**Virginia Standards of Learning Assessment**

**Grade 5 Mathematics Performance Level Descriptors**

| **Fail/Below Basic** | **Fail/Basic** | **Pass/Proficient** | **Pass/Advanced** |
| --- | --- | --- | --- |
| A student performing at this level should be able to:  *Reporting Category 1: Number and Number Sense*   * round whole numbers * compare and order fractions with like denominators * compare decimals with the same number of place values represented * identify single-digit odd and even numbers   *Reporting Category 2: Computation and Estimation*   * add, subtract, multiply and divide whole numbers to solve equations * add and subtract simple fractions with like denominators * list the order of operations   *Reporting Category 3: Measurement and Geometry*   * identify:   + squares,   + rectangles, and   + triangles * calculate perimeter and area of:   + squares and   + rectangles * identify parts of a circle * determine elapsed time to the nearest hour * identify right and straight angles * recognize congruent transformations   *Reporting Category 4: Probability, Statistics, Patterns, Functions, and Algebra*   * display data in charts and tables * understand that mean is a fair share * recognize patterns in shapes or pictures * identify the variable in an expression | A student performing at this level should be able to:  *Reporting Category 1: Number and Number Sense*   * round decimals to the nearest tenth * compare and order decimals * compare and order fractions * use manipulatives to represent equivalent fractions and decimals * identify prime and composite numbers less than 20   *Reporting Category 2: Computation and Estimation*   * add, subtract, multiply and divide whole numbers * add and subtract decimals * add and subtract simple fractions * identify the first step when using the order of operations   *Reporting Category 3: Measurement and Geometry*   * calculate perimeter and area of:   + squares,   + rectangles, and   + triangles * describe parts of a circle * determine elapsed time to the nearest quarter hour * measure angles * identify:   + acute,   + obtuse,   + right, and   + straight angles * identify translations and reflections   *Reporting Category 4: Probability, Statistics, Patterns, Functions, and Algebra*   * identify equally likely events * display data * determine mean and mode * identify patterns * identify variables in expressions and equations | A student performing at this level should be able to:  *Reporting Category 1: Number and Number Sense*   * round decimals to the nearest whole number, tenth, and hundredth * compare and order fractions and decimals * identify fraction/decimal equivalence * describe odd, even, prime, and composite numbers and describe the sum or difference as odd/even   *Reporting Category 2: Computation and Estimation*   * add, subtract, multiply and divide decimals; * add and subtract fractions and mixed numbers * multiply a whole number by a fraction * simplify numerical expressions using order of operations   *Reporting Category 3: Measurement and Geometry*   * find area and perimeter of:   + squares,   + rectangles, and   + triangles * find volume of rectangular solids * identify equivalent metric measurements * describe the relationship between parts of a circle * determine elapsed time to the nearest minute * measure angles * classify angles and triangles * identify transformations   *Reporting Category 4: Probability, Statistics, Patterns, Functions, and Algebra*   * construct:   + charts,   + tables,   + stem-and-leaf plots, and   + line plots * determine mean, median, mode, and range * subdivide and combine polygons * apply the Fundamental Counting Principle or construct a sample space to determine probability * extend patterns * represent mathematical relationships with a variable in expressions and equations | A student performing at this level should be able to:  *Reporting Category 1: Number and Number Sense*   * round decimals to the nearest whole number, tenth, and hundredth * represent and compare fraction/decimal relationships, including repeating decimals * explain prime, composite, even, and odd numbers and describe the sum or difference as odd/even   *Reporting Category 2: Computation and Estimation*   * create and solve practical problems with:   + whole numbers,   + decimals,   + fractions, and   + mixed numbers * simplify numerical expressions having parentheses using order of operations   *Reporting Category 3: Measurement and Geometry*   * solve practical problems involving area and perimeter of plane figures * solve practical problems involving volume of rectangular solids * use relationships between parts of a circle to determine unknown measures * solve elapsed time practical problems * determine unknown angle measures in triangles * apply transformations * subdivide and combine polygons   *Reporting Category 4: Probability, Statistics, Patterns, Functions, and Algebra*   * determine probability using Fundamental Counting Principal or sample space * interpret data represented in stem-and-leaf plots and line plots * determine mean, median, mode, and range * solve practical problems using patterns * use variables and equations to represent mathematical relationships * create word problems to represent a given equation |