# Correlation to the 2016 Mathematics Standards of Learning and Curriculum Framework – Grade 5

**Text/Instructional Material Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Publisher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Committee Member: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_**

## NOTE: The rating cells in the tables below are empty in order for division-level review teams to utilize this form.

## Section I. Correlation with the Mathematics 2016 SOL and Curriculum Framework

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| **5.1** |  |  |  |
| **5.2** |  |  |  |
| **5.3** |  |  |  |
| **5.4** |  |  |  |
| **5.5** |  |  |  |
| **5.6** |  |  |  |
| **5.7** |  |  |  |
| **5.8** |  |  |  |
| **5.9** |  |  |  |
| **5.10** |  |  |  |
| **5.11** |  |  |  |
| **5.12** |  |  |  |
| **5.13** |  |  |  |
| **5.14** |  |  |  |
| **5.15** |  |  |  |
| **5.16** |  |  |  |
| **5.17** |  |  |  |
| **5.18** |  |  |  |
| **5.19** |  |  |  |

## Section II. Additional Criteria: Instructional Planning and Support

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| **1.** Materials emphasize the use of effective instructional practices and learning theory. |  |  |  |
| * 1. Students are guided through critical thinking and problem-solving approaches.
 |  |  |  |
| * 1. Concepts are introduced through concrete experiences that use manipulatives and other technologies.
 |  |  |  |
| * 1. Multiple opportunities are provided for students to develop and apply concepts through the use of calculators, hand held devices, computers, and other technologies.
 |  |  |  |
| * 1. Students use the language of mathematics including specialized vocabulary and symbols.
 |  |  |  |
| * 1. Students use a variety of representations (graphical, numerical, symbolic, verbal, and physical) to connect mathematical concepts.
 |  |  |  |
| 1. The mathematics content is significant and accurate.
 |  |  |  |
| * 1. Materials are presented in an organized, logical manner which represents the current thinking on how students learn mathematics.
 |  |  |  |
| * 1. Materials are organized appropriately within and among units of study.
 |  |  |  |
| * 1. Format design includes titles, subheadings, and appropriate cross-referencing for ease of use.
 |  |  |  |
| * 1. Writing style, length of sentences, vocabulary, graphics, and illustrations are appropriate.
 |  |  |  |
| * 1. Level of abstraction is appropriate, and practical examples, including careers, are provided.
 |  |  |  |
| * 1. Sufficient applications are provided to promote depth of application.
 |  |  |  |
| 1. Materials present content in an accurate, unbiased manner.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.1 The student, given a decimal through thousandths, will round to the nearest whole number, tenth, or hundredth. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.2 The student will  |  |  |  |
| 1. represent and identify equivalencies among fractions and decimals, with and without models; and
 |  |  |  |
| b) compare and order fractions, mixed numbers, and/or decimals in a given set, from least to greatest and greatest to least. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.3 The student will |  |  |  |
| 1. identify and describe the characteristics of prime and composite numbers; and
 |  |  |  |
| 1. identify and describe the characteristics of even and odd numbers.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.4 The student will create and solve single-step and multistep practical problems involving addition, subtraction, multiplication, and division of whole numbers. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.5 The student will  |  |  |  |
| 1. estimate and determine the product and quotient of two numbers involving decimals; and
 |  |  |  |
| 1. create and solve single-step and multistep practical problems involving addition, subtraction, and multiplication of decimals, and create and solve single-step practical problems involving division of decimals
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.6 The student will  |  |  |  |
| a) solve single-step and multistep practical problems involving addition and subtraction with fractions and mixed numbers; and  |  |  |  |
| b) solve single-step practical problems involving multiplication of a whole number, limited to 12 or less, and a proper fraction, with models. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.7 The student will simplify whole number numerical expressions using the order of operations. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.8 The student will  |  |  |  |
| 1. solve practical problems that involve perimeter, area, and volume in standard units of measure; and
 |  |  |  |
| 1. differentiate among perimeter, area, and volume and identify whether the application of the concept of perimeter, area, or volume is appropriate for a given situation.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.9 The student will. |  |  |  |
| 1. given the equivalent measure of one unit, identify equivalent measurements within the metric system; and
 |  |  |  |
| 1. solve practical problems involving length, mass, and liquid volume using metric units.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.10 The student will identify and describe the diameter, radius, chord, and circumference of a circle. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.11 The student will solve practical problems related to elapsed time in hours and minutes within a 24-hour period. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.12 The student will classify and measure right, acute, obtuse, and straight angles. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.13 The student will  |  |  |  |
| 1. classify triangles as right, acute, or obtuse and equilateral, scalene, or isosceles; and
 |  |  |  |
| 1. investigate the sum of the interior angles in a triangle and determine an unknown angle measure.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.14 The student will  |   |  |  |
| * 1. recognize and apply transformations, such as translation, reflection, and rotation; and
 |  |  |  |
| * 1. investigate and describe the results of combining and subdividing polygons.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.15 The student will determine the probability of an outcome by constructing a sample space or using the Fundamental (Basic) Counting Principle. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.16 The student will  |  |  |  |
| 1. represent data in line plots and stem-and-leaf plots;
 |  |  |  |
| 1. interpret data represented in line plots and stem-and-leaf plots; and
 |  |  |  |
| 1. compare data represented in a line plot with the same data represented in a stem-and-leaf plot.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.17 The student will  |  |  |  |
| 1. describe mean, median, and mode as measures of center;
 |  |  |  |
| 1. describe mean as fair share;
 |  |  |  |
| 1. describe the range of a set of data as a measure of spread; and
 |  |  |  |
| 1. determine the mean, median, mode, and range of a set of data.
 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.18 The student will identify, describe, create, express, and extend number patterns found in objects, pictures, numbers and tables. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 5.19 The student will  |  |  |  |
| 1. investigate and describe the concept of variable;
 |  |  |  |
| 1. write an equation to represent a given mathematical relationship, using a variable;
 |  |  |  |
| 1. use an expression with a variable to represent a given verbal expression involving one operation; and
 |  |  |  |
| 1. create a problem situation based on a given equation, using a single variable and one operation.
 |  |  |  |

Virginia Department of Education 2017