How to "read" a math assessment test from Let's Go Learn
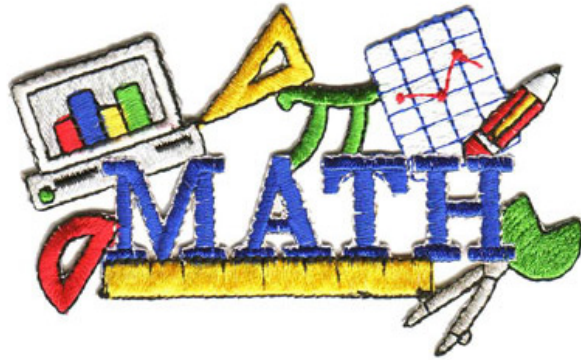
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Screenshots showing how to 'read' math assessment tests from Let's Go Learn including:

ADAM K-7
Diagnostic Assessment and Progress Monitoring Report

Detailed Report

ADAM (Adaptive Diagnostic Assessment of Mathematics) K-7

ADAM K-7 is Let's Go Learn's newest assessment built upon the OAASIS™ II platform. It takes individualized student assessment to a new level by using more sophisticated algorithms that adjust to student responses in real-time. Furthermore, the fundamental design of *ADAM* departs from political conventions of defining mathematics tests primarily by accountability definitions. *ADAM K-7*, while covering the 5 strands of NCTM and National Common Core Standards, uses instead a 44 sub-test model for diagnostic assessment and progress monitoring. These sub-tests represent 44 linear skills that make up K-7 mathematics. The other important feature of *ADAM K-7* is that it has built-in progress monitoring. Individual strands (Numbers & Operations, Measurement, Data Analysis, Geometry, Algebra) can be assessed individually for targeted progress monitoring. This fundamentally expands the scope in which *ADAM K-7* can be used.

Confidential Student Information

Student: **Dwight**
Assessment Date: **05/29/2012**

Grade: **5.9**
Age: **11 yrs   1 months**

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www.LetsGoLearn.com   -   help@letsgolearn.com

ADAM™ K-7 - Detail Report Summary Page
(Adaptive Diagnostic Assessment of Mathematics K-7)

Student: **Dwight**
Age: **11** yrs   **1** months
Grade: **5.9**

Summary Scores

Score Ranges by Grade								05/29/2012					
K	1	2	3	4	5	6	7	Raw Score	Grade Level	Raw Score	Grade Level	Raw Score	Grade Level
Numbers and Operations													
1-4	5-13	14-22	23-41	42-61	62-83	84-91	92-105	50	4.43				
Measurement													
1-2	3-4	5-12	13-18	19-26	27-31	NA	32-34	27	5.17				
Data Analysis													
1-1	2-4	5-9	10-12	13-16	17-21	22-27	28-36	19	5.50				
Geometry													
1-4	5-7	8-10	11-19	20-31	31-36	37-44	45-53	32	5.29				
Algebra													
1-1	2-4	5-6	7-13	14-20	21-25	26-31	32-43	20	4.88				
TOTAL													
0-12	13-32	33-59	60-103	104-154	155-196	197-224	225-271	148	4.87				

Here is the first page of the report.
A summary overview of performance.

This graph offers some general insight into the student's mastery level.

Raw Score

actual score earned

Grade Level

what grade level mastery student has

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ADAM™ K-7 - Numbers & Operations Strand Detail
(Adaptive Diagnostic Assessment of Mathematics K-7)

Student: **Dwight**
Age: **11** yrs **1** months
Grade: **5.9**

Test Date 1: **05/29/2012**   Test Date 2:   Test Date 3:

+ represents mastery for each construct within each testing date.
- represents a non-mastery.
nt indicates that the construct or sub-test was not tested.

First (-) Sign Above a
(+) Sign is the Student's
Instructional Point

Sub-test	Section Title (Constructs)	Raw Score	Grade Level Score	1	2	3
Numbers						
	Rounding (10s, 100s, 1,000s)	10	4.9	+		
	Rounding	9	3.9	+		
	Comma & Place Holder	8	3.5	+		
	Counting (by hundreds and thousands)	7	2.9	+		
	Text and Numerals	6	2.6	+		
	Counting (by 1s 2s 3s 5s and 10s)	5	2.3	+		
	Numerals (2 digit)	4	1.9	+		
	Cardinal & Ordinal #'s	3	1.5	+		
	Counting Backwards	2	0.9	+		
	Numerals	1	0.5	+		
Place Value						
	Place Value. Decimals.	6	5.9	+		
	Place Value (Thousand, Ten Thousand, Hundred Thousand, Millions)	5	4.9	+		
	Place Value = Expanded Form	4	3.9	+		
	Place Value (Thousand, Ten Thousand and Hundred Thousand)	3	3.5	+		
	Place Value	2	2.9	+		
	Place Value	1	1.9	+		
Comparing and Ordering						
	Decimals (Comparing & Ordering)	6	4.9	-		
	Comparing & Ordering	5	4.5			
	Money (equiv and non-equiv numbers using money)	4	3.9			
	Comparing Using Symbols (3-digits)	3	2.9			
	Comparing Using Symbols (2-digits)	2	1.9			
	Comparing (0-10)	1	0.9			
Addition of Whole Numbers						
	Addition (Multiple Digits)	7	4.9			
	Addition (Regrouping)	6	4.5			
	Multi-digit Addition (non-regrouping)	5	2.9			
	Addition (2-digit + 1-digit)	4	1.9			
	Addition- (to 10)	3	1.6			
	Addition- Equivalent Forms	2	1.3			
	Modeling addition and subtraction with objects	1	0.9			

Sub-test	Section Title (Constructs)	Raw Score	Grade Level Score	1	2	3
Subtraction of Whole Numbers						
	Subtraction (Regrouping)	3	4.9	+		
	Multi-digit Subtraction (non-regrouping)	2	2.9	+		
	Subtracting from 10	1	1.9	+		
Multiplication of Whole Numbers						
	Multiplication (Commutative, Associative, Distributed)	9	5.9	nt		
	Multiplication (Two and three digit numbers by a two digit)	8	5.5	nt		
	Multiplication (Three digit numbers by a single digit numbers)	7	4.9	nt		
	Multiplication (Two digit numbers by a single digit)	6	4.6	nt		
	Multiplication (Commutative, Associative, Distributed)	5	4.3	-		
	Multiplication (Powers of Ten)	4	3.9	-		
	Multiplication Facts (Factors 2 to 10)	3	3.7	+		
	Multiplication Facts (Factors of 0 and 1)	2	3.5	+		
	Multiplication Readiness (grouping and repeated addition)	1	3.2	+		
Division of Whole Numbers						
	Division (four digits)	5	5.9	+		
	Division (Whole Numbers)	4	4.9	+		

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Student: **Dwight**
Age: **11** yrs **1** months
Grade: **5.9**

Sub-test	Section Title (Constructs)	Raw Score	Grade Level Score	1	2	3
Fractions						
	Adding and Subtracting Fractions (unlike denominator)	26	7.9	nt		
	Converting Fractions	25	7.5	nt		
	Least Common Multiple & Greatest Common Factor	24	6.9	nt		
	Multiplying and Dividing Positive Fractions	23	6.5	nt		
	Solving Problems Using Fractions	22	5.9	nt		
	Fractions (Multiplying & Dividing Fractions)	21	5.8	nt		
	Fractions (multiplying patterns of fractions)	20	5.6	nt		
	Subtracting Fractions	19	5.5	nt		
	Fractions (Adding unlike denominators)	18	5.3	nt		
	Fractions (proper, improper, and mixed Fractions)	17	5.2	nt		
	Multiplying Fractions by a whole number	16	4.9	nt		
	Fractions (Adding like denominators)	15	4.8	nt		
	Fractions (least common multiple)	14	4.8	-		
	Fractions (Comparing and Ordering)	13	4.5	nt		
	Fractions (as decimals and place value tenth and hundredth)	12	4.3	-		
	Fraction (equivalent fractions lowest terms)	11	4.2	+		
	Fractions (solving problems)	10	3.9	+		
	Fractions (as decimals and place value tenth and hundredth)	9	3.6	+		
	Ordering Fractions	8	3.6	+		
	Comparing (Fractions)	7	3.5	+		
	Fractions (Equivalent fractions)	6	3.3	+		
	Fractions (Representing Fractions)	5	3.2	+		
	Fraction (equivalent fractions)	4	2.9	+		
	Fractions (as parts of sets)	3	2.6	+		
	Fractions (Representing & comparing fractions, like denom or num)	2	2.3	+		
	Partitioning objects into parts	1	1.9	+		
Number Theory						
	Number Theory (Divisibility rules)	7	5.9	nt		
	Number Theory (Common greatest factors)	6	5.7	nt		
	Number Theory (Prime Factors)	5	5.5	nt		
	Number Theory (prime/composite numbers)	4	5.2	nt		
	Number Theory (Multiples)	3	4.9	nt		
	Number Theory (Factors)	2	4.6	nt		
	Number Theory (Divisibility)	1	4.3	-		

Sub-test	Section Title (Constructs)	Raw Score	Grade Level Score	1	2	3
Decimal Operations						
	Terminating and Repeating Decimals	4	7.9	nt		
	Decimals (Division)	3	6.9	nt		
	Decimals (Multiplication & Money Notation)	2	6.8	nt		
	Decimals (Adding and Subtracting)	1	6.3	-		
Percentages						
	Discounts and Markups	8	7.9	nt		
	Percentage Increase and Decrease	7	7.5	nt		
	Calculate Percentages	6	6.9	nt		
	Percentages (estimating and calculating)	5	6.9	nt		
	Percentages (Proportions)	4	6.7	nt		
	Percentages (Ratios)	3	6.5	nt		
	Percentages (percents & decimals)	2	6.4	nt		
	Percentages (percents & fractions)	1	6.2	-		
Ratios and Proportions						
	Using Proportions to Solve Problems	2	7.9	nt		
	Interpreting and Using Ratios	1	6.9	nt		
Positive and Negative Integers						
	Multiplying and Dividing Negative Numbers	6	7.2	nt		
	Adding and Subtracting Negative Numbers	5	7.1	nt		
	Absolute Value	4	6.9	nt		
	Solving Problems with Integer Operations	3	6.7	nt		
	Ordering Rational Numbers	2	6.5	nt		
	Positive and Negative Numbers	1	6.2	nt		
Exponents						
	Rational Numbers and Exponent Rules	6	7.9	nt		
	Square Roots	5	7.6	nt		
	Negative Whole Number Exponents	4	7.7	nt		
	Indicial Numbers	3	7.6	nt		
	Rational Integer Operations and Powers	2	7.5	nt		
	Scientific Notation	1	7.3	nt		

Measurement Strand Detail

Let's Go Learn
ADAM™ K-7 - Measurement Strand Detail
(Adaptive Diagnostic Assessment of Mathematics K-7)

Student: **Dwight**
Age: **11** yrs **1** months
Grade: **5.9**

Test Date 1: **05/29/2012**   Test Date 2:   Test Date 3:

+ represents mastery for each construct within each testing date.
- represents a non-mastery.
nt indicates that the construct or sub-test was not tested.

First (-) Sign Above a (+) Sign is the Student's Instructional Point

Sub-test	Section Title (Constructs)	Raw Score	Grade Level Score	1	2	3
Money						
	Money (Values)	2	2.9	+		
	Money Recognition	1	0.9	+		
Time						
	Time - Calendar (Weeks)	4	3.9	+		
	Elapsed Time	3	3.5	+		
	Time - Calendar (Months)	2	2.9	+		
	Time (Reading a clock)	1	1.9	+		
Temperature						
	Temperature - Reading Temp.	2	3.9	+		
	Temperature - Concept	1	2.9	+		
Length						
	Converting Units (More Complex)	12	5.9	+		
	Metric ↔ Comparing Metric Lengths	11	4.9	+		
	Metric ↔ Converting Units of Lengths	10	4.8	+		
	Metric ↔ Length	9	4.6	+		
	Customary – Comparing Units of Length	8	4.5	+		
	Customary – Converting Units of Length	7	4.3	+		
	Customary – Length	6	4.2	+		
	Length, Customary and Metric Units	5	3.9	+		
	Customary & Metric - Concepts of Length	4	2.9	+		
	Number Line	3	2.5	+		
	Measuring Length by Object	2	1.9	+		
	Comparative Vocabulary	1	0.9	+		

Sub-test	Section Title (Constructs)	Raw Score	Grade Level Score	1	2	3
Weight						
	Weight – Converting and comparing units of weight	4	5.9	+		
	Weight – Units of Measure	3	4.9	+		
	Weight – customary	2	3.9	+		
	Customary and Metric - Concepts of Weight	1	2.9	+		
Capacity & Volume						
	Metric – Comparing Metric Capacity/Volume	5	5.9	nt		
	Customary ↔Units of Capacity/volume	4	5.5	-		
	Capacity – Units of Measure	3	3.9	+		
	Metric – Capacity	2	2.9	+		
	Customary ↔Capacity	1	2.5	+		
Rate						
	Solving Rate Problems	5	7.9	nt		
	Scale	4	7.6	nt		
	Comparing Rates	3	7.3	nt		
	Solving Problems Using Rate	2	5.9	nt		
	Understanding Rate	1	5.5	-		

Geometry Strand Detail

Let's Go Learn
ADAM™ K-7 - Geometry Strand Detail
(Adaptive Diagnostic Assessment of Mathematics K-7)

Student: **Dwight**
Age: **11** yrs **1** months
Grade: **5.9**

Test Date 1: **05/29/2012**   Test Date 2:   Test Date 3:

+ represents mastery for each construct within each testing date.
- represents a non-mastery.
nt indicates that the construct or sub-test was not tested.

First (-) Sign Above a (+) Sign is the Student's Instructional Point

Sub-test	Section Title (Constructs)	Score	Grade Level Score	1	2	3
Location & Direction						
	Location & Direction	2	0.9	+		
	Location Vocabulary	1	0.5	+		
2D Shapes						
	Solving Problems Involving Congruence	12	7.9	+		
	Translations and Reflections	11	7.6	-		
	Elements of Geometric Figures	10	7.3	+		
	Symmetry	9	4.9	+		
	Identifying Congruency Figures	8	4.5	+		
	Polygons	7	3.9	+		
	Forming Polygons	6	2.9	+		
	Describing Shapes	5	2.5	+		
	Shapes – Attributes	4	1.9	+		
	2D Shapes (Name Given)	3	1.5	+		
	Comparing Shapes	2	0.9	+		
	2D Shapes (Shape Given)	1	0.5	+		
3D Shapes						
	3D Geometric Elements	6	7.9	nt		
	Patterns for 3-Dimensional Figures	5	7.5	-		
	Qualities of Three-Dimensional Figures	4	4.9	+		
	Composing 3D Shapes	3	3.9	+		
	3D Shapes	2	3.5	+		
	3D Faces	1	1.9	+		
Triangles						
	Pythagorean Theorem	5	7.9	-		
	Solving for Unknown Angles	4	6.9	+		
	Triangle Definitions	3	5.9	+		
	Right Angle Knowledge	2	3.9	+		
	Triangles – Attributes	1	3.5	+		
Quadrilaterals						
	Quadrilateral Definitions	2	5.9	nt		
	Quadrilaterals – Attributes	1	3.9	-		

Sub-test	Section Title (Constructs)	Score	Grade Level Score	1	2	3
Area & Perimeter						
	Area of Complex Figures	9	7.9	nt		
	"Perimeter, Area, and Volume"	8	7.5	-		
	Area of Triangles and Parallelograms	7	6.9	+		
	Units of Measure (2D & 3D Shapes)	6	5.9	+		
	Area and Perimeter Word Problems	5	4.9	+		
	Solving for Area vs Perimeter	4	3.9	+		
	"Area vs Perimeter (figures with the same area, different perimeters)"	3	3.6	+		
	Area (square units shown)	2	3.3	+		
	Dividing Rectangles into Squares (precursor to area/perimeter)	1	2.9	+		
Lines						
	Parallel and Perpendicular Lines	4	4.9	nt		
	Vertical Line Segment Length	3	4.8	-		
	Horizontal Line Segment Length	2	4.5	+		
	Plotting Points of a Linear Equation	1	4.3	+		
Circles						
	Calculating using Pi	3	6.9	nt		
	Pi	2	6.5	nt		
	Qualities of a Circle	1	4.9	-		
Angles						
	Types of Angles	3	6.9	-		
	Sum of Angles	2	5.9	+		
	Angles and Angle Measurement	1	4.9	+		
Volume & Surface Area						
	Surface Area and Volume of Complex Solids	4	7.9	nt		
	Volume of Triangular Prisms and Cylinders	3	6.9	nt		
	Volume	2	5.9	-		
	Surface Area	1	5.5	+		
Geometric Relationships						
	Changes of Scale	3	7.9	nt		
	Expressing Geometric Relationship	2	6.9	nt		
	Using Variables in Geometric Equations	1	6.5	-		

Data Analysis Strand Detail

Let's Go Learn
ADAM™ K-7 - Data Analysis Strand Detail
(Adaptive Diagnostic Assessment of Mathematics K-7)

Student: **Dwight**
Age: **11** yrs **1** months
Grade: **5.9**

Test Date 1: **05/29/2012**   Test Date 2:   Test Date 3:

+ represents mastery for each construct within each testing date.
- represents a non-mastery.
nt indicates that the construct or sub-test was not tested.

First (-) Sign Above a (+) Sign is the Student's Instructional Point

Sub-test	Section Title (Constructs)	Score	Grade Level Score	1	2	3
Patterns & Sorting						
	Problem Solving (Linear Patterns)	5	2.9	+		
	Extending Linear Patterns	4	2.5	+		
	Extending Patterns	3	1.9	+		
	Sorting by Common Attributes	2	1.5	+		
	Simple Patterns	1	0.9	+		
Data Representation						
	Problem Solving (Data Representation)	4	2.9	+		
	Features of Data Sets	3	2.6	+		
	Multiple Representations of the Same Data	2	2.3	+		
	Simple Data Representation	1	1.9	+		
Simple Probability						
	Probability of Multiple Events	5	7.9	nt		
	Representing Probabilities	4	7.5	-		
	Estimating Future Events	3	6.9	+		
	Simple Probability	2	4.9	+		
	Likelihood	1	3.9	+		
Outcomes						
	Representing Possible Outcomes	4	6.9	nt		
	Representing Outcomes	3	4.9	-		
	Representing Results	2	3.9	+		
	Recording Outcomes	1	3.5	+		

Sub-test	Section Title (Constructs)	Score	Grade Level Score	1	2	3
Displaying Data						
	Scatterplots	5	7.9	nt		
	Data Representation	4	7.5	nt		
	Comparing Data (Fractions and Percents)	3	5.9	nt		
	Displaying Data	2	5.5	-		
	Interpreting Graphs	1	4.9	+		
Measures of Central Tendency						
	Data Set Quartiles	7	7.9	nt		
	Use of Measures of Central Tendency	6	6.9	nt		
	Outliers	5	6.8	-		
	Changing Central Tendency	4	6.5	-		
	Computing Measures of Central Tendency	3	6.3	+		
	"Mean, Median, and Mode (computing)"	2	5.9	+		
	"Mean, Median, and Mode"	1	4.9	+		
Ordered Pairs						
	Writing Ordered Pairs	2	5.9	-		
	Identifying Ordered Pairs	1	5.5	+		
Samples						
	Independent and Dependent Events	4	7.9	nt		
	Sampling Errors	3	7.8	nt		
	Selecting Samples	2	7.5	nt		
	Samples	1	7.3	nt		

Algebraic Thinking Strand Detail

Let's Go Learn
ADAM™ K-7 - Algebraic Thinking Strand Detail
(Adaptive Diagnostic Assessment of Mathematics K-7)

Student: **Dwight**
Age: **11** yrs **1** months
Grade: **5.9**

Test Date 1: **05/29/2012**   Test Date 2:   Test Date 3:

+ represents mastery for each construct within each testing date.
- represents a non-mastery.
nt indicates that the construct or sub-test was not tested.

First (-) Sign Above a (+) Sign is the Student's Instructional Point

Sub-test	Section Title (Constructs)	Score	Grade Level Score	1	2	3
Relationships						
	Equivalent Multiplication	7	4.9	-		
	Equivalent Addition	6	4.5	+		
	Rules of Linear Patterns	5	3.9	+		
	Comm. & Assoc. Properties of Mult.	4	3.8	+		
	Symbolic Unit Conversions	3	3.5	+		
	Relationships of Quantities	2	3.3	+		
	Sorting by Unlike Objects	1	0.9	+		
Expressions & Problem Solving						
	Multiplying and Dividing Monomials	18	7.9	nt		
	Positive Whole Number Powers	17	7.8	nt		
	Simplifying Expressions	16	7.6	nt		
	Using Order of Operations to Evaluate Expressions	15	7.4	nt		
	Writing Expressions	14	7.2	nt		
	Solving Problems Using Order of Operations	13	6.9	nt		
	Applying Order of Operations	12	6.8	nt		
	Equivalent Expressions	11	6.5	nt		
	Writing Algebraic Expressions	10	6.3	nt		
	Using Distributive Property	9	5.9	-		
	Order of Operations (with Parentheses)	8	4.9	+		
	Mathematical Expressions using Parentheses	7	4.5	+		
	Selecting Operations	6	3.9	+		
	Problem Solving Using Data (add. & subtr.)	5	2.9	+		
	Problem Solving (add. & subtr.)	4	2.5	+		
	Number Sentences and Problems (add. & subtr.)	3	1.9	+		
	Symbols	2	1.6	+		
	Number Sentences (addition and subtraction)	1	1.3	+		

Sub-test	Section Title (Constructs)	Score	Grade Level Score	1	2	3
Equations						
	Solving Multi-Step Rate Problems	13	7.9	nt		
	Solving Two-Step Linear Equations	12	7.6	nt		
	Algebraic Terminology	11	7.3	nt		
	Solving One-Step Inequalities	10	6.9	nt		
	Solving One-Step Linear Equations	9	6.5	nt		
	Solving Linear Functions	8	5.9	nt		
	Solving by Substitution	7	5.6	-		
	Problem Solving and Data	6	5.3	-		
	Simple Equations	5	4.9	+		
	Formulas	4	4.6	+		
	Concept of Variables	3	4.3	+		
	Functional Relationships (Problem Solving)	2	3.9	+		
	Problem Solving with Equations/Inequalities	1	3.5	+		
Graphing Algebraic Relationships						
	Plotting Set Ratios	5	7.9	nt		
	Slope	4	7.8	nt		
	Graphing Functions	3	7.5	nt		
	Graphic Representations	2	7.3	-		
	Coordinate Plane	1	5.9	+		

The following pages (pictured) are more breakdowns of specific areas of what was tested.

+ = mastered
- = need help

Let's Go Learn

DOMA Pre-Algebra Assessment Report

Confidential Information

Student: **Molly**

Assessment Date: **07/05/2012**

Grade: **10.9**

Age: **15** yrs **0 months**

DOMA (Diagnostic Online Math Assessment) Pre-Algebra Overview

DOMA Pre-Algebra was built on the Let's Go Learn OAASIS™ platform, which uses adaptive assessment technology to intelligently decide which specific test items will be given to each student. Based on individual student performance during the assessment, *DOMA*, with OAASIS's help, adjusts in difficulty, item selection, and construct selection. These adaptations allow *DOMA* to measure a wide range of student abilities efficiently and accurately.

Part I: Pre-Screening: This section presents students with questions aligned to most of the 14 Pre-Algebra constructs that have been determined to encompass the prerequisite knowledge necessary for success in Algebra I. The 14 Pre-Algebra constructs are aligned to NCTM standards. The majority of the questions in this section require students to key in answers, thus reducing the chance that they will guess correct answers, which can skew results. Based on the Pre-Screening results, students may test out of constructs on which they have demonstrated mastery. Constructs in Part II of this assessment may be skipped or abbreviated based on performance.

Part II: Pre-Algebra Constructs: This part of *DOMA* contains the detailed test items that make up each of the 14 Pre-Algebra constructs. Construct selection will vary depending on the student's performance. A high error* rate may terminate a construct before a student has completed all of its questions.

Part III: Foundation Skills: If students' errors demonstrate a possible deficit in multiplication math facts or reading comprehension, this section is given. Otherwise, it will be skipped.

See "Interpreting Pre-Algebra Scores." www.letsgolearn.com/media/PDFs/InterPreA.pdf

www.LetsGoLearn.com
help@letsgolearn.com

DOMA PRE-ALGEBRA

Here is the front cover of what the test results will look like.

You will see the "version" of the test...in this case "Pre-Algebra"

You will see the student's name, date they took test, grade, and age.

This blue paragraph is worth a read through. It talks about how the test is "adaptive" (questions get harder or easier depending on kid's progress) AND what the measurement constructs are below.

Let's Go Learn

Pre-Algebra Diagnostic

Student: Molly   **Assessment Date:** 07/05/2012   **Grade:** 10.9

Diagnostic Summary - (7 out of 14 constructs mastered)

Part I - Prescreening	% of Part 2 skipped		Results
Prescreening	28.6	Coordinate Graphing	○
Part II - Pre-Algebra	**Results**	Linear Func. & Exte. Pat.	●
Integer Operations	●	Simple Equations	●
Fraction Operations	●	Geometry	◐
Decimal Operations	●	Interpreting Data	○
Comparing & Converting	○	Simple Probability	●
Estimating & Rounding	○	**Part III - Foundation Skills**	**% Correct**
Evaluating Exponents	◐	Timed Mult. Math Facts	N/T
Ratios and Proportions	○	Untimed Mult. Math Facts	N/T
Simplifying Expressions	●	Reading Comp.(5th gr level)	100

Test Question Legend

+	Tested Correctly
-	Tested Incorrectly
N/T	Not Tested
●	Mastery of Construct*
◐	Partial Mastery of Construct*
○	Non-mastery of Construct*

* Mastery of a construct is determined by the student either correctly answering the corresponding pre-screening question or correctly answering 75% or more of the questions in the full construct set. Partial mastery is determined by full construct testing and a percent correct of greater than 50% but less than 75%.

● Construct 1: Integer Operations
Mastery demonstrated by Pre-Screening

Test Question	Results
Adding two positive numbers	nt
Subtracting two positive numbers	nt
Multiplying two positive numbers	nt
Adding a positive and a negative	nt
Adding two negative numbers	nt
Subtracting a negative and a positive	nt
Subtracting two negative numbers	nt
Dividing two negative numbers	nt
Multiplying a positive and a negative	nt
Dividing a positive and a negative	nt
Absolute value	nt

● Construct 2: Fraction Operations
Mastery demonstrated by Pre-Screening

Test Question	Results
Fraction identification	nt
Simplifying fractions	nt
Adding fractions with the same denominator	nt
Subtracting fractions with the same denominator	nt
Adding fractions with different denominators	nt
Subtracting fractions with different denominators	nt
Multiplying fractions	nt
Dividing fractions	nt
Adding mixed numbers with regrouping	nt
Subtracting mixed numbers with regrouping	nt
Multiplying mixed numbers	nt
Dividing mixed numbers	nt

● Construct 3: Decimal Operations
Mastery demonstrated by complete construct testing

Test Question	Results
Adding decimals, same place values	+
Adding decimals, different place values	-
Subtracting decimals, same place values	-
Subtracting decimals, different place values	+
Multiplying decimals (vertically written)	+
Multiplying decimals (horizontally written)	+
Dividing a whole number by a whole number (decimal answer)	+
Dividing a whole number by a decimal	+
Dividing a decimal by a decimal	+

○ Construct 4: Comparing and Converting
Non-mastery demonstrated by construct testing

Test Question	Results
Converting a fraction to a decimal	+
Converting a decimal to a fraction	-
Converting a decimal to a percent	+
Converting a percent to a decimal	+
Converting a percent to a fraction	-
Converting a fraction to a percent	-
Ordering fractions	-
Ordering mixed numbers	-
Ordering fractions, decimals, and percents	nt
Ordering fractions, decimals, and percents	nt

○ Construct 5: Estimating and Rounding
Non-mastery demonstrated by construct testing

Test Question	Results
Estimating measurement	+
Estimating measurement (metric)	-
Rounding whole numbers (hundreds)	-
Rounding whole numbers (ten-millions)	-
Rounding decimals (hundredths)	nt
Rounding decimals (ten-thousandths)	nt

Here at the top is an overview of the kid's performance on the different skills.

Full green circle = mastery
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Then below is each concept broken down even more specifically.

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◐ Construct 6: Evaluating Exponents

Partial mastery demonstrated by construct testing

Test Question	Results
Knowledge of base and exponent	+
Definition of base	-
Definition of exponent	+
Evaluating exponents	+
Scientific notation (converting to)	-
Scientific notation (converting from)	+

○ Construct 7: Ratios and Proportions

Non-mastery demonstrated by construct testing

Test Question	Results
Writing as a ratio from a word problem	+
Solving proportions (using : symbol)	-
Solving proportions (using fractions)	-
Solving proportions, word problem	-
Rewriting a proportion as a percent	nt

● Construct 8: Simplifying Expressions

Mastery demonstrated by Pre-Screening

Test Question	Results
Order of operations (simple)	nt
Order of operations (harder)	nt
Parentheses	nt
Simplifying with variables	nt
Simplifying with variables and parentheses	nt
Simplifying with variables and exponents	nt

○ Construct 9: Coordinate Graphing

Non-mastery demonstrated by construct testing

Test Question	Results
Knowledge of quadrants	-
Knowledge of quadrants	+
Point identification	-
Point identification	-
Knowledge of line equations	-
Knowledge of slope	nt
Knowledge of y-intercept	nt
Knowledge of line equations	nt

● Construct 10: Linear Functions and Extending Patterns

Mastery demonstrated by complete construct testing

Test Question	Results
Number patterns	+
Number patterns as a data chart	+
Complex number patterns	+
Identifying the graph of an input/output table	-
Solving for one variable, basic equation	+
Solving for one variable, fraction in equation	+
Solving for one variable, harder equation	+
Completing an input/output for a function	+

● Construct 11: Simple Equations

Mastery demonstrated by complete construct testing

Test Question	Results
Solving one-step equations, add/sub	+
Solving one-step equations, add/sub	+
Solving one-step equations, mult/div	+
Solving one-step equations, ratio	+
Solving two-step equations	+
Solving two-step equations, harder	-

◐ Construct 12: Geometry

Partial mastery demonstrated by construct testing

Test Question	Results
Finding perimeter of a rectangle	-
Finding area of a square	+
Finding area of a rectangle	+
Finding missing angle measurement of a triangle	+
Finding area of a triangle	+
Solving a triangle	-
Finding missing angle measurement of a circle	-
Finding circumference of a circle	+
Finding area of a circle	-
Finding surface area of a rectangular prism	+
Finding volume of a cylinder	-

○ Construct 13: Interpreting Data

Non-mastery demonstrated by construct testing

Test Question	Results
Reading a bar graph	+
Reading a bar graph and finding a range	-
Reading a pie graph	-
Reading a table, performing a calculation	-
Reading a table, drawing a conclusion	+
Finding the sample space of a data set	+
Finding an average of a data set	+
Finding the mean of a data set	-
Finding the median of a data set	-
Finding the mode of a data set	nt

● Construct 14: Simple Probability

Mastery demonstrated by Pre-Screening

Test Question	Results
Probability rule	nt
General rule of a coin flip	nt
Probability of a coin flip	nt
Probability of dice	nt
Simple probability	nt
Simple probability	nt
Simple probability	nt

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These assessment tests can show you exactly where to focus for reinforcement!

Let's Go Learn

DOMA: Algebra Assessment Report

Confidential Information

Student: **Tom**

Assessment Date: **2/08/2005**

Grade: **8.5**

Age: **14 yrs 7 months**

DOMA (Diagnostic Online Math Assessment) Algebra Overview

DOMA Algebra was built on the Let's Go Learn OAASIS™ platform, which uses adaptive assessment technology to intelligently decide which specific test items will be given to each student. Based on individual student performance during the assessment, *DOMA*, with OAASIS's help, adjusts in difficulty, item selection, and construct selection. These adaptations allow *DOMA* to measure a wide range of student abilities efficiently and accurately.

Part I: Pre-Screening: This section presents students with two questions for each of 11 Algebra constructs that have been determined to encompass the knowledge necessary for success in Algebra I. The 11 Algebra constructs are aligned to NCTM standards. Based on their Pre-Screening results, students may test out of constructs on which they have demonstrated mastery. Constructs in Part II of this assessment may be skipped or abbreviated based on performance.

Part II: Pre-Algebra Constructs: This part of *DOMA* contains the detailed test items that make up each of the 11 Algebra constructs. Construct selection will vary depending on the student's performance. A high error* rate may terminate a construct before a student has completed all of its questions.

See "Interpreting Algebra Scores." www.letsgolearn.com/media/PDFs/InterAlg.pdf

www.LetsGoLearn.com
help@letsgolearn.com

Let's Go Learn

Algebra Diagnostic

Student: Tom   Assessment Date: 2/08/2005   Grade: 8.5

Diagnostic Summary - (6 out of 11 constructs mastered)

Part I - Prescreening 75.1 % Correct

Prescreening ....   Results

Part II - Algebra   Results

Eval. Adv. Exponents .... 🟢	Solv. & Grap. Sys. of Lin Equ.. 🟡
Solving Linear Equations........ 🟢	Polynomial Operations .... 🔴
Graph & Analyze Linear Equ .. 🟢	Factoring Polynomials .... 🔴
Relations & Functions. .... 🟢	Radical Expressions & Equ .... 🟡
Solving & Graphing Inequal.... 🟢	Quadratic Expressions .... 🟢
	Rational Expres. & Equ. .... 🔴

Test Question Legend
+   **Tested Correctly**
-    **Tested Incorrectly**
N/T   **Not Tested**

🟢   **Mastery of Construct***

🟡   **Partial Mastery of Construct***

🔴   **Non-mastery of Construct***

* Mastery of a construct is determined by the student either correctly answering the corresponding pre-screening question or correctly answering 75% or more of the questions in the full construct set. Partial mastery is determined by full construct testing and a percent correct of greater than 50% but less than 75%.

🟢 Construct 1: Evaluating Advanced Exponents
Mastery demonstrated by Pre-Screening

Test Question	Results
Zero exponent rule	nt
Applying a negative exponent	nt
Multiplying monomials	nt
Dividing monomials	nt
Applying negative exponents to variables	nt
Multiplying in scientific notation	nt
Dividing in scientific notation	nt

🟢 Construct 2: Solving Linear Equations
Mastery demonstrated by Pre-Screening

Test Question	Results
Solving a multi-step equation	nt
Solving an equation with no solution set	nt
Solving an equation with an infinite solution set......	nt
Isolating variables.....................................	nt
Solving a word problem involving percent...............	nt
Solving absolute value equations	nt

🟢 Construct 3: Graph and Analyze Linear Equations
Mastery demonstrated by complete construct testing

Test Question	Results
Graphing an equation.....................................	+
Graphing an absolute value equation.....................	+
Deriving an equation from a graph	+
Deriving an equation from the y-intercept and slope	+
Deriving an equation from two points	+
Writing an equation for a parallel line	+
Writing an equation for a perpendicular line	+
Verifying a point on a line	+
Determining perimeter of a polygon from coordinates.....................................	-

🟢 Construct 4: Relations and Functions
Mastery demonstrated by complete construct testing

Test Question	Results
Identifying a function from a relation	+
Completing the input/output for a function...............	+
Identifying range/domain	+
Identifying a graph from a relation chart..................	-
Writing a function from data.....................................	+
Identifying a function from a graph	-
Using a stem and leaf table.....................................	+

🟢 Construct 5: Solving and Graphing Inequalities
Mastery demonstrated by complete construct testing

Test Question	Results
Solving a linear inequality.....................................	+
Solving an absolute value inequality	+
Solving a compound inequality.....................................	+
Graphing a two-variable inequality	-
Graphing an inequality system	+

🟡 Construct 6: Solving and Graphing Systems of Linear Equations
Non-mastery demonstrated by construct testing

Test Question	Results
Solving systems using substitution............................	+
Solving systems using addition	+
Solving systems using subtraction	+
Solving systems using multiplication	-
Identifying parallel line solution sets	-
Identifying infinite solution sets.....................................	+
Graphing systems	-
Solving three-variable systems	-

- 2 -

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○ Construct 7: Polynomial Operations

Non-mastery demonstrated by construct testing

Test Question	Results
Adding polynomials	-
Subtracting polynomials	-
Multiplying a monomial by a polynomial	-
Multiplying polynomials	-
Squaring polynomials	nt
Evaluating a polynomial	nt
Solving polynomial equations	nt
Finding the additive inverse of a polynomial	nt

○ Construct 8: Factoring Polynomials

Non-mastery demonstrated by construct testing

Test Question	Results
Factoring binomials	-
Factoring polynomials	-
Factoring trinomials	-
Finding the difference of squares	-
Identifying a perfect square trinomial	nt
Identifying a prime polynomials	nt
Solving polynomial equations	nt

◐ Construct 9: Radical Expressions and Equations

Mastery demonstrated by complete construct testing

Test Question	Results
Simplifying radical expressions without variables	+
Simplifying radical expressions with variables	+
Rationalizing the denominator of a rational expression	+
Adding radical expressions	-
Subtracting radical expressions	+
Multiplying radical expressions	+
Solving radical equations	-

● Construct 10: Quadratic Equations

Mastery demonstrated by complete construct testing

Test Question	Results
Finding the axis of symmetry of a quadratic equation	+
Finding the vertex coordinates of a quadratic equation	+
Finding the x-intercepts of a quadratic equation	+
Graphing quadratic equations	+
Identifying a perfect square trinomial	+
Completing the square of a quadratic equation	+
Solving quadratic equations	-

○ Construct 11: Rational Expressions and Equations

Non-mastery demonstrated by construct testing

Test Question	Results
Identifying exclusions in the denominator	-
Simplifying rational expressions	-
Multiplying rational expressions	-
Dividing rational expressions	-
Adding rational expressions with like denominators	nt
Subtracting rational expressions with like denominators	nt
Adding rational expressions with unlike denominators	nt
Subtracting rational expressions with unlike denominators	nt
Solving rational equations	nt

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