

Grade 5 Mathematics MCA-III Achievement Level Descriptors

Number and Operation	
599	Exceeds the Standard Efficiently divides and knows when to divide in a problem solving situation; adds and subtracts fluently with fractions and decimals.
563	Meets the Standard Divides multi-digit numbers; solves division problems when all relevant information is present and the question is clearly defined; orders and compares common fractions and decimals; adds and subtracts fractions; adds and subtracts decimals.
550	Partially Meets the Standard Knows basic division facts; knows benchmark decimal and fraction equivalents (e.g., $\frac{1}{2} = 0.5$, $\frac{1}{4} = 0.25$).
540	Does Not Meet the Standard Partial mastery of basic division facts; recognizes fractions and decimals in familiar context.
501	

Geometry & Measurement	
599	Exceeds the Standard Understands the connections between two- and three-dimensional representations; conceptual understanding of area, surface area, and volume.
563	Meets the Standard Classifies three-dimensional figures and describes distinct attributes using correct vocabulary; uses formulas to calculate area, surface area, and volume; decomposes familiar shapes.
550	Partially Meets the Standard Recognizes similar attributes of three-dimensional figures; limited vocabulary for attributes of three-dimensional figures; recognizes area as a multiplicative model (e.g., multiplies two sides of any shape to find area).
540	Does Not Meet the Standard Distinguishes between two- and three-dimensional shapes; uses informal naming conventions.
501	

Algebra	
599	Exceeds the Standard Works fluently with patterns and/or rules involving more than one operation or complex problem; applies the commutative, associate and distributive properties; interprets inequalities using variables.
563	Meets the Standard Uses rules to generate patterns; translates between patterns and rules; applies commutative and associative properties; understands simple inequalities; represents a situation with an equation containing a variable.
550	Partially Meets the Standard Recognizes patterns in a list of numbers; resorts to calculation to verify commutative and associative properties; solves verbal and simple one-step equations and inequalities by substituting a value for the unknown.
540	Does Not Meet the Standard Recognizes patterns that use skip counting; works with simple variable representations.
501	

Data Analysis & Probability	
599	Exceeds the Standard Conceptual understanding of mean, median and range; analyzes complex situations that include data displays and making interpretations.
563	Meets the Standard Calculates mean, median and range, and data can be provided in a variety of formats (e.g., tables, bar graphs); works fluently with data displays and solving problems.
550	Partially Meets the Standard Applies rote procedures for calculating mean, median and range (e.g., median is always middle number in a list); interprets simple displays of data to solve problems.
540	Does Not Meet the Standard Performs procedures for finding mean, median and range according to direct instructions; reads displays of data.
501	