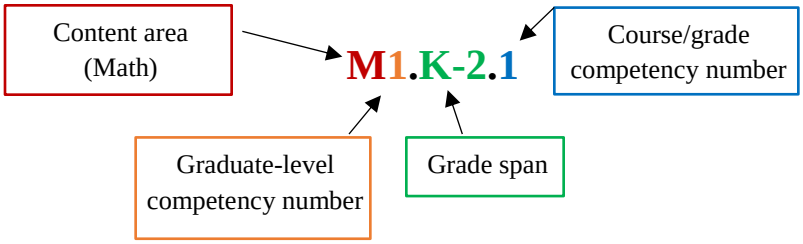
Grades K-5 Math Competencies

Competency Coding



Elementary Math Competency Checklist

Competencies	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Symbolic Expression: M1: Graduates of the FNSBSD will be able to reason abstractly and utilize symbolic expressions and mathematical models.	✓	✓	✓	✓	✓	✓
M1.K-2.1: The learner will reason abstractly and quantitatively, recognizing and making appropriate use of mathematical symbols and expressions for different purposes.	✓	✓	✓			
M1.3-4.1: The learner will reason abstractly and quantitatively, recognizing and making appropriate use of mathematical symbols and expressions for a variety of purposes, including variables.				✓	✓	
M1.5-6.1: The learner will reason abstractly and manipulate symbolic expressions to represent relationships and interpret expressions and equations in terms of a given context for determining an unknown value.						✓

Competencies	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Numbers and Number Systems: M2: Graduates of the FNSBSD will develop an applied knowledge of numbers and number systems to solve problems.	✓	✓	✓	✓	✓	✓
M2.K-2.1: The learner will demonstrate an understanding of the nature of numbers, thinking flexibly and attending to precision and reasonableness when solving problems using whole numbers.	✓	✓	✓			
M2.3-4.1: The learner will demonstrate an understanding of number systems, thinking flexibly and attending to precision and reasonableness when solving problems using whole numbers, fractions, and decimals.				✓	✓	
M2.5-6.1: The learner will expand their understanding of number systems, thinking flexibly and attending to precision and reasonableness when solving problems using rational numbers.						✓
Reasoning and Strategic Thinking: M3: Graduates of the FNSBSD will use evidence to support authentic application of concepts and support mathematical arguments.	✓	✓	✓	✓	✓	✓
M3.K-2.1: The learner will apply additive reasoning using multiple strategies (algorithms, models, & manipulatives) to solve authentic applied problems.	✓	✓	✓			
M3.K-2.2: The learner will use reasoning and self-monitoring to analyze and explain a solution pathway.	✓	✓	✓			
M3.3-4.1: The learner will apply additive, multiplicative, and fractional reasoning using multiple strategies (algorithms, models, & manipulatives) to solve authentic applied problems.				✓	✓	
MS.3-4.2: The learner will use reasoning and self-monitoring to analyze and justify one or more solution pathways.				✓	✓	
M3.5-6.1: The learner will expand the use of computational strategies, algorithms, and proportional reasoning to rational numbers.						✓
M3.5-6.2: The learner will use reasoning and metacognitive skills through making conjectures, justifying, and communicating mathematical solutions and arguments.						✓

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Measurement: M4: Graduates of the FNSBSD will explain reasoning when applying and modeling geometric principles.	✓	✓	✓	✓	✓	✓
M4.K-2.1: The learner will use standard and nonstandard measurement tools, units, and attributes to describe and compare objects, authentic applied situations or events, and to solve measurement problems.	✓	✓	✓			
M4.3-4.1: The learner will use measurement tools, units, and attributes to describe and compare objects, situations, or events, and to solve authentic applied measurement problems.				✓	✓	
M4.5-6.1: The learner will use tools and apply precision and reasoning to solve measurement problems in authentic applied contexts.						✓
Algebraic Functions, Patterns, and Relations: M5: Graduates of the FNSBSD will utilize patterns, relations, and functions to compare, interpret, and analyze situations.	✓	✓	✓	✓	✓	✓
M5.K-2.1: The learner will make use of structure to represent, interpret, and analyze change or patterns in various contexts using models, rules, and explanations.	✓	✓	✓			
M5.3-4.1: The learner will make use of structure to represent, analyze, and generalize change or patterns in various contexts using models and justification.				✓	✓	
M5.5-6.1: The learner will make use of structure to describe and compare situations that involve change or patterns, and use the information to make conjectures and justify conclusions/ solutions.						✓

Competencies	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Geometry: M6: Graduates of the FNSBSD will solve problems involving spatial reasoning and model geometric concepts in applied contexts.	✓	✓	✓	✓	✓	✓
M6.K-2.1: The learner will recognize and use attributes of two- and three-dimensional figures to solve problems.	✓	✓	✓			
M6.3-4.1: The learner will use attributes of two-dimensional shapes and complex figures to solve authentic applied problems.				✓	✓	
M6.5-6.1: The learner will solve problems involving reasoning using properties two- and three- dimensional shapes to analyze, represent, and model geometric relationships in authentic applied contexts.						✓
Data, Analysis, Probability, and Statistics: M7: Graduates of the FNSBSD will apply statistical methods to summarize, represent, analyze, and interpret data.	✓	✓	✓	✓	✓	✓
M7.K-2.1: The learner will gather, represent, and interpret data related to a particular/ single unit scale, including authentic applications.	✓	✓	✓			
M7.3-4.1: The learner will gather, represent, and interpret data related to a particular/ single context, including authentic applications.				✓	✓	
M7.5-6.1: The learner will design investigations and gather data involving populations (data sets).						✓