

A Correlation of

en**VISION**MATH™
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to the

West Virginia Mathematics Criteria

Grade 2

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**GENERIC EVALUATION CRITERIA
20013-2016 – Off Cycle Year Adoption
Grade 2 Mathematics**

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
X			I. INTER-ETHNIC The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
X			II. EQUAL OPPORTUNITY The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	
X			III. FORMAT The resource is available as an option for adoption in an interactive electronic format.	

INSTRUCTIONAL MATERIALS ADOPTION: 21st CENTURY LEARNING EVALUATION CRITERIA

GENERAL EVALUATION CRITERIA 20013-2016 – Off Cycle Year Adoption Grade 2 Mathematics

INSTRUCTIONAL MATERIALS ADOPTION: GENERAL EVALUATION CRITERIA

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 criteria must be met with I (In-depth) or A (Adequate) in order to be recommended.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses										
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For student mastery of content standards and objectives, the instructional materials will provide students with the opportunity to apply:											
A. MATHEMATICAL PRACTICES											
<i>enVisionMATH Common Core</i> is built on a foundation of problem-based instruction that has sense-making at its heart. Each topic includes at least one <i>problem-solving lesson</i> in which students focus on honing their sense-making and problem-solving skills. The problem-solving lessons in Grades K–2 present to students a process that begins with making sense of the problem. <i>Read and Understand</i> , the first phase of the process, has students ask themselves, <i>What am I trying to</i>	1. Make sense of problems and persevere in solving them. <ul style="list-style-type: none"> • Explain to themselves the meaning of a problem and looking for entry points to its solution. • Analyze givens, constraints, relationships, and goals • Make conjectures about the form and meaning of the solution attempt. • Plan a solution pathway rather than simply jumping into a solution. • Consider analogous problems and try special cases and simpler forms of insight into its solution. • Monitor and evaluate their progress and change course if necessary. • Transform algebraic expressions or change the viewing window 										

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<p><i>find?</i> and <i>What do I know?</i>, questions that will help identify the givens and constraints of the problem. In the second phase, <i>Plan and Solve</i>, students decide on a solution plan. In the final phase, <i>Look Back and Check</i>, students verify that their work is reasonable and reflects the information given.</p> <p>Each lesson begins with <i>Problem-Based Interactive Learning</i>, an activity in which students interact with their peers and teachers to make sense of and decide on a workable solution for a real-world situation. Another feature of each lesson is the set of problem-solving exercises in which students persevere by applying different skills and strategies to solve problems.</p> <p>SE/TE: Topic 1: 6, 10, 15-18, 22, 26; Topic 2: 44, 45-48, 49, 52, 53, 56, 60, 61, 64; Topic 3: 82, 90, 91; Topic 4: 104, 105; Topic 5: 126, 130, 143-146, 147-150; Topic 6: 160, 164, 165-168, 176, 173-176; Topic 7: 190, 194, 202, 203-206; Topic 8: 216, 220, 224, 232, 236, 241-244; Topic 9: 271, 282, 287-290; Topic 10: 304, 308, 312, 317-320, 324, 328; Topic 11: 351, 355, 358, 362, 366, 367, 370, 371-374; Topic 12: 392, 409-412; Topic 13: 422, 423, 427-430, 434, 435-438; Topic 14: 448, 452, 453-456; Topic 15: 470, 478, 482,</p>	<p>on their graphing calculator to get information.</p> <ul style="list-style-type: none"> • Explain correspondences between equations, verbal descriptions, tables, and graphs. • Draw diagrams of important features and relationships, graph data, and search for regularity or trends. • Use concrete objects or pictures to help conceptualize and solve a problem. • Check their answers to problems using a different method. • Ask themselves, "Does this make sense?" • Understand the approaches of others to solving complex problems and identify correspondences between approaches. 										

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<p>enVisionMATH Common Core provides scaffolded instruction to help students develop both quantitative and abstract reasoning. In the <i>Visual Learning Bridge</i>, students can see how to represent a given situation numerically or algebraically. They will have opportunities later in the lesson to reason abstractly as they endeavor to represent situations symbolically.</p> <p>Reasonableness exercises remind students to compare their work to the original situation. In the <i>Do You Understand?</i> part of the Guided Practice, students gain experiences with quantitative reasoning as they consider the meaning of different parts of an expression or equation. Reasoning problems throughout the exercise sets focus students' attention on the structure or meaning of an operation, for example, rather than merely the solution.</p> <p>SE/TE: Topic 1: 18, 23-26; Topic 2: 45-48; Topic 3: 83-86; Topic 5: 131-134, 138; Topic 7: 199-202; Topic 8: 221, 225, 229, 237-240; Topic 9: 275-278; Topic 10: 297-300, 309-312; Topic 11: 371-374; Topic 12: 385, 401, 409-412; Topic 13: 419-422, 426; Topic 14: 453, 456; Topic 15: 483-486, 491; Topic 16: 529-532</p>	<p>2. Reason abstractly and quantitatively.</p> <ul style="list-style-type: none"> • Make sense of quantities and their relationships in problem situations. • Bring two complementary abilities to bear on problems involving quantitative relationships: <ul style="list-style-type: none"> ○ Decontextualize (abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents and ○ Contextualize (pause as needed during the manipulation process in order to probe into the referents for the symbols involved). • Use quantitative reasoning that entails creating a coherent representation of the problem at hand, considering the units involved, and attending to the meaning of quantities, not just how to compute them • Know and flexibly use different properties of operations and objects. 										

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<p>TE: Topic 1: 23A; Topic 2: 45A, 48A, 52A, 56A; Topic 3: 83A, 86A-86B; Topic 5: 131A, 134a-134B; Topic 7: 199A, 202A-202B; Topic 8: 211B, 237A, 240A-240B; Topic 9: 275A; Topic 10: 297A, 300A-300B, 309A, 312A-312B; Topic 11: 371A, 374A-374B; Topic 12: 409A, 412A-412B; Topic 13: 417A, 419A, 422A-422B, 434A; Topic 14: 453A; Topic 15: 465A, 483A, 486A, 486B; Topic 16: 529A</p>	(Continued)											
<p>Consistent with a focus on reasoning and sense-making is a focus on critical reasoning – argumentation and critique of arguments. In Pearson’s enVisionMATH Common Core, the Problem-Based Interactive Learning affords students opportunities to share with classmates their thinking about problems, their solution methods, and their reasoning about the solutions. Many exercises found throughout the program specifically call for students to use reasoning and to justify or explain their solutions.</p> <p><i>Journal</i> activities in Grades K–2 help students develop foundational critical reasoning skills by having them construct explanations for processes. The ability to articulate a clear</p>	<p>2. Reason abstractly and quantitatively.</p>											
	<p>3. Construct viable arguments and critique the reasoning of others.</p> <ul style="list-style-type: none"> • Understand and use stated assumptions, definitions, and previously established results in constructing arguments. • Make conjectures and build a logical progression of statements to explore the truth of their conjectures. • Analyze situations by breaking them into cases • Recognize and use counterexamples. • Justify their conclusions, communicate them to others, and respond to the arguments of others. • Reason inductively about data, making plausible arguments that take into account the context from which the data arose. • Compare the effectiveness of plausible arguments. • Distinguish correct logic or reasoning from that which is flawed and, if there is a flaw, explain what it is <ul style="list-style-type: none"> ○ Elementary students construct arguments using concrete referents such as objects, drawings, diagrams, and actions. ○ Later students learn to determine domains to which an argument applies. 											

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<p>explanation for a process is a stepping stone to critical analysis and reasoning of both the student's own processes and those of others.</p> <p>SE/TE: Topic 2: 61; Topic 5: 143; Topic 6: 157; Topic 7: 203; Topic 8: 237; Topic 9: 283; Topic 10: 325; Topic 11: 339; Topic 12: 389, 397; Topic 13: 427; Topic 15: 483; Topic 16: 524</p> <p>TE: Topic 2: 61A, 64A; Topic 5: 143A, 146A; Topic 6: 157A; Topic 7: 203A, Topic 8: 237A, 240A; Topic 9: 253B, 283A; Topic 11: 339A; Topic 12: 392A</p>		<ul style="list-style-type: none"> Listen or read the arguments of others, decide whether they make sense, and ask useful question to clarify or improve arguments. 								
<p>Students in Pearson's <i>enVisionMATH Common Core</i> are introduced to mathematical modeling in the early grades. They first use manipulatives and drawings and then equations to model addition and subtraction situations. The <i>Visual Learning Bridge</i> often presents real-world situations and students are shown how these can be modeled mathematically. In later grades, students expand their modeling skills to include representations such as tables and graphs, as well as equations.</p> <p>SE/TE: Topic 1: 3-6, 10, 14, 19-22; Topic 2: 61-64; Topic 3: 78,</p>	<p>4. Model with mathematics.</p> <ul style="list-style-type: none"> Apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. <ul style="list-style-type: none"> In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Make assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. Identify important quantities in a practical situation Map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. Analyze those relationships mathematically to draw conclusions. 									

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<p>87-90; Topic 4: 109-112; Topic 5: 147-150; Topic 6: 169-172; Topic 7: 187, 195, 203; Topic 8: 217, 245-248; Topic 9: 258, 259, 263-266, 274, 279, 282; Topic 10: 308; Topic 12: 404, 405-407; Topic 13: 423-426, 435-438; Topic 14: 460; Topic 15: 491-494, 499-502; Topic 16: 517-520</p> <p>TE: Topic 1: 3A, 6A-6B, 14A, 19A, 22A-22b; Topic 2: 61A, 64A, 64B; Topic 3: 74A, 82A, 90A-90B, 94A; Topic 4: 99A, 109A, 112A-112B; Topic 5: 147A, 150A-150B; Topic 6: 169A, 172A-172B; Topic 7: 203A; Topic 8: 220B, 245A, 248A-248B; Topic 9: 263A, 266A-266B; Topic 12: 384B, 405A, 408A-405B, Topic 13: 423A, 426A-426B, 435A, 438A-438B; Topic 15: 491A, 494A-494B, 499A, 502A-502B; 16: 507B, 517A, 520A, 520A-520B</p>	<ul style="list-style-type: none"> Interpret their mathematical results in the context of the situation. Reflect on whether the results make sense, possibly improving the model if it has not served its purpose. 								
<p>Students become fluent in the use of a wide assortment of tools ranging from physical objects, including manipulatives, rulers, protractors, and even pencil and paper, to digital tools, such as eTools, calculators, and computers. As students become more familiar with the tools available to them, they are able to begin making decisions about which tools are most helpful in a</p>	<p>5. Use appropriate tools strategically.</p> <ul style="list-style-type: none"> Consider available tools when solving a mathematical problem. (these tools might include pencil and paper, concrete models, a ruler, protractor, calculator, spreadsheet, computer algebra system, a statistical package, or dynamic geometry software. Are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. <ul style="list-style-type: none"> High school students analyze graphs of functions and 								

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<p>particular situation.</p> <p>SE/TE: Topic 1: 3, 7, 11, 15, 16, 17, 18, 19, 23, 27; Topic 2: 37, 41, 57; Topic 3: 71, 75, 79, 82, 83, 86, 87; Topic 4: 101, 104, 108, 109, 112, 113, 115; Topic 5: 123, 127; Topic 6: 161, 169, 172, 173; Topic 7: 191; Topic 8: 213, 233, 236, 241; Topic 9: 255, 262, 267, 270, 275; Topic 10: 300, 301, 328; Topic 11: 343, 347, 350, 354, 359; Topic 12: 393; Topic 13: 431, 432, 433, 434; Topic 15: 471, 479, 487, 499, 502; Topic 16: 509, 512, 517, 518, 519, 520, 521, 525, 526, 527, 528</p> <p>TE: Topic 1: 18A, 18B; Topic 4: 99B; Topic 6: 155B; Topic 7: 185A; Topic 11: 337A, 337B, 366A; Topic 13: 434A, 434B; Topic 14: 443B; Topic 15: 465B; Topic 16: 507A, 517A, 520A, 520B, 525A, 528A, 528B</p>	<p>solutions generated using a graphing calculator</p> <ul style="list-style-type: none"> • Detect possible errors by using estimations and other mathematical knowledge. • Know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. • Identify relevant mathematical resources and use them to pose or solve problems. • Use technological tools to explore and deepen their understanding of concepts. 										
<p>Students are expected to use mathematical terms and symbols with precision. Key terms and concepts are highlighted in each lesson. The <i>Problem-Based Interactive Learning</i> activity provides repeated opportunities for children to use precise language to explain their solution paths while solving problems.</p> <p>In the <i>Do You Understand?</i></p>	<p>6. Attend to precision.</p> <ul style="list-style-type: none"> • Try to communicate precisely to others. • Try to use clear definitions in discussion with others and in their own reasoning. • State the meaning of the symbols they choose, including using the equal sign consistently and appropriately. • Specify units of measure and label axes to clarify the correspondence with quantities in a problem. • Calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. 										

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<p>feature, students revisit these key terms or concepts and provide explicit definitions or explanations. Students are reminded to use appropriate units of measure in their solutions as well as in labels for diagrams, graphs, and other kinds of displays.</p> <p>SE/TE: Topic 1: 6, 14, 22; Topic 2: 37, 40, 61; Topic 3: 74, 94; Topic 4: 112; Topic 5: 134, 142, 149, 150; Topic 6: 165; Topic 7: 198; Topic 8: 216, 224, 228, 244; Topic 9: 258, 266, 274, 278; Topic 10: 304, 312, 317, 321, 324; Topic 11: 339, 340, 341, 342, 363, 364, 365; Topic 14: 445, 448, 449; Topic 15: 474, 475, 479, 494, 495; Topic 16: 525</p> <p>TE: Topic 1: 1A, 1D; Topic 2: 35D, 37A, 61A, 64A, 64B; Topic 3: 69D; Topic 4: 99D; Topic 5: 121D, 126A, 134A; Topic 6: 155D; Topic 7: 185D; Topic 8: 211A, 211D; Topic 9: 253B, 253D; Topic 10: 295D, 320A; Topic 11: 337D, 342A, 342B, 363A, 366A, 366B; Topic 12: 379D; Topic 13: 417D; Topic 14: 443B, 443D; Topic 15: 465D, 470A, 482A, 494A, 498A; Topic 16: 507D, 528A</p>	<ul style="list-style-type: none"> ○ In the elementary grades, students give carefully formulated explanations to each other. ○ In high school, students have learned to examine claims and make explicit use of definitions. 									

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<p>Students are encouraged to look for structure as they develop solution plans. In the <i>Look for a Pattern</i> problem-solving lessons, children in the early years develop a sense of patterning with visual and physical objects. As students mature in their mathematical thinking, they look for structure in numerical operations by focusing on place value and properties of operations. This focus on looking for and recognizing structure enables students to draw from patterns as they formalize their thinking about the structure of operations.</p> <p>SE/TE: Topic 1: 23, 24, 25, 26, 29; Topic 2: 49, 50, 51, 52; Topic 5: 135, 139, 142, 143; Topic 8: 240; Topic 10: 300, 316; Topic 12: 381, 384, 388, 396, 400, 408, 411; Topic 15: 482; Topic 16: 513, 514, 515, 516</p> <p>TE: Topic 1: 1D, 23A, 26A, 26B; Topic 2: 35B, 35D, 49A, 52A, 52B; Topic 3: 69B, 69D; Topic 4: 99D; Topic 5: 121B, 121D; Topic 6: 155D; Topic 7: 185D; Topic 8: 211B, 211D; Topic 9: 253D; Topic 10: 295A, 295D, 312A; Topic 11: 337B, 337D; Topic 12: 379D, 388A; Topic 13: 417B, 417D; Topic 14: 443D; Topic 15: 465D; Topic 16: 507D, 513A, 516A, 516B</p>	<p>7. Look for and make use of structure.</p> <ul style="list-style-type: none"> • Look closely to discern a pattern or structure. <ul style="list-style-type: none"> ○ Young students might notice that three and seven more is the same amount as seven and three more or they may sort a collection of shapes according to how many sides the shapes have. ○ Later, students will see 7×8 equals the well remembered $7 \times 5 - 7 \times 3$, in preparation for the distributive property. ○ In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. • Step back for an overview and can shift perspective. • See complicated things, such as some algebraic expressions, as single objects or composed of several objects. 							

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<p>Students are prompted to look for repetition in computations to help them develop shortcuts and become more efficient problem solvers. Students are reminded to think about problems they have encountered previously that may share features or processes. They are encouraged to draw on the solution plan developed for such problems, and as their mathematical thinking matures, to look for and apply generalizations to similar situations. The <i>Problem-Based Interactive Learning</i> activities offer students opportunities to look for regularity in the way operations behave.</p> <p>SE/TE: Topic 1: 15, 16, 17, 18; Topic 2: 53, 54, 55, 56; Topic 6: 180; Topic 8: 232; Topic 10: 313, 320, 329-332; Topic 11: 363, 364, 365, 366; Topic 13: 435, 436, 437, 438; Topic 15: 490; Topic 16: 513, 514, 515, 516, 529</p> <p>TE: Topic 1: 15A, 18A, 18B; Topic 2: 35B, 56A, 56B; Topic 7: 185B; Topic 10: 329A, 332A, 332B; Topic 11: 363A, 366A, 366B; Topic 12: 396A; Topic 13: 435A, 438A, 438B; Topic 16: 513A, 516A, 516B, 529A</p>	<p>8. Look for and express regularity in repeated reasoning.</p> <ul style="list-style-type: none"> • Notice if calculations are repeated. • Look both for general methods and for shortcuts. <ul style="list-style-type: none"> ○ Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeated decimal. ○ Middle school students might abstract the equation $(y-2)/((x-1)=1$ by paying attention to the calculation of slope as they repeatedly check whether the points are on the line through (1,2) with a slope 3. ○ Noticing the regularity in the way terms cancel when expanding $(x-1)(x+1)(x^2+1)$ and $(x-1)(x^3+x^2+x+1)$ might lead high school students to the general formula for the sum of a geometric series. • Maintain oversight of the process of solving a problem, while attending to the details. • Continually evaluate the reasonableness of intermediate results. 							

SPECIFIC EVALUATION CRITERIA

2013-2016 – Off Cycle Year Adoption

Grade 2 Mathematics

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

1. Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens and multiples of hundreds, tens and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).
2. Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.
3. Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.
4. Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

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For student mastery of content standards and objectives, the instructional materials will provide students with the opportunity to											
A. Operations & Algebraic Thinking											
Represent and solve problems involving addition and subtraction.											
<p>SE/TE: Topic 1: 3-6, 7-10, 11-14, 15-18, 19-22, 23-26, 27-30; Topic 2: 37-40, 41-44, 45-48, 49-52, 53-56, 61-64; Topic 3: 71-74, 75-78, 79-82, 83-86, 87-90, 91-94; Topic 4: 113-116; Topic 5: 147-150; Topic 6: 173-176; Topic 7: 199-202; Topic 8: 245-247; Topic 9: 287-290</p> <p>TE: Topic 1: 3A, 6A-6B, 7A, 10A-10B, 11A, 14A-14B, 15A, 18A-18B, 19A, 22A-22B, 23A, 26A-26B, 27A, 30A-30B; Topic 2: 37A, 40A-40B, 41A, 44A-44B, 45A, 48A-48B, 49A, 52A-52B, 53A, 56A-56B, 61A, 64A-64B; Topic 3: 71A, 74A-74B, 75A, 78A-78B, 79A, 82A-82B, 83A, 86A-86B, 87A, 90A-90B, 91A, 94A-94B; Topic 4: 113A, 116A-116B; Topic 5: 147A, 150A-150B; Topic 6: 173A, 176A-176B; Topic 7: 199A, 202A-202B; Topic 8: 245A, 248A-248B; Topic 9: 287A, 290A-290B</p>	<p>1. use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.</p>										

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	Add and subtract within 20.										
<p>SE/TE: Topic 2: 37-40, 41-44, 45-48, 57-60; Topic 3: 71-74, 75-78, 79-82, 83-86, 87-90</p> <p>TE: Topic 2: 37A, 40A-40B, 41A, 44A-44B, 45A, 48A-48B, 57A, 60A-60B; Topic 3: 71A, 74A-74B, 75A, 78A-78B, 79A, 82A-82B, 83A, 86A-86B, 87A, 90A-90B</p>	2. fluently add and subtract within 20 using mental strategies and by end of Grade 2, know from memory all sums of two one-digit numbers.										
	Work with Equal Groups of Objects to Gain Foundations for Multiplication										
<p>SE/TE: Topic 5: 143-146</p> <p>TE: Topic 5: 143A, 146A-146B</p>	3. determine whether a group of objects (up to 20) has an odd or even number of members, e.g. by pairing objects or counting them by 2s and write an equation to express an even number as a sum of two equal addends.										
<p>SE/TE: Topic 4: 101-104, 105-108, 109-112, 113-116</p> <p>TE: Topic 4: 101A, 104A-104B, 105A, 108A-108B, 109A, 112A-112B, 113A, 116A-116B</p>	4. use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns and write an equation to express the total as a sum of equal addends.										

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	B. Number & Operations in Base Ten										
	Understand place value.										
<p>SE/TE: Topic 5: 123-126, 127-130; Topic 10: 301-304</p> <p>TE: Topic 5: 123A, 126A-126B, 127A, 130A-130B, Topic 10: 301A, 304A, 304B</p> <p>a. SE/TE: Topic 5: 123-126, Topic 10: 297-300, 305-308 TE: Topic 5: 123A, 126A-126B, Topic 10: 297A, 300A, 300B, 305A, 308A, 308B</p> <p>b. SE/TE: Topic 10: 297-300, 301-304, 305-308 TE: Topic 10: 297A, 300A, 300B, 301A, 304A, 304B, 305A, 308A, 308B</p>	<p>1. understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones; e.g. 706 equals 7 hundreds, 0 tens and 6 ones and understand the following as special cases:</p> <p>a. 100 can be thought of as a bundle of ten tens – called a “hundred.”</p> <p>b. numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight or nine hundreds (and 0 tens and 0 ones).</p>										
<p>SE/TE: Topic 5: 135-138; Topic 6: 177-180; Topic 10: 297-300, 313-316, 317-320, 329-332</p> <p>TE: Topic 5: 135A, 138A-138B; Topic 6: 177A, 180A-180B; Topic 10: 297A, 300A-300B, 313A, 316A-316B, 317A, 320A-320B, 329A, 332A-332B</p>	<p>2. count within 1000 and skip-count by 5s, 10s and 100s.</p>										
<p>SE/TE: Topic 5: 123-126, 127-130; Topic 10: 301-304, 305-308</p> <p>TE: Topic 5: 123A, 126A-126B, 127A, 130A-130B; Topic 10: 301A, 304A-304B, 305A, 308A-308B</p>	<p>3. read and write numbers to 1000 using base-ten numerals, number names and expanded form .</p>										

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses										
	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I		A		M		N
<p>SE/TE: Topic 5: 131-134; Topic 10: 321-324, 325-328, 329-332</p> <p>TE: Topic 5: 131A, 134A-134B, Topic 10: 321A, 324A-324B, 325A, 328A-328B, 329A, 332A-332B</p>	<p>4. compare two three-digit numbers based on meanings of the hundreds, tens and ones digits, using $>$, $=$ and $<$ symbols to record the results of comparisons.</p>										
	<p>Use place value understanding and properties of operation to add and subtract.</p>										
<p>SE/TE: Topic 1: 23-26; Topic 2: 37-40, 41-44, 45-48, 49-52, 53-56, 57-60; Topic 3: 71-74, 75-78, 79-82, 83-86, 87-90; Topic 5: 139-142, 147-150; Topic 6: 157-160, 161-164, 165-168, 169-172, 173-176; Topic 7: 187-190, 191-194, 195-198, 199-202, 203-206; Topic 8: 213-216, 217-220, 221-224, 225-228, 229-232, 233-236, 237-240, 241-244, 245-248; Topic 9: 255-258, 259-262, 263-266, 267-270, 271-274, 275-278, 279-282, 283-286, 287-290; Topic 14: 445-448, 449-452, 453-456</p> <p>TE: Topic 1: 23A, 26A-26B, Topic 2: 37A, 40A-40B, 41A, 44A-44B, 45A, 48A-48B, 49A, 52A-52B, 53A, 56A-56B, 57A, 60A-60B, Topic 3: 71A, 74A-74B, 75A, 78A-78B, 79A, 82A-82B, 83A, 86A-86B, 87A, 90A-90B; Topic 5: 139A, 142A-142B, 147A, 150A-150B; Topic 6: 157A, 160A-160B, 161A, 164A-164B, 165A, 168A-168B, 169A, 172A-172B, 173A, 176A-176B; Topic 7: 187A, 190A-190B, 191A, 194A-194B, 195A,</p>	<p>5. fluently add and subtract within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction.</p>										

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses										
	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I		A		M		N
198A-198B, 199A, 202A-202B, 203A, 206A-206B; Topic 8: 213A, 216A-216B, 217A, 220A-220B, 221A, 224A-224B, 225A, 228A-228B, 229A, 232A-232B, 233A, 236A-236B, 237A, 240A-240B, 241A, 244A-244B; Topic 9: 255A, 258A-258B, 259A, 262A-262B, 263A, 266A-266B, 267A, 270A-270B, 271A, 274A-274B, 275A, 278A-278B, 279A, 282A-282B, 283A, 286A-286B, 287A, 290A-290B; Topic 14: 445A, 448A-448B, 449A, 452A-452B, 453A, 456A-456B	(Continued) 5. fluently add and subtract within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction.										
SE/TE: Topic 5: 139-142; Topic 8: 225-228, 229-232, 233-236, 237-240, 241-244; Topic 9: 275-278, 283-286 TE: Topic 5: 139A, 142A-142B; Topic 8: 225A, 228A-228B, 229A, 232A-232B, 233A, 236A-236B, 237A, 240A-240B, 241A, 244A-244B; Topic 9: 275A, 278A-278B, 283A, 286A-286B	6. add up to four two-digit numbers using strategies based on place value and properties of operations.										
SE/TE: Topic 7: 203-206; Topic 11: 339-342, 343-346, 347-350, 351-354, 355-358, 359-362, 363-366, 367-370, 371-374 TE: Topic 7: 203A, 206A-206B; Topic 11: 339A, 342A-342B, 343A, 346A-346B, 347A, 350A-350B, 351A, 354A-354B, 355A, 358A-358B, 359A, 362A-362B, 363A, 366A-366B, 367A, 370A-370B, 371A, 374A-374B	7. add and subtract within 1000, 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 understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones and sometimes it is necessary to compose or decompose tens or hundreds.										

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	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I		A		M		N
<p>SE/TE: Topic 6: 157-160, 161-164, 165-168, 173-176; Topic 7: 187-190, 199-202, Topic 10: 309-312, 313-316; Topic 11: 339-342, 343-346, 359-362</p> <p>TE: Topic 6: 157A, 160A-160B, 161A, 164A-164B, 165A, 168A-168B, 173A, 176A-176B; Topic 7: 187A, 190A-190B, 199A, 202A-202B; Topic 10: 309A, 312A-312B, 313A, 316A-316B; Topic 11: 339A, 342A-342B, 343A, 346A-346B, 359A, 362A-362B</p>	8. mentally add 10 or 100 to a given number 100-900 and mentally subtract 10 or 100 from a given number 100-900.										
<p>SE/TE: Topic 2: 37-40, 41-44, 45-48, 49-52, 53-56, 57-60; Topic 3: 71-74, 75-78, 79-82, 83-86; Topic 5: 143-146; Topic 6: 157-160, 161-164, 165-168, 169-172, 173-176; Topic 7: 187-190, 191-194, 195-198, 199-202; Topic 8: 213-216, 217-220, 221-224, 225-228, 229-232, 233-236, 237-240, 241-244; Topic 9: 255-258, 259-262, 263-266, 267-270, 271-274, 275-278, 279-282, 283-286; Topic 11: 339-342, 343-346, 347-350, 351-354, 359-362, 363-366, 367-370; Topic 14: 445-448, 449-452, 453-456</p> <p>TE: Topic 2: 37A, 40A-40B, 41A, 44A-44B, 45A, 48A-48B, 49A, 52A-52B, 53A, 56A-56B, 57A, 60A-60B; Topic 3: 71A, 74A-74B, 75A, 78A-78B, 79A, 82A-82B, 83A, 86A-86B; Topic 5: 143A, 146A-146B; Topic 6: 157A, 160A-160B, 161A, 164A-164B, 165A,</p>	9. Explain why addition and subtraction strategies work, using place value and the properties of operations.										

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	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I	A	M	N
168A-168B, 169A, 172A-172B, 173A, 176A-176B; Topic 7: 187A, 190A-190B, 191A, 194A-194B, 195A, 198A-198B, 199A, 202A-202B; Topic 8: 213A, 216A-216B, 217A, 220A-220B, 221A, 224A-224B, 225A, 228A-228B, 229A, 232A-232B, 233A, 236A-236B, 237A, 240A-240B, 241A, 244A-244B; Topic 9: 255A, 258A-258B, 259A, 262A-262B, 263A, 266A-266B, 267A, 270A-270B, 271A, 274A-274B, 275A, 278A-278B, 279A, 282A-282B, 283A, 286A-286B; Topic 11: 339A, 342A-342B, 343A, 346A-346B, 347A, 350A-350B, 351A, 354A-354B, 359A, 362A-362B, 363A, 366A-366B, 367A, 370A-370B; Topic 14: 445A, 448A-448B, 449A, 452A-452B, 453A, 456A-456B	(Continued) 9. Explain why addition and subtraction strategies work, using place value and the properties of operations.							
	C. Measurement & Data Measure and estimate lengths in standard units.							
SE/TE: Topic 15: 467-470, 471-474, 475-478, 479-482, 483-486, 499-502 TE: Topic 15: 467A, 470A, 470B, 471A, 474A-474B, 475A, 478A-478B, 479A, 482A-482B, 483A, 486A-486B, 499A, 502A-502B	1. measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks and measuring tapes.							

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SE/TE: Topic 15: 487-490 TE: Topic 15: 487A, 490A-490B	2. measure the length of an object twice, using length units of different lengths for the two measurements, describe how the two measurements relate to the size of the unit chosen and compare and contrast plane and solid geometric shapes.										
SE/TE: Topic 15: 471-474, 475-478, 479-482, 483-486, 499-502 TE: Topic 15: 471A, 474A-474B, 475A, 478A-478B, 479A, 482A-482B, 483A, 486A-486B, 499A, 502A-502B	3. estimate lengths using units of inches, feet, centimeters and meters.										
SE/TE: Topic 15: 495-498 TE: Topic 15: 495A, 498A-498B	4. measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.										
	Relate addition and subtraction to length.										
SE/TE: Topic 15: 491-494, 499-502 TE: Topic 15: 491A, 494A-494B, 499A, 502A-502B	5. use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.										
SE/TE: Topic 8: 233-236, 250; Topic 9: 275-278 TE: Topic 8: 233A, 236A-236B; Topic 9: 275A, 278A-278B	6. represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0,1,2,... and represent whole-number sums and differences within 100 on a number line diagram.										

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	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I		A		M		N
	Work with time and money.										
SE/TE: Topic 16: 509-512, 513-516 TE: Topic 16: 509A, 512A-512B, 513A, 516A-516B	7. tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.										
SE/TE: Topic 13: 419-422, 423-426, 427-430, 431-434, 435-438; Topic 14: 445-448, 449-452, 453-456, 457-460 TE: Topic 13: 419A, 422A-422B, 423a, 426A-426B, 427A, 430A-430B, 431A, 434A-434B, 435A, 438A-438B; Topic 14: 454A, 448A-448B, 449A, 452A-452B, 453A, 456A-456B, 457A, 460A-460B	8. solve word problems involving dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?										
	Represent and interpret data.										
SE/TE: Topic 16: 521-524 TE: Topic 16: 521, 524A-524B	9. generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object and show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.										
SE/TE: Topic 16: 517-520, 525-528, 529-532 TE: Topic 16: 517A, 520A-520B, 525A, 528A-528B, 529A, 532A-532B	10. draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories and solve simple put-together, take-apart and compare problems using information presented in a bar graph.										

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	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I		A		M		N
	D. Geometry Reason with Shapes and Their Attributes										
SE/TE: Topic 12: 381-384, 385-388, 389-392, 393-396, 397-400, 409-412 TE: Topic 12: 381A, 384A-384B, 385A, 388A-388B, 389A, 392A-392B, 393A, 396A-396B, 397A, 400A-400B, 409A, 412A-412B											
SE/TE: Topic 12: 401-404 TE: Topic 12: 401A, 404A-404B											
SE/TE: Topic 12: 405-408 TE: Topic 12: 405A, 408A-408B											