

Minnesota 3rd Grade MCAII Mathematics Teacher Reflection Form

Have your students mastered these benchmarks?

Number and Operations

Vocabulary *digits, value, plot, locate, point, equal, fewer, more, less, greater, estimate, round, nearest, closest, least, greatest, compare, order, value, add, subtract, sum, difference, result, multiply, divide, product, fraction*

Exceeds Standard Solves real-world and mathematical problems using addition, subtraction, and multiplication; understands that the size of a fractional part is relative to the size of the whole.

Meets Standard Compares and represents whole numbers up to 100,000; solves real-world and mathematical problems using addition and subtraction; represents multiplication and division in various ways (reference MN Academic Standards 3.1.2.3); compares and orders fractions with common denominators.

Partially Meets Represents whole numbers up to 1,000 using expanded notations; compares whole numbers up to 100,000; subtracts multi-digit whole numbers without regrouping; knows common multiplication and division facts (2s, 5s, 10s); writes fractions for a given representation, including number line.

Does Not Meet Represents whole numbers with words; adds multi-digit whole numbers, matches fractions with correct area model.

Self-Reflection #1	Unit	#	Benchmark	Self-Reflection #2
		3.1.1.1	Read, write and represent whole numbers up to 100,000.	
		3.1.1.2	Use place value to describe whole numbers between 1000 and 100,000 in terms of ten thousands, thousands, hundreds, tens and ones .	
		3.1.1.3	Find 10,000 more or 10,000 less than a given five-digit number. Find 1000 more or 1000 less than a given four- or five-digit number. Find 100 more or 100 less than a given four- or five-digit number.	
		3.1.1.4	Round numbers to the nearest 10,000, 1000, 100 and 10. Round up and round down to estimate sums and differences	
		3.1.1.5	Compare and order whole numbers up to 100,000.	
		3.1.2.1	Add and subtract multi-digit numbers, using efficient and generalizable procedures based on knowledge of place value, including standard algorithms.	
		3.1.2.2	Use addition and subtraction to solve real-world and mathematical problems involving whole numbers.	
		3.1.2.3	Represent multiplication facts by using a variety of approaches, such as repeated addition , equal-sized groups, arrays, area models, equal jumps on a number line and skip counting. Represent division facts by using a variety of approaches, such as repeated subtraction , equal sharing and forming equal groups. Recognize the relationship between multiplication and division.	
		3.1.2.4	Solve real-world and mathematical problems involving multiplication and division, including both " how many in each group " and " how many groups " division problems.	
		3.1.2.5	Use strategies and algorithms based on knowledge of place value, equality and Properties of addition and multiplication to multiply a two- or three-digit number by a one-digit number. Strategies may include mental strategies, partial products, the standard algorithm, and the commutative, associative, and distributive properties .	
		3.1.3.1	Read and write fractions with words and symbols. Recognize that fractions can be used to represent parts of a whole, parts of a set, points on a number line, or distances on a number line.	
		3.1.3.2	Understand that the size of a fractional part is relative to the size of the whole.	
		3.1.3.3	Order and compare unit fractions and fractions with like denominators by using models and an understanding of the concept of numerator and denominator.	

Algebra

Vocabulary rule, input, output, *number sentence, equation, represent, value*

Exceeds Standard Conceptual understanding of pattern (e.g., recognizes input-output relationship); interprets number sentences involving unknowns.

Meets Standard Continues patterns to a specified term (e.g., given first three terms in a pattern, finds sixth term); represents real-world situations with a number sentence involving basic facts and an unknown.

Partially Meets Identifies next number in a pattern; represents simple situations with a number sentence involving basic facts and an isolated unknown.

Does Not Meet Recognizes additive patterns in lists of numbers; recognizes basic facts represented in number sentences

Self-Reflection #1	Unit	#	Benchmark	Self-Reflection #2
		3.2.1.1	Create, describe, and apply single-operation input-output rules involving addition, subtraction and multiplication to solve problems in various contexts.	
		3.2.2.1	Understand how to interpret number sentences involving multiplication and division basic facts and unknowns.	

		3.2.2.2	Use multiplication and division basic facts to represent a given problem situation using a number sentence . Use number sense and multiplication and division basic facts to find values for the unknowns that make the number sentences true.	
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Geometry and Measurement

Vocabulary	parallel, perpendicular, right, figure, sides , angles, vertices, perimeter, length, width, tool, ruler, yardstick, meter stick, tape measure, a.m., p.m., unit, greatest, least, fewest, most, value, thermometer, temperature, degrees, increase, decrease.			
Exceeds Standard	Distinguishes between parallel and perpendicular lines in a shape; conceptual understanding of perimeter; determines elapsed time and does not require a graphic			
Meets Standard	Identifies parallel and perpendicular lines; calculates perimeter; makes correct change from a dollar; tells time from an analog clock; determines elapsed time within an hour; solves problems involving reading a thermometer and calculating temperature.			
Partially Meets	Names and describes polygons based on a familiar pictorial orientation by counting number of sides; determines perimeter using additive model.			
Does Not Meet	Recognizes parallel lines; matches a picture to the name of a familiar polygon (pattern blocks); knows to use a ruler to measure distance; knows the value of coins; reads a thermometer.			
Self-Reflection #1	Unit	#	Benchmark	Self-Reflection #2
		3.3.1.1	Identify parallel and perpendicular lines in various contexts, and use them to describe and create geometric shapes, such as right triangles, rectangles, parallelograms and trapezoids .	
		3.3.1.2	Sketch polygons with a given number of sides or vertices (corners) , such as pentagons, hexagons and octagons .	
		3.3.2.1	Use half units when measuring distances .	
		3.3.2.2	Find the perimeter of a polygon by adding the lengths of the sides.	
		3.3.2.3	Measure distances around objects.	
		3.3.3.1	Tell time to the minute , using digital and analog clocks. Determine elapsed time to the minute.	
		3.3.3.2	Know relationships among units of time .	
		3.3.3.3	Make change up to one dollar in several different ways, including with as few coins as possible.	
		3.3.3.4	Use an analog thermometer to determine temperature to the nearest degree in Fahrenheit and Celsius.	

Data Analysis and Probability

Vocabulary	pictograph, tally chart, bar graph, line plot, table, data, title, label, key, represent			
Exceeds Standard	Translates between data and data displays in a variety of situations.			
Meets Standard	Interprets bar graphs, pictographs, and tally charts.			
Partially Meets	Matches set of data with data display (e.g., table or graph).			
Does Not Meet	Reads data from a bar graph.			
Self-Reflection #1	Unit	#	Benchmark	Self-Reflection #2
		3.4.1.1	Collect, display and interpret data using frequency tables, bar graphs, picture graphs and number line plots having a variety of scales. Use appropriate titles, labels and units.	

Benchmarks that will be taught by the mid-January OLPA

- Unit 1 –
- Unit 2 –
- Unit 3 –
- Unit 4 –

HOW TO USE THE MCA TEACHER RELECTION FORMS

Minnesota MCAIII Mathematics Teacher Reflection Form

Have your students mastered these benchmarks? What is your evidence?

Directions: Take 20 minutes 2-5 times a year to reflect on your student's mastery of grade level standards. All staff are highly encouraged to reflect one week prior to and within one week after all MCA testing dates (including OLPA). The questions on this sheet written in **red** are questions you can ask yourself as you use the reflection form.

Achievement Level Descriptors HOW are you teaching the standards?	Strand (Number and Operations, Algebra, Geometry and Measurement, Data Analysis or Probability)			
	Vocabulary	<p>This section represents the vocabulary highlighted in the Test Specifications. All of these terms may show up on student assessments. In addition, terms from prior grades will be on the assessment. What specific best practices for teaching vocabulary have you used to teach all these terms? What evidence do you have that students have mastered these terms? Are all students using these terms orally and in writing? Tip: ELL and Sp Ed staffs have great ideas for teaching academic vocabulary to students. Words highlighted are terms that appear in the test specifications more than once. If a term appears in slightly larger font, this term appears multiple times.</p>		
	Exceeds Standard	<p>This is the gold standard level for all students. All students should receive instruction that allows them to master this level. This level often expects students to have conceptual understanding of the standards in this section. It requires students to make connections. If students only receive teaching at the lower levels, most will not meet or exceed the state standards. What specific classroom experiences have given your students a chance to master conceptual understanding of grade level standards?</p>		
	Meets Standard	<p>Students who "Meet" grade level standards have are considered 'proficient' by the state.</p>		
	Partially Meets	<p>Students who score as "Partially Meets" on the MCA's have likely mastered the skills in the 'does not meet' section below as well as the skills listed in this section. Ask yourself: "What is the difference between the words in the 'partially meets' and 'does not meet' sections? What did this look like in my classroom?"</p>		
Does Not Meet	<p>Students who score as "Does Not Meet" on the MCA's can only do items described in this section. This level often represents teaching skills vs. teaching concepts. What percent of my teaching is represented by the description in this level? It is recommended that teachers spend at most 25% of their time teaching at this level.</p>			
Self-Reflection #1	Unit	#	Benchmark	Self-Reflection #2
<p>It is important for all teachers to personally reflect on each benchmark. How one reflects can take many forms. Here are 2 options, but feel free to reflect in your own way.</p> <p>Option 1: How well do you predict your students will do on each benchmark? Rank each benchmark as High OR Medium OR Low</p> <p>Option 2 - Use this rubric 1: I have <u>not</u> taught this benchmark 2: I have taught this benchmark 3: I have assessed this benchmark 4: I have evidence that 85% or more of students have mastered the entire benchmark. 5: 85% or more of students have mastered the benchmark and consistently use appropriate notation and mathematical vocabulary both written and orally.</p>	<p>COMING SUMMER 2013</p> <p>The numbers in this section represent the units listed on the MPS Focused Instruction curriculum guide Year-at-a-glance (YAG)</p>	<p>The number in this section represents the numbers the state uses to identify each benchmark in the standards.</p> <p>1st #: Grade Level 2nd #: Strand 3rd #: Standard 4th #: Benchmark</p>	<p>This section is the exact benchmark language from the Minnesota 2007 MCAIII state standards. These are the benchmarks all students in grades 3-8th and 11th grade will be assessed on each May. Sites that choose to participate in the OLPA (Optional Local Purpose Assessment) will be assessed on these benchmarks as well.</p>	<p>This column can also be completed using one of the reflection options from the first column.</p> <p>Note: This same form can be used by students, particularly at the secondary level, to personally reflect on their progress towards meeting grade level standards.</p>

Benchmarks that will be taught by the mid-January OLPA:

COMING SUMMER 2013

This is a list of benchmarks from the Focused Instruction Curriculum Guides that students should have mastered by the end of Semester 1.