

<b>PUBLISHER:</b>			
<b>SUBJECT:</b>		<b>SPECIFIC GRADE:</b>	
<b>COURSE:</b>		<b>TITLE</b>	
<b>COPYRIGHT:</b>			
<b>SE ISBN:</b>		<b>TE ISBN:</b>	

## NON-NEGOTIBLE EVALUATION CRITERIA

**2018-2024**  
**Group VI – Mathematics**  
**Grade 1**

<b>Equity, Accessibility and Format</b>				
Yes	No	N/A	CRITERIA	NOTES
			<b>1. INTER-ETHNIC</b> The <b>instructional</b> materials meets the requirements of inter-ethnic: concepts, content and illustrations, as set by WV Board of Education Policy (Adopted December 1970).	
			<b>2. EQUAL OPPORTUNITY</b> The instructional material meets the requirements of equal opportunity: concepts, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by WV Board of Education Policy (Adopted May 1975).	
			<b>3. FORMAT</b> This resource is available as an option for adoption in an interactive electronic format.	
			<b>4. BIAS</b> The instructional material is free of political bias.	

## GENERAL EVALUATION CRITERIA

**2018-2024**  
**Group VI – Mathematics**  
**Grade 1**

The general evaluation criteria apply to each grade level and are to be evaluated for each grade level unless otherwise specified. These criteria consist of information critical to the development of all grade levels. In reading the general evaluation criteria and subsequent specific grade level criteria, **e.g. means “examples of” and i.e. means that “each of” those items must be addressed.** Eighty percent of the general and eighty percent of the specific criteria must be met with I (in-depth) or A (adequate) in order to be recommended.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCTS	(IMR Committee) Responses							
	I=In-depth, A=Adequate, M=Minimal, N=Nonexistent	I		A		M		N
	<i>In addition to alignment of Content Standards, materials must also clearly connect to Learning for the 21<sup>st</sup> Century which includes opportunities for students to develop:</i>							
<b>Use Problem Solving Skills</b>  <i>For student mastery of content standards, the instructional materials will include multiple strategies that provide students with opportunities to:</i>								
	1. Make sense of problems and persevere in solving them;							
	2. attend to precision;							
	3. deepen understanding through meaningful and challenging teacher and/or student directed inquiry-based learning that builds number sense using prior knowledge and promotes interdisciplinary connections;							
	4. reason abstractly and quantitatively;							
	5. construct viable arguments and critique the reasoning of others							
	6. make informed choices by interacting with outside resources through opportunities for local and global collaboration in a variety of safe venues							

	7. model with mathematics;						
	8. use appropriate tools strategically;						
	9. use appropriate technology tools for a variety of purposes						
	10. look for and make use of structure						
	11. look for and express regularity in repeated reasoning.						
<b>Personal and Workplace Productivity Skills</b> <i>For student mastery of content standards, the instructional materials will include multiple strategies that provide students with opportunities to:</i>							
	12. work collaboratively;						
	13. practice time-management and project management skills in problem-based learning situations.						
<b>Developmentally Appropriate Instructional Resources and Strategies</b> <i>For student mastery of content standards, the instructional materials:</i>							
	14. are designed to devote the large majority of time to the critical areas of the grade as noted in the narrative written above the grade level standards;						
	15. include suggestions for appropriate scaffolding and provide opportunities to engage in high interest, age-appropriate activities that simulate real-life situations, and make cross-curricular, global connections;						
	16. provide students with opportunities to use print, graphs, visual displays, developmentally appropriate manipulatives, media and technology sources to acquire and apply new information;						

	17. include best practices that emphasize the importance of authentic vocabulary acquisition using multiple methods and modes that motivate and increase vocabulary skills;						
	18. support personalized learning through intervention and enrichment activities;						
	19. provide a dynamic, interactive website for students to access electronic resources (i.e., podcasts, videos, skill-based games, etc.). The media included in the instructional materials must enhance and support instruction and learning;						
	20. include a professional resource that builds content and pedagogical knowledge for the teacher.						
<b>Assessment</b>							
	21. Instructional materials provide tools for a balanced approach to assessment including diagnostic, formative and summative assessments in multiple formats (i.e., rubrics, performance tasks, open-ended questions, portfolio evaluation, and multimedia simulations).						
<b>Organization, Presentation and Format</b>							
	22. Information is organized logically and presented clearly using multiple methods and modes for delivering differentiated instruction that motivates and increases numeracy as students engage in high interest, authentic activities.						
	23. Instructional materials include an electronic file of the student edition provided on an electronic data storage device (e.g., CD, DVD, USB drive, etc.) and through a link on the publisher's server, both of which are accessible by an internet-enabled device that can open standard file formats.						
	24. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades consists of routine problems, practice with getting answers and fluency-building exercises that parents can easily support.						

## SPECIFIC EVALUATION CRITERIA

### 2018-2024 Group VI – Mathematics Grade 1

All West Virginia teachers are responsible for classroom instruction that integrates content standards and mathematical habits of mind. Students in the first grade will focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as repeating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes. Mathematical habits of mind, which should be integrated in these content areas, include: making sense of problems and persevering in solving them, reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others; modeling with mathematics; using appropriate tools strategically; attending to precision, looking for and making use of structure; and looking for and expressing regularity in repeated reasoning. Continuing the skill progressions from kindergarten, the following chart represents the mathematical understandings that will be developed in first grade:

Operations and Algebraic Thinking	Number and Operations in Base Ten
<ul style="list-style-type: none"> <li>Solve addition and subtraction word problems in situations of adding to, taking from, putting together, taking apart, and comparing (e.g., a taking from situation would be: “Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat?”).</li> <li>Add fluently with a sum of 10 or less, and accurately subtract from a number 10 or less (e.g., <math>2 + 5</math>, <math>7 - 5</math>).</li> <li>Understanding the relationship between addition and subtraction.</li> </ul>	<ul style="list-style-type: none"> <li>Understand what the digits mean in two-digit numbers (place value).</li> <li>Use understanding of place value and properties of operations to add and subtract (e.g., <math>38 + 5</math>, <math>29 + 20</math>, <math>64 + 27</math>, <math>80 - 50</math>).</li> <li>Identify the value of pennies, nickels and dimes.</li> </ul>
Measurement and Data	Geometry
<ul style="list-style-type: none"> <li>Measure lengths of objects by using a shorter object as a unit of length.</li> <li>Tell and write time.</li> </ul>	<ul style="list-style-type: none"> <li>Make composite shapes by joining shapes together, and dividing circles and rectangles into halves or fourths.</li> </ul>

**For student mastery of content standards, the instructional materials will provide students with the opportunity to**

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	I=In-depth, A=Adequate, M=Minimal, N=Nonexistent	I		A		M		N
<b>Operations and Algebraic Thinking</b>								
Represent and solve problems involving addition and subtraction.								
	1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions (e.g., by using objects,							

	drawings, and equations with a symbol for the unknown number to represent the problem).					
	2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).					
Understand and apply properties of operations and the relationship between addition and subtraction.						
	3. Apply properties of operations as strategies to add and subtract (e.g., If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known: Commutative Property of Addition. To add $2 + 6 + 4$ , the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$ : Associative Property of Addition). Instructional Note: Students need not use formal terms for these properties.					
	4. Understand subtraction as an unknown-addend problem (e.g., subtract $10 - 8$ by finding the number that makes 10 when added to 8).					
Add and subtract within 20.						
	5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).					
	6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10 and use strategies such as <ul style="list-style-type: none"> <li>counting on;</li> <li>making ten (e.g., <math>8 + 6 = 8 + 2 + 4 = 10 + 4 = 14</math>);</li> <li>decomposing a number leading to a ten (e.g., <math>13 - 4 = 13 - 3 - 1 = 10 - 1 = 9</math>);</li> <li>using the relationship between addition and subtraction (e.g., knowing that <math>8 + 4 = 12</math>, one knows <math>12 - 8 = 4</math>); and</li> <li>creating equivalent but easier or known sums (e.g., adding <math>6 + 7</math> by creating the known equivalent <math>6 + 6 + 1 = 12 + 1 = 13</math>).</li> </ul>					
Work with addition and subtraction equations.						
	7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ ).					

	8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers (e.g., Determine the unknown number that makes the equation true in each of the equations. $8 + ? = 11$ , $5 = ? - 3$ , $6 + 6 = ?$ ).					
<b>Number and Operations in Base Ten</b>						
Extend the counting sequence.						
	9. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.					
Understand place value.						
	10. Understand the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: <ul style="list-style-type: none"> <li>a. 10 can be thought of as a bundle of ten ones — called a “ten.” (e.g., A group of ten pennies is equivalent to a dime.)</li> <li>b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight or nine ones.</li> <li>c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones).</li> </ul>					
	11. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$ , $=$ , and $<$ .					
Use place value understanding and properties of operations to add and subtract.						
	12. Add within 100, including <ul style="list-style-type: none"> <li>• adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10,</li> <li>• using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction.</li> </ul> Relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten.					
	13. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count and explain the reasoning used.					

	14. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences) using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction. Relate the strategy to a written method and explain the reasoning used.					
<b>Measurement and Data</b>						
Measure lengths indirectly and by iterating length units.						
	15. Order three objects by length and compare the lengths of two objects indirectly by using a third object.					
	16. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Instructional Note: Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.					
Tell and write time.						
	17. Tell and write time in hours and half-hours using analog and digital clocks.					
Represent and interpret data.						
	18. Organize, represent, interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category and how many more or less are in one category than in another.					
<b>Geometry</b>						
Reason with shapes and their attributes.						
	19. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, and/or overall size); build and draw shapes to possess defining attributes.					

	<p>20. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape. Instructional Note: Students do not need to learn formal names such as, "right rectangular prism."</p>							
	<p>21. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths and quarters and use the phrases half of, fourth of and quarter of. Describe the whole as two of, or four of the shares and understand for these examples that decomposing into more equal shares creates smaller shares.</p>							