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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| **7.1** | **X** | **\*** | **\*** |
| **7.2** | **X** | **\*** | **\*** |
| **7.3** | **X** | **\*** | **\*** |
| **7.4** | **X** | **\*** | **\*** |
| **7.5** | **X** | **\*** | **\*** |
| **7.6** | **X** | **\*** | **\*** |
| **7.7** | **X** | **\*** | **\*** |
| **7.8** | **X** | **\*** | **\*** |
| **7.9** | **X** | **\*** | **\*** |
| **7.10** | **X** | **\*** | **\*** |
| **7.11** | **\*** | **X** | **\*** |
| **7.12** | **X** | **\*** | **\*** |
| **7.13** | **X** | **\*** | **\*** |

# 2017 Mathematics Textbooks and Instructional Materials Committee Consensus Form

## Correlation to the 2016 Mathematics Standards of Learning and Curriculum Framework – Grade 7

**Text/Instructional Material Title: \_\_Big Ideas Math Course 2 (Grade 7): Virginia Edition\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Publisher: \_Big Ideas Learning, LLC\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Copyright Date: 2019**

The tables included in this document represent the consensus ratings of 2017 Mathematics Textbook committee members.

**KEY:**

* **X** - rating applicable
* **\*** - rating not applicable

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

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

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

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.1 The student will | **n/a** | **n/a** | **n/a** |
| * 1. investigate and describe the concept of negative exponents for powers of ten; | X | **\*** | **\*** |
| * 1. compare and order numbers greater than zero written in scientific notation; | \* | **X** | **\*** |
| * 1. compare and order rational numbers; | **X** | **\*** | **\*** |
| * 1. determine square roots of perfect squares; and | **X** | **\*** | **\*** |
| * 1. identify and describe absolute value of rational numbers. | **X** | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.2 The student will solve practical problems involving operations with rational numbers. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.3 The student will solve single-step and multistep practical problems, using  proportional reasoning. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.4 The student will | **n/a** | **n/a** | **n/a** |
| 1. describe and determine the volume and surface area of rectangular prisms and cylinders; and | X | **\*** | **\*** |
| 1. solve problems, including practical problems, involving the volume and surface area of rectangular prisms and cylinders. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.5 The student will solve problems, including practical problems, involving  the relationship between corresponding sides and corresponding angles of similar quadrilaterals and triangles. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.6 The student will | **n/a** | **n/a** | **n/a** |
| 1. compare and contrast quadrilaterals based on their properties; and | X | **\*** | **\*** |
| b) determine unknown side lengths or angle measures of quadrilaterals. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.7 The student will apply translations and reflections of right triangles or  rectangles in the coordinate plane. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.8 The student will | **n/a** | **n/a** | **n/a** |
| 1. determine the theoretical and experimental probabilities of an event; and | X | **\*** | **\*** |
| 1. investigate and describe the difference between the experimental probability and theoretical probability of an event. | X | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.9 The student, given data in a practical situation, will | **n/a** | **n/a** | **n/a** |
| a) represent data in a histogram; | **X** | **\*** | **\*** |
| b) make observations and inferences about data represented in a  histogram; and | **X** | **\*** | **\*** |
| 1. compare histograms with the same data represented in stem-and-leaf plots, line plots, and circle graphs. | **\*** | **X** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.10 The student will | **n/a** | **n/a** | **n/a** |
| 1. determine the slope, *m*, as rate of change in a proportional relationship between two quantities and write an equation in the form *y* = *mx* to represent the relationship; | **X** | **\*** | **\*** |
| 1. graph a line representing a proportional relationship between two quantities given the slope and an ordered pair, or given the equation in *y* = *mx­* form where *m* represents the slope as rate of change; | **\*** | **X** | **\*** |
| 1. determine the *y*-intercept, *b*, in an additive relationship between two quantities and write an equation in the form *y* = *x* + *b* to represent the relationship; | **X** | **\*** | **\*** |
| 1. graph a line representing an additive relationship between two quantities given the *y*-intercept and an ordered pair, or given the equation in the form *y* = *x* + *b*, where *b* represents the *y*-intercept; and | **X** | **\*** | **\*** |
| 1. make connections between and among representations of a proportional or additive relationship between two quantities using verbal descriptions, tables, equations, and graphs. | **X** | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.11 The student will evaluate algebraic expressions for given replacement values of the variables. | **\*** | **X** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.12 The student will solve two-step linear equations in one variable, including practical problems that require the solution of a two-steplinear equation in one variable. | **X** | **\*** | **\*** |

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| **Mathematics Standard of Learning** | **Adequate**  **Rating** | **Limited**  **Rating** | **No Evidence**  **Rating** |
| 7.13 The student will solve one- and two-step linear inequalities in one  variable, including practical problems, involving addition, subtraction,  multiplication, and division, and graph the solution on a number line. | **X** | **\*** | **\*** |

Virginia Department of Education 2017