# Student Profile Report

**Julie Milke – Grade 7 – Mathematics Class**  
Subject: Mathematics

Describes the academic needs of each student based on her performance on the Diagnostic and provides customized instructional support to maximize growth.

### Overall Performance

<table>
<thead>
<tr>
<th>Test</th>
<th>Placement</th>
<th>Scale Score</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1 - 09/25/2012</td>
<td>Level 5</td>
<td>490</td>
<td>+/- 13.0</td>
</tr>
<tr>
<td>Test 2 - 01/25/2013</td>
<td>Level 6</td>
<td>514</td>
<td>+/- 12.0</td>
</tr>
</tbody>
</table>

**High level comparison between assessments allows for quick growth measurement. Here, Julie is steadily working toward being on grade level after growing a full level in 4 months!**

### Detail for Test 2 - 1/25/2013

<table>
<thead>
<tr>
<th>Domain</th>
<th>Placement</th>
<th>Scale Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and Operations</td>
<td>Level 6</td>
<td>533</td>
</tr>
<tr>
<td>Algebra and Algebraic Thinking</td>
<td>Level 6</td>
<td>599</td>
</tr>
<tr>
<td>Measurement and Data</td>
<td>Level 5</td>
<td>503</td>
</tr>
<tr>
<td>Geometry</td>
<td>Level 5</td>
<td>504</td>
</tr>
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</table>

**Domain scores and placement levels, as well as more detailed explanations of those scores, allow Julie’s teacher to understand why Julie is performing below grade level and prioritize instruction to meet Julie’s needs.**

### Developmental Analysis

<table>
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<tr>
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</table>

Test results indicate that Julie would benefit from review of various prior grade level skills and concepts related to quantitative reasoning and representation. Instruction that connects understanding of algebraic representation, computation, and problem solving skills will strengthen Julie’s math abilities across domains. This priority places Julie in Instructional Grouping Profile 2.

- **Number and Operations**: Level 6  
  At levels 6-8 this domain addresses operations with whole numbers, fractions, decimals, and positive and negative rational numbers, as well as exponents. Test results indicate that Julie may benefit from practice with percent and ratio concepts and division with whole numbers, fractions, and decimals.

- **Algebra and Algebraic Thinking**: Level 6  
  At levels 6-8, this domain addresses ratios and proportional relationships, expressions, equations and inequalities, and functions. Test results indicate that Julie needs to develop a deeper understanding of expressions and practice using them to solve multi-step problems.

- **Measurement and Data**: Level 5  
  At levels 3-5 this domain addresses the relationship among measurement units, geometric measurement concepts, and presenting and interpreting data on line plots and bar graphs. Results indicate Julie may benefit from review of a wide variety of measurement skills related to unit conversions, volume, angles, and data skills related to graphing and analyzing graphs.

- **Geometry**: Level 5  
  At levels 3-5 this domain addresses angles and perpendicular and parallel lines, classification of two-dimensional figures, line symmetry and plotting points on the coordinate plane. Test results indicate that Julie may benefit from practice using properties to classify two-dimensional figures into categories and using formulas to find area and volume.
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## Building Number and Operations Skills

Number and Operations in grades K-8 focuses on representing, comparing, and performing operations with numbers. As in the CCSS, this domain includes whole numbers, decimals, fractions, integers, and irrational numbers, and emphasizes both conceptual understanding and computation.

In grades 6-8, students develop an understanding of proportional relationships. They learn about rational and irrational numbers and compute with rational numbers.

### What Julie Can Do

Results indicate that Julie can likely do the skills shown below.

**Base Ten**
- Multiply three-digit numbers by one-digit numbers.
- Divide up to three-digit numbers by one-digit numbers.
- Read and write decimals to thousandths in standard form, word form, and expanded form.
- Compare two decimals through thousandths.
- Multiply decimal numbers through hundredths.

**Fractions**
- Express fractions with denominators of 10 or 100 as decimals.
- Decompose a fraction into a sum of fractions with like denominators.

### Next Steps for Instruction

Results indicate that Julie will benefit from instruction and practice in the skills shown below.

**Base Ten**
- Multiply multi-digit decimals.
- Divide multi-digit whole numbers.
- Divide multi-digit decimals.

**Fractions**
- Add and subtract fractions and mixed numbers with unlike denominators.
- Multiply a whole number by a fraction.
- Divide fractions.

#### The Number System

- Use the distributive property to write a sum of two numbers as a product of the greatest common factor of the two numbers and a sum of two different numbers.
- Find the least common multiple of two whole numbers through 12.
- Express decimals as percents and percents as decimals.
- Represent and compare positive and negative rational numbers as points on the number line.
- Understand absolute value and interpret it in the context of a real-world situation.

## Tools for Instruction

Indicates CC standards on which Julie has demonstrated proficiency. Great to use for parent conferences and to motivate learners who may not often feel successful in school.

Links to immediately downloadable Tools for Instruction. These lesson plans provide best-practice instruction on the exact same skills Julie needs to work on next, as determined by the Diagnostic.

## Recommended Products from Curriculum Associates

If you have this product... Use...

**Ready Common Core Math Instruction**
- **Grade 5**  
  Lesson 10: Add and Subtract Fractions  
  Lesson 13: Understand Products of Fractions
- **Grade 6**  
  Lesson 1: Ratios  
  Lesson 5: Solve Problems with Percents  
  Lesson 6: Understand Division with Fractions  
  Lesson 7: Divide with Fractions  
  Lesson 8: Divide Whole Numbers  
  Lesson 10: Multiply and Divide Decimals  
  Lesson 11: Common Factors and Multiples  
  Lesson 12: Understand Positive and Negative Numbers  
  Lesson 13: Absolute Value and Ordering Numbers

Saves teachers the hours of time needed to search for content to differentiate instruction for students performing at a variety of levels.

Recommends specific lessons in print resources that target Julie’s areas of need.

Learn More
Student Profile Report

Julie Milke – Grade 7 – Mathematics Class
Subject: Mathematics

Building Algebra and Algebraic Thinking Skills

Algebra and Algebraic Thinking in grades K-8 focuses on the relationships between numbers, the meaning of operations, and the relationships between operations. As in the CCSS, this includes using the appropriate operations to solve real world and mathematical problems.

In grades 6-8, students work with algebraic relationships using ratios, equations, inequalities, functions, tables, and graphs. They use equations and inequalities to solve problems and represent the solutions numerically and graphically.

What Julie Can Do
Results indicate that Julie can likely do the skills shown below.

Operations and Algebraic Thinking
- Know multiplication/division fact families.
- Identify multiples of whole numbers with products to 100.
- Select the proper operation to solve real-world and mathematical problems.
- Describe, extend, analyze, and make generalizations about numeric patterns.
- Evaluate expressions for given values of the variables.
- Use substitution to determine whether a solution to an equation is true.

Next Steps for Instruction
Results indicate that Julie will benefit from instruction and practice in the skills shown below.

Expressions and Equations
- Write and evaluate expressions with grouping symbols.
- Write and evaluate numerical expressions with whole-number exponents.
- Read, write, and identify variable expressions using mathematical terms (sum, term, product, factor, quotient, coefficient).
- Write an equation in two variables for a real-world problem in which a dependent and independent variable change in relationship to one another.
- Solve real-world and mathematical problems by writing and solving equations of the form \(x + p = q\) and \(px = q\), where \(p\), \(q\), and \(x\) are all nonnegative rational numbers.
- Use substitution to determine whether a solution to an inequality is true.

Ratios and Proportional Relationships
- Use proportions to solve real-world and mathematical problems.
- Solve problems involving unit rate.
- Solve problems using ratio and rate reasoning.

Tools for Instruction

Recommended Products from Curriculum Associates

If you have this product... Use...

Ready Common Core Math Instruction
Grade 5
Lesson 19: Evaluate and Write Expressions

Grade 6
Lesson 2: Understand Unit Rate
Lesson 3: Equivalent Ratios
Lesson 4: Solve Problems with Unit Rates
Lesson 5: Solve Problems with Percents
Lesson 15: Numeric Expressions
Lesson 16: Algebraic Expressions
Lesson 19: Solve Equations
Lesson 20: Solve Inequalities
Lesson 21: Dependent and Independent Variables

Learn More
Student Profile Report

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Overview | Number and Operations | Algebra and Algebraic Thinking | Measurement and Data | Geometry

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Building Measurement and Data Skills

Measurement and Data in grades K-8 focuses on measurement tools and units, as well as data. As in the CCSS, physical measurement activities lead to the development of formulas for geometric measurements. Data skills include graphing, analysis, and in later grades, statistics and probability.

In grades 3-5, students study concepts of area, perimeter, and volume and use this understanding to develop formulas. They learn about the relationship among units of measure to solve problems involving liquid volume, mass, time, and money. They present data on line plots and line graphs.

In grades 6-8, students use reasoning and formulas to solve measurement problems involving area, surface area, and volume. They use statistical measures to analyze data and calculate probabilities.

What Julie Can Do
Results indicate that Julie can likely do the skills shown below.

Measurement
- Use a ruler to measure length in inches.
- Choose the best unit to measure length: inches, feet, or yards.
- Solve problems involving counting dollar bills and coins, and use the dollar symbol.
- Cover a plane figure with unit squares, and count squares to measure area.
- Use side lengths to solve problems involving perimeter.

Data
- Construct and interpret scaled bar graphs and scaled picture graphs.

Next Steps for Instruction
Results indicate that Julie will benefit from instruction and practice in the skills shown below.

Measurement
- Convert and compare customary units of weight and metric units of mass involving whole-number measures.
- Convert and compare customary and metric units of capacity involving whole-number measures.
- Solve multi-step, real-world problems involving conversion among measurement units within a system.
- Use formulas to find the area of rectangles and squares.
- Use formulas to find the volume of cubes and rectangular prisms.
- Measure angles using a virtual protractor.

Data and Statistics
- Construct and interpret a line plot using data in fractional units.
- Find, use, and interpret mean, median, mode, range, and maximum and minimum.

Tools for Instruction

Recommended Products from Curriculum Associates

If you have this product... Use...

Ready Common Core Math Instruction
- Grade 4 Lesson 26: Perimeter and Area
- Lesson 29: Measure and Draw Angles
- Grade 5 Lesson 21: Convert Measurement Units
- Lesson 22: Solve Word Problems Involving Conversions
- Lesson 23: Make Line Plots and Interpret Data
- Lesson 24: Understand Volume
- Lesson 25: Find Volume Using Unit Cubes
- Lesson 26: Find Volume Using Formulas
- Grade 6 Lesson 27: Measures of Center and Spread
- Lesson 29: Analyze Numerical Data

Learn More
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Overview

Number and Operations

Algebra and Algebraic Thinking

Measurement and Data

Geometry

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</table>

Scale Score 0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800

Building Geometry Skills

Geometry in grades K-8 involves describing the attributes and relationships among a growing range of shapes. As in the CCSS, this understanding is then applied to categorizing shapes by attributes.

In grades 3-5, students describe equal parts of shapes with fractions. They use knowledge of angles and perpendicular and parallel lines to classify two-dimensional figures. Students recognize line symmetry in figures and plot points on the coordinate plane.

In grades 6-8, students solve problems involving angle measures, area, surface area, volume, and the Pythagorean theorem. They learn the relationships between two- and three-dimensional figures and study congruence and similarity in transformations of figures.

What Julie Can Do

Results indicate that Julie can likely do the skills shown below.

- Sort and classify two-dimensional shapes according to attributes such as vertices, angles, and sides.
- Compare and contrast attributes of solid figures including numbers of vertices, faces, and edges.
- Describe areas of equal parts of a shape using unit fractions.
- Identify acute, obtuse, right, and straight angles and perpendicular and parallel lines.
- Identify one or more lines of symmetry in two-dimensional figures and predict and identify reflections of two-dimensional figures.
- Locate and plot ordered pairs on a coordinate grid and find the distance between two points with the same x- or y-coordinate.

Next Steps for Instruction

Results indicate that Julie will benefit from instruction and practice in the skills shown below.

- Use formulas to find the area of rectangles and triangles with whole-number side lengths.
- Use formulas to find the volume of rectangular prisms with whole-number edge lengths.
- Classify two-dimensional figures based on their parallel and perpendicular lines or angle measures.
- Use properties to classify two-dimensional figures into categories.
- Use the first quadrant of the coordinate plane to represent and solve real-world and mathematical problems.
- Find the length of a side of a polygon using two points with the same first coordinate or the same second coordinate.

Tools for Instruction

<table>
<thead>
<tr>
<th>Volume Concepts</th>
<th>Use Volume to Solve Problems</th>
<th>Attributes of Shapes</th>
<th>Subcategories of Plane Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1 of 6)</td>
<td>(2 of 6)</td>
<td>(3 of 6)</td>
<td>(4 of 6)</td>
</tr>
</tbody>
</table>

Recommended Products from Curriculum Associates

If you have this product... Use...

Ready Common Core Math Instruction

Grade 4
Lesson 32: Classify Two-Dimensional Figures

Grade 5
Lesson 29: Graph Points in the Coordinate Plane
Lesson 30: Classify Two-Dimensional Figures
Lesson 31: Understand Properties of Two-Dimensional Figures

Grade 6
Lesson 23: Polygons in the Coordinate Plane

Learn More