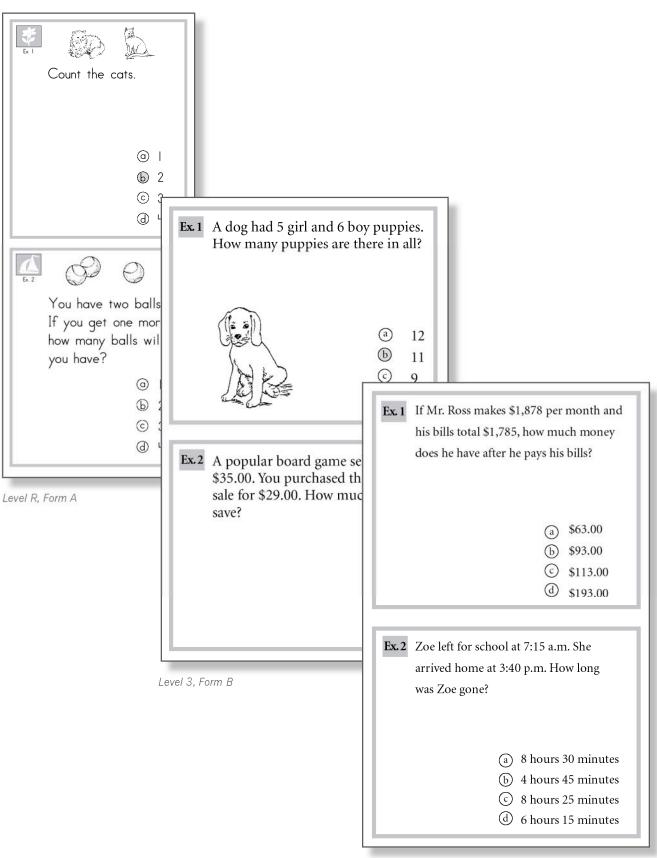
- Quantity
- Sequence
- Statistics
- Time

For Levels R and 1, teachers read the questions to the students and administer the subtest item by item. For other levels, students work on their own after the subtest is explained and examples provided.

Process and Application items in the lower levels are generally only one-step problems. More multiple-step problems are included in the upper-levels. Some upper level items do not require an answer or solution, but rather the identification of a process or application that would be used to derive the answer.







Level 3, Form B Items for "Process and Application" subtests

Analyze

Quickly and effectively identify students' strengths and weaknesses.

Once students have been assessed, the data need to be analyzed so focused instruction can be planned. *GMADE* report options give educators the flexibility to view the individual or classroom data they need in a variety of easy-to-read formats.

Generate reports in three ways:

- **By Hand:** *GMADE* Teacher's Manual provides step-by-step instructions and reproducible forms for scoring student responses and completing diagnostic analyses of their performance. Handscoring templates are available for Levels 4–12.
- **Technology:** *GMADE* Scoring & Reporting Software delivers fast, easy scoring of test booklets and answer sheets and works for all levels of *GMADE* to calculate derived scores based on fall/spring normative data for on-level and out-of-level testing. *GMADE* Scoring & Reporting Software is available in single-user and multiuser license editions, so you can use it on an individual classroom PC or on a school or district-wide network. Enter student data directly by keyboard or from scanned *GMADE* test booklets or answer sheets. You can also import information from another *GMADE* student database.
- Scoring Service: For large volumes of student answer sheets, Pearson will preprint student information on answer sheets, scan and score completed answer sheets, and report results in standard or custom reports.

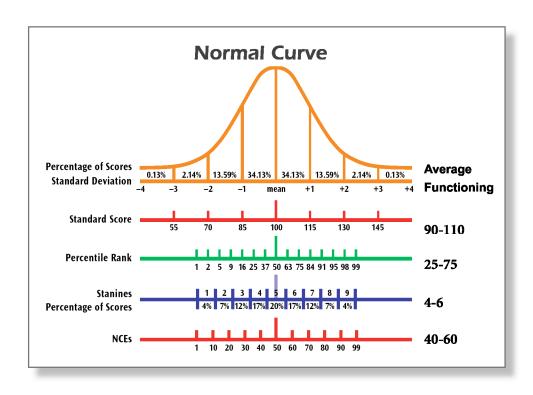
Understanding Normative Data

Raw scores from *GMADE* or any assessment cannot be interpreted directly or compared because each subtest varies in types and numbers of items. For easier analysis, raw scores are converted into normative scores. With *GMADE* normative scores, educators summarize and interpret students' performances in comparison to students

in the same grade ranges from across the country. Several different normative scores are available, and some are compared in the diagram on the next page.

- **Stanines:** Identify students' reading strengths and weaknesses with nine intervals representing various percentile bands over a normal curve.
- Percentiles: Easy to understand, percentiles indicate the percentage of students in the reference group who performed at or below a designated student's score.
- Grade or Age Equivalents (GE or AE): Establish the approximate grade level and month of typical development (50th percentile) in tenths of a grade or age level (e.g., fourth grade 4.0 is scoring in 50th percentile at month 1 of the school year).
- Standard Scores (SS): Students with a Standard Score of 100 are at the 50th percentile. With each standard deviation, equaling 15 points, find how far a student's raw score is from average compared to others in that grade.
- Normal Curve Equivalents (NCEs): NCEs of 1, 50, and 99 are the same as the 1st, 50th, and 90th percentiles, respectively; however, each NCE is at equal intervals and thus allows more accurate comparisons and reporting.
- Growth Scale Values (GSVs): The most meaningful of all scores, GSVs are calibrated to one continuous scale from Grade 1 to 12 and allow educators to compare scores and determine progress across grade levels and from form to form.





Interpretation in Action

- Student X scored in the 3rd stanine for Concepts and Communication as well as on Operations and Computation, and in the 6th stanine for Process and Application. With an overall score in the 4th stanine, Student X scored in the average range for students in the fall of fourth grade (in the top 60%).
- Student X's percentile rank of 32 on the total test means that she scored as high or higher than 32% of the normative sample of fourthgrade students.
- Student X had a raw score of 47, which equates to a grade equivalent of greater than the 5th month of the third grade. This means Student X's performance was higher than the median performance of a student in the fifth month of the third grade.
- Student X's standard score of 93 is within one standard deviation of the mean, which indicates that Student X's math skills are average in comparison with other fourth-grade students during the fall of the school year.

 Student X took Level 4 in the fall of fourth grade and Level 6 in the fall of sixth grade.
 By comparing GSVs from Level 4 to Level 6, her sixth-grade teacher can see how much Student X's math skills have improved over time.

	Score Bo	x for Lev	el 4, F	orm /	4			
Student Name	Stul	ent >	<					
Standard Scores bo	sed on: (che	ck one)	ø	Grade	9	☐ Age		
If using grade-base indicate time of tes					e-based tudent's			
Grade 4 Fall (Sep		200	Test	Month Day				
Grade Spring (recrudiy-Augus	,	Birth Age	Date •	and months	orily; dia not	round u	
Grade Spring (Raw Score	Standard Score	Birth Age	Date •	and months	orily: do not		
	Raw	Standard	Birth Age *Use or	Date • ge in year		XGE	gsv	
Subtest Concepts and	Raw Score	Standard Score	Birth Age "Use or Kille Rank	Date pe in year NCE	Stanine	XGE		
Subtest Concepts and Communication Operations and	Raw Score	Standard Score	Birth Age "Use or Kank 13	Date pe in year NCE 26	Stanine 3	XGE		

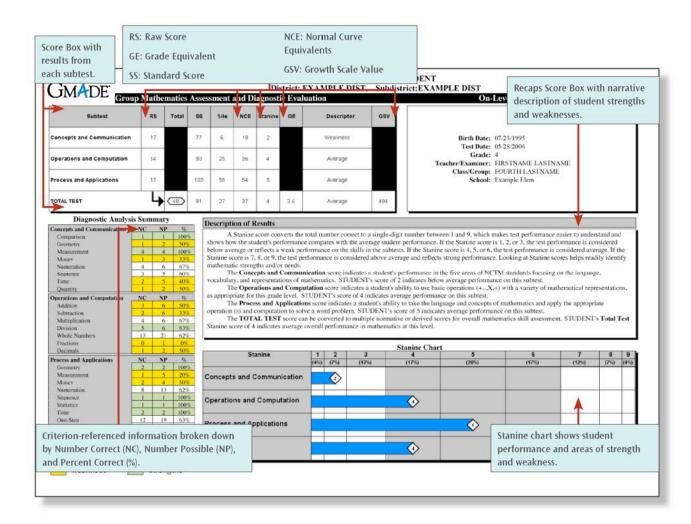
Score Box for Level 4, Form A

Individual Score Summary

Understand students' strengths and weaknesses at a glance.

Review and analyze student performance on one sheet. This report shows raw score, stanine, percentile, grade equivalent, standard score, normal curve equivalent, descriptor of performance, and growth scale values as described on page 18. Reports generated by the *GMADE* Scoring & Reporting Software also provide the following:

- Narrative description of student strengths and weaknesses
- Diagnostic Analysis Summary showing criterion-referenced information broken down by number correct, number possible, and percent correct for each subtest and item type
- Stanine chart visually demonstrating student performance to easily pinpoint areas of strength and weakness

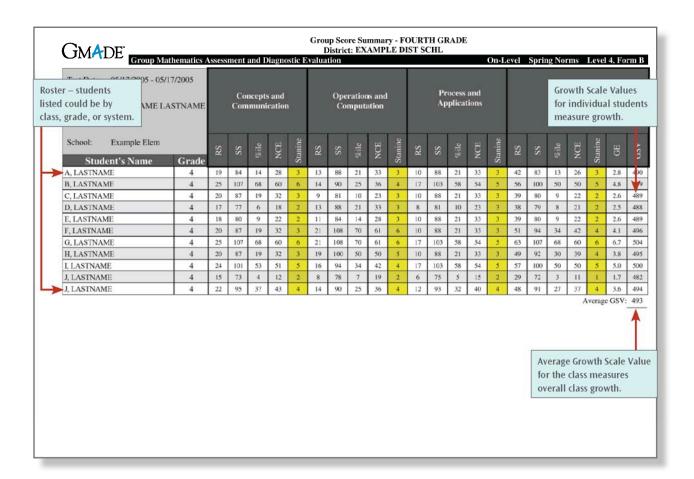




Group Score Summary

Get a snapshot of the class and easily create small groups accordingly.

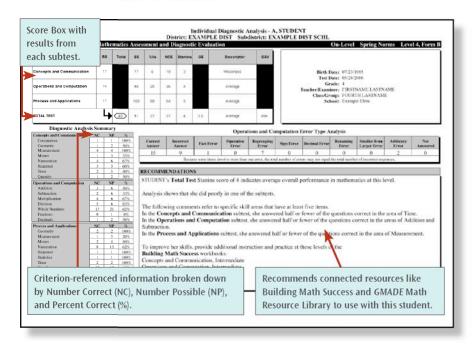
Like the Individual Score Summary Report, this group report offers all students' subtest and total score totals, as well as an average GSV for the class.



Individual Diagnostic Analysis

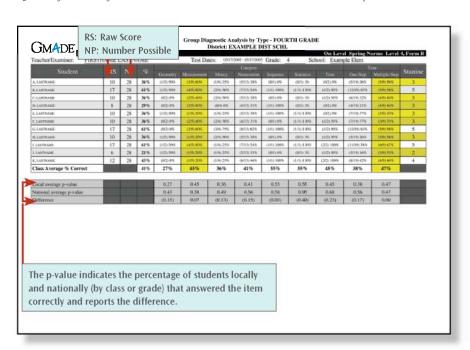
Automated recommendations help determine what to do next.

Better understand students' subtest scores with a breakdown of skills and how students scored in each area. Narrative recommendations for interventions and a guide to specific support materials are also provided as part of the softwaregenerated reports.



Group Diagnostic Analysis by Type

Quickly identify students in need of more instruction on particular skills.



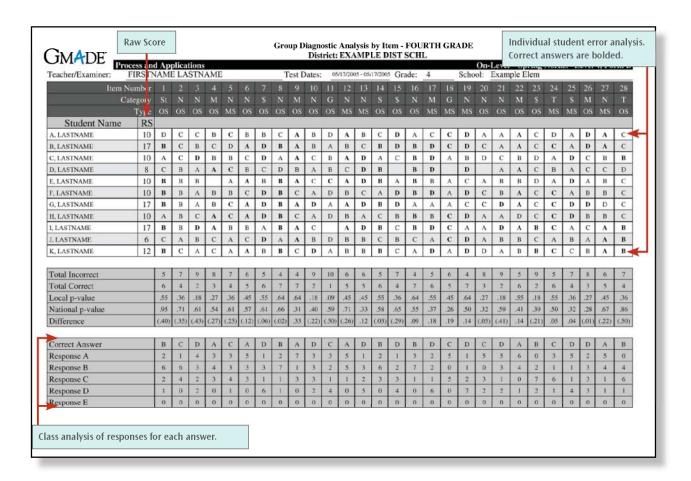
Quickly find the class average for each type of question per subtest. From this information, focus more closely on individual students or compare the class average with the local and national averages.



Group Diagnostic Analysis by Item

Simply drill down to the item level and provide individualized instruction.

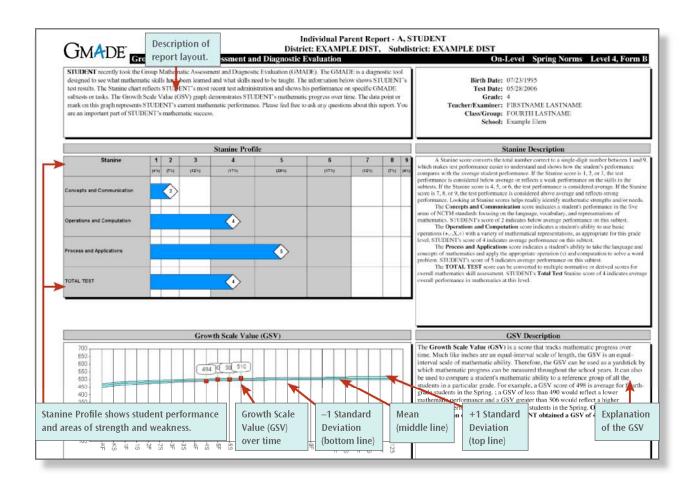
Review students' individual responses to each item per subtest. Analyzing the selected wrong answers will give more information about students' understanding and help direct instruction. Also compare scores to local and national averages.



Parent Report

Present parents with professional reports on their children's progress in seconds.

Easily provide parents with an overview of their students' *GMADE* results using the software. Combining the best elements of each report, the Parent Report represents the Stanine Profile and the GSV progress graph with informative narrative outlining students' strengths and weaknesses.

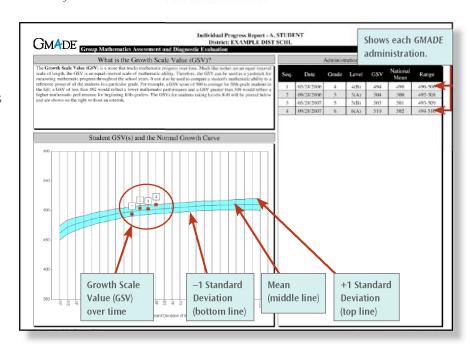




Individual Progress Report

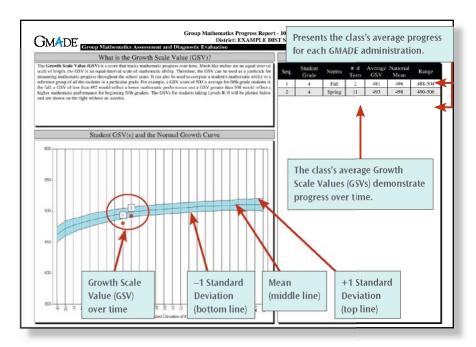
Easily create progress reports for every student after each assessment.

Demonstrate student performance over time with a graph and chart indicating the results of each test administration's GSV plotted on a chart that also shows +1 or -1 standard deviation. You will see growth in GSV and movement on the graph in relationship to the norm. Because GMADE spans the grades, students' development can be plotted and followed over time.



Group Progress Report

Easily chart the class average mathematical skills and watch the group grow over time.



Capture class progress in a graph and chart of the average GSV from each administration of *GMADE*.

Intervene

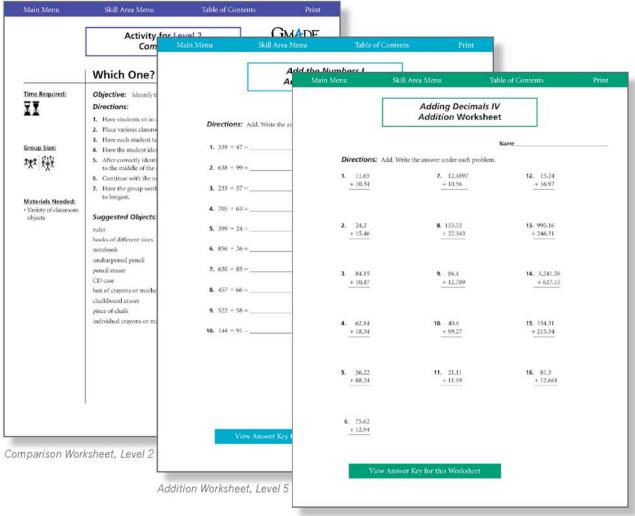
Plan focused instruction directly linked to assessment results.

GMADE Math Resource Library and Head for Success were created to follow up GMADE assessment results with correlated activities. Pearson provides other materials that also link to GMADE analyses.

GMADE Math Resource Library

This extensive resource library provides teaching activities and worksheets that deal with the same skill areas covered by *GMADE* on a convenient, searchable CD. The nine CDs, one for each *GMADE* level, offer remediation, on-level practice, and enrichment exercises.

These sample worksheets offer students an opportunity to practice the skills that they need to strengthen. This could be used by an individual or group of students.



Addition Worksheet, Level M



Head for Success

Build math skills with correlated activities.

Head for Success workbooks provide lessons with guided practice specifically designed for students' areas of need. This series, available for Levels 1-5, offers lessons with instruction, practice, and test practice specifically correlated to the subtest of *GMADE* so students will improve the skills they need the most. Full lessons in Head for Success supply instruction and practice, which complement worksheets and activities in the *GMADE Math Resource Library*.





Building Math Success

Correlated to *GMADE* and available for Levels K–12, the *Building Math Success* Workbook Series, which is built to be used in small groups or individually to further reinforce specific skills areas in mathematics with remediation, on-level practice, and enrichment exercises.

More Solutions for Striving Students

The correlated instruction cycle illustrates how you can match our full line of products to meet your students' needs, from grades *K*–12.

	If GMADE test reports indicate the following CHALLENGES	Then turn to these Pearson SOLUTIONS	n
CONCEPTS & COMMUNICATION	ALGEBRA (Tested at levels 9–12)	GMADE Math Resource Library (9–12)	
	COMPARISON (Tested at levels K—4)	MCP Math (K-4) I Get It! Math: Measurement & Geometry (3-4) Read It! Draw It! Solve It! (K-4) Thinking Algebraically (1-4)	$\begin{array}{l} \mbox{Head for Success} \ (1-4) \\ \mbox{GMADE Math Resource Library} \ (\mbox{K4}) \\ \mbox{Building Math Success} \ (\mbox{K4}) \end{array}$
	GEOMETRY (Tested at levels K–1, 3–12)	MCP Math (K-1, 3-6) I Get It! Math: Measurement & Geometry (3-5) Read It! Draw It! Solve It! (1, 3-5) Thinking Algebraically (1, 4)	Head for Success (1, 3–5) GMADE Math Resource Library (K–1 3–12) Building Math Success (K–1, 3–12)
	MEASUREMENT (Tested at levels K–1, 3–12)	MCP Math (1, 3–6) I Get It! Math: Measurement & Geometry (3–5) Read It! Draw It! Solve It! (1, 3–5)	Head for Success (1, 3–5) GMADE Math Resource Library (K–1 3–12) Building Math Success (K–1, 3–12)
	MONEY (Tested at levels 1–2, 4)	MCP Math (1-2, 4) I Get It! Math: Fractions & Decimals (4) Nimble With Numbers (1-2, 4) Read It! Draw It! Solve It! (1, 4) Thinking Algebraically (4)	Head for Success (1–2, 4) GMADE Math Resource Library (1–2, 4) Building Math Success (1–2, 4)
	NUMERATION (Tested at levels K–12)	MCP Math (K-6) I Get It! Math (3-5)* Nimble With Numbers (1-7)	Head for Success (1–5) GMADE Math Resource Library (K–12) Building Math Success (K–12)
	QUANTITY (Tested at levels K–2, 4–5, 7–12)	MCP Math (K-2, 4-5) Head for Success (1-2, 4-5) GMADE Math Resource Library (K-2, 4-5, 7-12)	Building Math Success (K-2, 4-5, 7-12)
	SEQUENCE (Tested at levels K–4, 7–8)	MCP Math (K-4) Nimble With Numbers (1-4, 7) Thinking Algebraically (1-2)	Head for Success (1-4) GMADE Math Resource Library (K-4, 7-8) Building Math Success (K-4, 7-8)
	STATISTICS (Tested at levels 5, 9–12)	MCP Math (5) Head for Success (5) GMADE Math Resource Library (5, 9–12)	Building Math Success (5, 9–12)
	TIME (Tested at levels K–6, 9–12)	I Get It! Math: Measurement & Geometry (3–5) Read It! Draw It! Solve It! (2–4)	Head for Success (1–5) GMADE Math Resource Library (K–6, 9–12) Building Math Success (K–6, 9–12)
OPERATIONS & COMPUTATION	ADDITION (Tested at levels 1–12) Whole Numbers, Fractions, Decimals	MCP Math (1-6) I Get It! Math (3-5)* Nimble With Numbers (1-7) Read It! Draw It! Solve It! (1-5)	Thinking Algebraically (1–2) Head for Success (1–5) GMADE Math Resource Library (1–12) Building Math Success (1–12)
	SUBTRACTION (Tested at levels 1–12) Whole Numbers, Fractions, Decimals	MCP Math (1-6) I Get It! Math (3-5)* Nimble With Numbers (1-7) Read It! Draw It! Solve It! (1-5)	Thinking Algebraically (1–2) Head for Success (1–5) GMADE Math Resource Library (1–12) Building Math Success (1–12)
	MULTIPLICATION (Tested at levels 3–12) Whole Numbers, Fractions, Decimals	MCP Math (3-6) I Get It! Math (3-5)* Nimble With Numbers (3-5) Read It! Draw It! Solve It! (3-5)	Thinking Algebraically (3) Head for Success (3–5) GMADE Math Resource Library (3–12) Building Math Success (3–12)



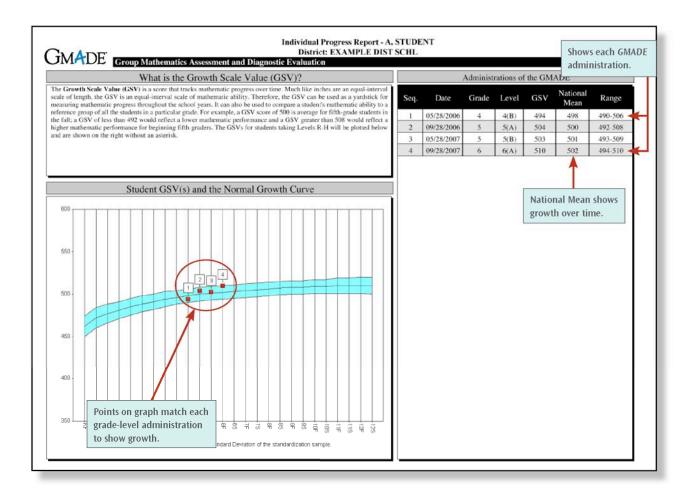
	If GMADE test reports indicate the	Then turn to these Pearso	on
	following CHALLENGES	SOLUTIONS	
	DIVISION (Tested at levels 3–12) Whole Numbers, Decimals	MCP Math (3–6) I Get It! Math (3–5)* Nimble With Numbers (3–7)	Read It! Draw It! Solve It! (3–5) Thinking Algebraically (3) Head for Success (3–5) GMADE Math Resource Library
	MULTIPLE OPERATIONS (Tested at levels 5–12) Fractions	MCP Math (5–6) Nimble With Numbers (5–7) Head for Success (5)	GMADE Math Resource Library (5–12) Building Math Success (5–12)
PROCESS & APPLICATION	ALGEBRA (Tested at levels 1, 5–8) One-Step, Multiple-Step	I Get It! Math: Problem Solving (5) MCP Math (1, 5-6)	Nimble With Numbers (5–7) Thinking Algebraically (1, 5) Head for Success (1, 5) GMADE Math Resource Library (1, 5–8) Building Math Success (1, 5–8)
	COMPARISON (Tested at levels K, 2–3, 5, 7–12) One-Step, Multiple-Step	MCP Math (K, 2-3, 5) I Get It! Math (3, 5)* Nimble With Numbers (5, 7) Read It! Draw It! Solve It! (2, 5)	Head for Success (2–3, 5) GMADE Math Resource Library (K, 2–3, 5, 7–12) Building Math Success (K, 2–3, 5, 7–12)
	GEOMETRY (Tested at levels K–1, 3–4, 6–12) One-Step, Multiple-Step	MCP Math (K-1, 3-4, 6) I Get It! Math: Measurement & Geometry (3-4) Read It! Draw It! Solve It! (1, 3-4)	Thinking Algebraically (1, 4) Head for Success (1, 3-4) GMADE Math Resource Library (K-1, 3-4, 6-12) Building Math Success (K-1, 3-4, 6-12)
	MEASUREMENT (Tested at levels 1–12) One-Step, Multiple-Step	MCP Math (1-6) I Get It! Math: Measurement & Geometry (3-4) Read It! Draw It! Solve It! (2, 5)	Problem-Solving Experiences (3–6) Head for Success (1–5) GMADE Math Resource Library (1–12) Building Math Success (1–12)
	MONEY (Tested at levels 1–4, 7–12) One-Step, Multiple-Step	MCP Math (1-4) Read It! Draw It! Solve It! (2) Thinking Algebraically (1, 4) Nimble With Numbers (1-4, 7)	Head for Success (1-4) GMADE Math Resource Library (1-4, 7-12) Building Math Success (1-4, 7-12)
	NUMERATION (Tested at levels K—12) One-Step, Multiple-Step	MCP Math (K–6) I Get It! Math (3, 5)** Read It! Draw It! Solve It! (2, 5) Thinking Algebraically (1, 4) Nimble With Numbers (1–7)	Problem-Solving Experiences (3–6) Head for Success (1–5) GMADE Math Resource Library (K–12) Building Math Success (K–12)
	QUANTITY (Tested at levels K–3, 5–12) One-Step	MCP Math (K-3, 5-6) Read It! Draw It! Solve It! (2, 5) Thinking Algebraically (1)	Nimble With Numbers (1–3, 5–7) Head for Success (1–3, 5) GMADE Math Resource Library (K–3, 5–12) Building Math Success (K–3, 5–12)
	SEQUENCE (Tested at levels K–2, 4) One-Step	MCP Math (K-2, 4) Read It! Draw It! Solve It! (2) Thinking Algebraically (1, 4) Nimble With Numbers (1-2, 4)	Head for Success (1–2, 4) GMADE Math Resource Library (K–2, 4) Building Math Success (K–2, 4)
	STATISTICS (Tested at levels 1–12) One-Step, Multiple-Step, Process	MCP Math (1–6) I Get It! Math: Problem Solving (5) Read It! Draw It! Solve It! (2, 5)	Head for Success (1–5) GMADE Math Resource Library (1–12) Building Math Success (1–12)
	TIME (Tested at levels K–12) One-Step, Multiple-Step	MCP Math (K-6) I Get It! Math (3, 5)* Read It! Draw It! Solve It! (2, 5)	Problem-Solving Experiences (3–6) Head for Success (1–5) GMADE Math Resource Library (K–12) Building Math Success (K–12)

*Multiple workbooks per grade level

Reassess

Measure student progress and AYP.

There are several ways to reassess with *GMADE*. After targeted skills are taught, students can be reassessed with Form B or an appropriate out-of-level form. This second assessment will measure progress and identify students' skill gain. Testing can be done at intervals of twelve weeks using the forms appropriate for each student's level. The chart on page 31 lists what levels can be administered to each grade for normative scoring on-level and out-of-level.





Out-of-Level Norms

Assess students at a range of abilities.

Each *GMADE* level contains questions that cover the appropriate skills expectation for that grade level. It also includes a slightly enhanced range of more difficult or easier items to more accurately determine what skills students know. Therefore, in addition to testing on-level students, some levels of *GMADE* can also be administered "out-of-level" as shown in the tables below.

G•MADE Test Levels with Age-Based Norms

 $\label{thm:contain} The \ G^{\bullet}MADE \ Supplementary \ Norms \ Book \ will \ contain \ the \ age-based \ norms \ as \ listed \ in \ the \ following \ table. Please note that 5-year-olds have age-based norms for \ Level \ R \ only.$

				G•MA	ADE Test	Levels			
Age Band	R	1	2	3	4	5	6	М	Н
5-0-5-5									
5-6-5-11									
6-0-6-5									
6-6-6-11									
7-0-7-5									-
7-6-7-11									
8-0-8-5									
8-6-8-11									
9-0-9-5									
9-6-9-11									
10-0-10-5									
10-6-10-11				2250					
11-0-11-5									-
11-6-11-11									-
12-0-12-5					The same				
12-6-12-11					1000000				
13-0-13-11									
14-0-14-11									
15-0-15-11									
16-0-17-11									
18-0 & above									

Tables show examples of Test Levels with Age-Based Norms, left, and with Grade-Based Norms, below.

How to Use This Table

Each G•MADE level can be administered to a spepreferred reporting metric. To determine which levhis or her chronological age in the first column, ar administered. For example, a student who is 14-8should consider any special circumstances when smay include sporadic school attendance or previot. To derive a profile of strengths and needs, the exaexperience some success.

				G•N	ADE Lev	els			
Grades	R	1	2	3	4	5	6	М	н
Kdg.	TO BE	Spring							
1	Fall	11	Spring						
2		Fall	35 E	Spring					
3			Fall		Spring				
4				Fall	Tall (c)	Spring			L
5					Fall	Start Area	Spring		
6						Fall		Spring	
7							Fall	1	
8								S. Aist	Spring
9	$\overline{}$	Black Recon	mended G•MA	DE level for se	adata) dall as a	des 1		Fall	
10	Shade		udents suspect			2000 CO			
11	Shaded: \$		udents who are						5
12		,		-					164153

Learn More: 877-324-2401 Option 3 A4L@pearson.com

www.PearsonGMADE.com



