| PUBLISHER: |  |  |  |
| :--- | :--- | :--- | :--- |
| SUBJECT: |  | SPECIFIC GRADE: |  |
| COURSE: |  | TITLE |  |
| COPYRIGHT: |  |  |  |
| SE ISBN: |  | TE ISBN: |  |

## NON-NEGOTIABLE EVALUATION CRITERIA

## 2018-2024

Group VI - Mathematics
Kindergarten

## Equity, Accessibility and Format

| Yes | No | CRITERIA | NOTES |
| :---: | :---: | :---: | :---: |
|  |  | 1. INTER-ETHNIC <br> The instructional materials meets the requirements of interethnic: concepts, content and illustrations, as set by WV Board of Education Policy 2445.41. |  |
|  |  | 2. EQUAL OPPORTUNITY <br> 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. |  |
|  |  | 3. FORMAT <br> This resource includes an interactive electronic/digital component for students. |  |
|  |  | 4. BIAS <br> The instructional material is free of political bias. |  |
|  |  | 5. COMMON CORE <br> The instructional materials do not reference Common Core academic standards. (WV Code §18-2E-1b-1). |  |

## GENERAL EVALUATION CRITERIA

## 2018-2024

## Group VI - Mathematics <br> Kindergarten

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 | (IMR Committee) Responses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | I=In-depth, $\mathbf{A}=$ Adequate, $\mathbf{M}=$ Minimal, $\mathbf{N}=$ Nonexistent | I | A | M | N |
|  | In addition to alignment of Content Standards, materials must also clearly connect to Learning for the $21^{\text {st }}$ Century which includes opportunities for students to develop: |  |  |  |  |
| Use Problem Solving Skills For student mastery of content standards, the instructional materials will include multiple strategies that provide students with opportunities to: |  |  |  |  |  |
|  | 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. |  |  |  |  |
| Personal and Workplace Productivity Skills <br> For student mastery of content standards, the instructional materials will include multiple strategies that provide students with opportunities to: |  |  |  |  |  |
|  | 12. work collaboratively; |  |  |  |  |
|  | 13. practice time-management and project management skills in problembased learning situations. |  |  |  |  |

## Developmentally Appropriate Instructional Resources and Strategies

For student mastery of content standards, the instructional materials:


## SPECIFIC EVALUATION CRITERIA

2018-2024<br>Group VI - Mathematics<br>Kindergarten

All West Virginia teachers are responsible for classroom instruction that integrates content standards and mathematical habits of mind. Students in kindergarten will focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. 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. The skill progressions begin in kindergarten as foundational understanding of numeracy. The following chart represents the mathematical understandings that will be developed in kindergarten:

## Counting and Cardinality

- Count objects to tell how many there are by ones and by tens.
- Write numbers from 0 to 20 .
- Compare two groups of objects to tell which group, if either, has more; compare two written numbers to tell which is greater.
- Group pennies.


## Number and Operations in Base Ten

- Act out addition and subtraction word problems and draw diagrams to represent them.
- Add with a sum of 10 or less; subtract from a number 10 or less; and solve addition and subtraction word problems.
- Group objects by tens and ones. (1 group of 10 and 3 ones makes 13)


## Geometry

- Name shapes correctly regardless of orientation or size (e.g., a square oriented as a "diamond" is still a square).


## Operations and Algebraic Thinking

- Understand addition as putting together and adding to.
- Understand subtraction as taking apart and taking from.
- Add and subtract very small numbers quickly and accurately (e.g., $3+1$ ).


## Measurement and Data

- Describe and compare objects as longer, shorter, larger, smaller, etc.
- Classify objects and count the number of objects in each category. (e.g., Identify coins and sort them into groups of 5 s or 10 s .)

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

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| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{I}=$ In-depth, $\mathbf{A}=$ Adequate, $\mathbf{M}=$ Minimal, $\mathbf{N}=$ Nonexistent | I | A | M |  |
| Counting and Cardinality |  |  |  |  |  |
| Know number names and the count sequence. |  |  |  |  |  |
|  | 1. Count to 100 by ones and by tens. |  |  |  |  |


|  | 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3. Write numbers from 0 to 20 . Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). |  |  |  |  |  |
| Count to tell the number of objects. |  |  |  |  |  |  |
|  | 4. Understand the relationship between numbers and quantities; connect counting to cardinality. <br> a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. <br> b. Understand that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in which they were counted. <br> c. Understand that each successive number name refers to a quantity that is one larger. |  |  |  |  |  |
|  | 5. Count to answer questions (e.g., "How many?") about as many as 20 things arranged in a line, a rectangular array, a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. |  |  |  |  |  |
| Compare numbers. |  |  |  |  |  |  |
|  | 6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group (e.g., by using matching and counting strategies). |  |  |  |  |  |
|  | 7. Compare two numbers between 1 and 10 presented as written numerals. |  |  |  |  |  |
| Operations and Algebraic Thinking |  |  |  |  |  |  |
| Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. |  |  |  |  |  |  |
|  | 8. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), and acting out situations, verbal explanations, expressions, or equations. |  |  |  |  |  |


|  | 9. Solve addition and subtraction word problems and add and subtract within 10 by using objects or drawings to represent the problem. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10. Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5=2+3$ and $5=4+1$ ). |  |  |  |  |
|  | 11. For any number from 1 to 9 , find the number that makes 10 when added to the given number by using objects or drawings, and record the answer with a drawing or equation. |  |  |  |  |
|  | 12. Fluently add and subtract within 5 . |  |  |  |  |
| Number and Operations in Base Ten |  |  |  |  |  |
| Work with numbers 11-19 to gain foundations for place value. |  |  |  |  |  |
|  | 13. Compose and decompose numbers from 11 to 19 into ten ones and some further ones by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+$ 8 ); understand that these numbers are composed of ten ones (one ten) and one, two, three, four, five, six, seven, eight, or nine ones. |  |  |  |  |
| Measurement and Data |  |  |  |  |  |
| Describe and compare measurable attributes. |  |  |  |  |  |
|  | 14. Describe measurable attributes of objects, such as length or weight and describe several measurable attributes of a single object. |  |  |  |  |
|  | 15. Directly compare two objects with a measurable attribute in common, to see which object has "more of" or "less of" the attribute, and describe the difference. |  |  |  |  |
| Classify objects and count the number of objects in each category. |  |  |  |  |  |
|  | 16. Classify objects into given categories, count the numbers of objects in each category, and sort the categories by count. Category counts should be limited to less than or equal to 10. (e.g., Identify coins and sort them into groups of 5 s or 10 s .) |  |  |  |  |


| Geometry |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). |  |  |  |  |  |
|  | 17. Describe objects in the environment using names of shapes and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind and next to. |  |  |  |  |
|  | 18. Correctly name shapes regardless of their orientations or overall size. |  |  |  |  |
|  | 19. Through the use of real-life objects, identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). |  |  |  |  |
| Analyze, compare, create and compose shapes. |  |  |  |  |  |
|  | 20. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners"), and other attributes (e.g., having sides of equal length). Instructional Note: Student focus should include real-world shapes. |  |  |  |  |
|  | 21. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. |  |  |  |  |
|  | 22. Compose simple shapes to form larger shapes (e.g., "Can these two triangles, with full sides touching, join to make a rectangle?"). |  |  |  |  |

