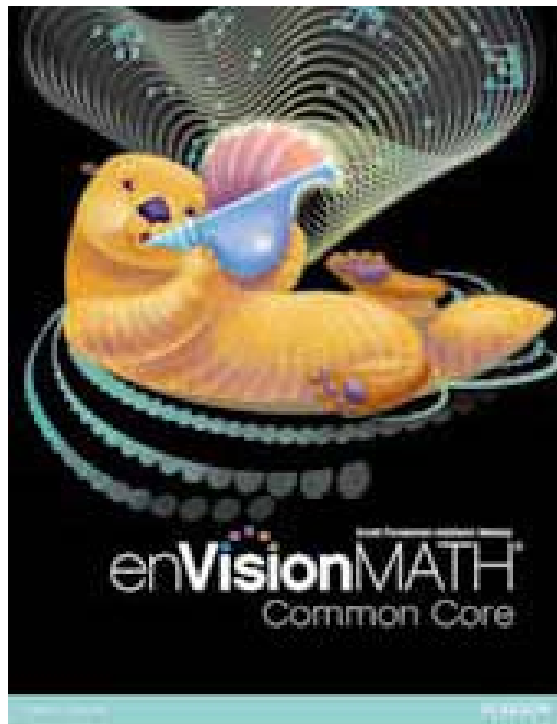


A Correlation of

en**VISION**MATH™
Common Core ©2012

Scott Foresman·Addison Wesley



to the

**Common Core State Standards
for Mathematics
Grade 3**

**A Correlation of *enVisionMATH Common Core*
to the Common Core State Standards for Mathematics**

Introduction

This document demonstrates how ***enVisionMATH Common Core*** ©2012 aligns to the Common Core State Standards for Mathematics, Grade 3. Correlation page references are to the Teacher's Edition. Lessons in the Teacher's Edition include facsimile pages of the Student Edition.

enVisionMATH Common Core was written specifically to address the Common Core State Standards and is based on critical foundational research and proven classroom results. It is organized and color-coded by the Common Core Domains, so teaching is highly focused, manageable, and coherent. ***enVisionMATH Common Core*** teaches all of the standards for mathematical content within a powerful concept-development skeleton grounded on big ideas of mathematics and related essential understandings.

The straightforward 4-Part lesson structure communicates daily to teachers both the Standards for Mathematical Content and Standards for Mathematical Practice that need to be developed with students and the conceptual underpinnings that need to be understood.

enVisionMATH Common Core provides deep conceptual development and understanding through daily Problem-Based Interactive Learning as a core part of instruction. This daily Interactive Learning is then connected with Visual Learning.

The ***enVisionMATH Common Core*** Student Edition presents content in more visual ways. Page layouts are clean, open, predictable, and easy-to-use. All art is functional, promoting understanding or providing data needed for problems. Visual models are consistent and, whenever possible, the visual and physical models remain the same across lessons to make teaching and learning easier.

The ***enVisionMATH Common Core*** Teacher's Edition provides an instructional plan for each lesson that reflects the work that highly effective teachers do in the classroom. The Teacher's Edition is visually appealing, easily connecting information (e.g. questions) to its point of use in the text. Teaching is grounded on rich questions and classroom conversations.

Assessment in ***enVisionMATH Common Core*** is an integral part of instruction, not an interruption. Both skills and understanding are assessed on a daily basis. Daily formative assessment leads to data-driven differentiated instruction, as well as information for interpreting results (diagnosis) and intervention tasks.

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<p style="text-align: center;">Common Core State Standards for Mathematics Mathematical Practices</p>	<p style="text-align: center;">enVisionMATH Common Core Grade 3</p>
<p>1. Make sense of problems and persevere in solving them. Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.</p>	<p><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. 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.</p> <p>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: 20-21, 22-23; Topic 2: 37, 49, 56-57; Topic 3: 67, 74-75, 77, 79, 81, 84, 88-91; Topic 4: 101, 108-109; Topic 5: 120, 123, 125, 127, 129, 131, 132-133; Topic 6: 147, 160-163; Topic 7: 173, 178-179, 180, 181, 182-183; Topic 8: 199, 202-203, 210-213; Topic 9: 236-237; Topic 10: 250, 261, 264-265; Topic 11: 292-293, 294-295; Topic 12: 314-315; Topic 13: 325, 329, 332-333; Topic 14: 343, 345, 352-353, 355, 356, 361, 362-363; Topic 15: 375, 382-383; Topic 16: 398, 404-405</p> <p>TE: Topic 3: 78B; Topic 4: 108B; Topic 5: 124B, 126B, 128B, 130B; Topic 6: 158B; Topic 7: 172B, 178B, Topic 10: 252B; Topic 11: 288B, 290B, 292B; Topic 13: 321A, 324B, 332B; Topic 14: 342B, 344B; Topic 15: 374B; Topic 16: 400B</p>

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<p>2. Reason abstractly and quantitatively. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to 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 the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.</p>	<p><i>enVisionMATH Common Core</i> 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. Reasonableness exercises remind students to compare their work to the original situation.</p> <p>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.</p> <p>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: 7, 8, 11, 12, 14, 15, 16, 18, 21, 23; Topic 2: 32, 36, 37, 40, 42, 43, 44, 46, 47, 50, 51; Topic 3: 66, 67, 68, 70, 73, 74, 75, 78, 79, 82, 88, 90; Topic 4: 100, 103; Topic 5: 118, 120, 123, 125, 129, 130, 131, 132, 133; Topic 6: 142, 143, 146, 147, 150, 153, 154, 156, 158; Topic 7: 175, 177, 178, 180; Topic 8: 192, 195, 198, 200, 206, 207, 208, 209; Topic 9: 223, 224, 228, 232, 233, 235, 237; Topic 10: 246, 247, 248, 249, 250, 251, 253, 256, 262, 263, 264; Topic 11: 279, 280, 284, 285, 286, 287, 289, 293; Topic 12: 305, 308, 309, 310, 312; Topic 13: 324, 327; Topic 14: 346, 349, 352, 357, 358, 359, 361, 362, 363; Topic 15: 374, 375, 377, 379, 380, 381; Topic 16: 394, 401, 403, 405</p> <p>TE: Topic 1: 14B, 16B, 20B; Topic 2: 29B, 29D, 32B, 36B, 40B, 42B, 46B, 50B, 56B; Topic 3: 66B, 78B; Topic 5: 124B, 128B, 130B; Topic 6: 139A, 154B; Topic 7: 172B, 174B, 178B, 180B; Topic 8: 189A, 189B; Topic 9: 222B, 234B; Topic 10: 234A, 248B, 250B, 252B, 254B, 258B, 260B, 262B; Topic 11: 278B, 280B; Topic 12: 304B, 312B; Topic 13: 324B; Topic 14: 342B, 346B, 348B; Topic 15: 374B, 376B, 378B, 380B; Topic 16: 394B, 400B, 402B</p>

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<p>3. Construct viable arguments and critique the reasoning of others. Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.</p>	<p>Consistent with a focus on reasoning and sense-making is a focus on critical reasoning – argumentation and critique of arguments. In Pearson’s <i>enVisionMATH Common Core</i>, the <i>Problem-Based Interactive Learning</i> 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>Writing to Explain</i> exercises in Grades 3–6 help students develop foundational critical reasoning skills by having them construct explanations for processes. The ability to articulate a clear 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 1: 10, 13, 17, 20; Topic 2: 32, 41, 47, 50, 54; Topic 3: 86; Topic 4: 105; Topic 5: 122, 124; Topic 6: 147, 150, 153, 155, 157, 159, 160; Topic 7: 177; Topic 8: 194, 204; Topic 9: 225, 230; Topic 10: 248, 249, 250; Topic 11: 282, 287, 290, 295; Topic 12: 306; Topic 13: 326, 332; Topic 14: 343, 345, 346</p> <p>TE: Topic 2: 32B, 36B, 40B, 42B, 46B, 50B, 56B; Topic 3: 66B, 74B, 78B; Topic 4: 104B, 106B, 108B; Topic 5: 124B, 128B, 130B; Topic 6: 139B, 154B; Topic 7: 172B, 178B, 180B; Topic 9: 222B, 234B; Topic 10: 254B, 262B; Topic 11: 278B, 280B; Topic 12: 304B, 314B; Topic 13: 324B, 330B; Topic 14: 342B, 344B; Topic 15: 374B, 380B; Topic 16: 400B, 402B</p>

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<p>4. Model with mathematics. Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. 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. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	<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: 11; Topic 2: 33, 34, 35, 41, 55; Topic 3: 69, 80, 87; Topic 4: 100, 101, 102, 103, 105, 107, 108, 109; Topic 5: 125, 129; Topic 6: 143, 149, 150, 159, 160, 161; Topic 7: 172, 173, 174, 175, 181, 183; Topic 8: 201, 205, 211; Topic 9: 225, 227, 229; Topic 10: 249, 258, 259, 265; Topic 11: 283, 291; Topic 12: 306, 313, 315; Topic 13: 329; Topic 14: 342, 351, 361; Topic 15: 382, 383; Topic 16: 401, 403, 405</p> <p>TE: Topic 2: 46B, 50B; Topic 3: 86B, 88B; Topic 4: 97A, 104B, 106B, 108B, Topic 5: 124B, 128B, 132B; Topic 6: 148B, 160B; Topic 7: 169B, 169B, 174B, 182B; Topic 8: 200B, 202B, 206B, 210B; Topic 9: 224B; 228B, 232B, Topic : 264B, 280B; Topic 12: 304B, 312B, 314B; Topic 13: 330B; Topic 14: 342B, 350B, 352B, 360B; Topic 16: 400B, 402B, 404B</p>

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<p>5. Use appropriate tools strategically. Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students 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. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.</p>	<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 particular situation.</p> <p>SE/TE: Topic 1: 6; Topic 3: 73; Topic 5: 127; Topic 6: 145, 162, 174, 175, 176; Topic 7: 174, 175, 176; Topic 9: 222, 231; Topic 10: 259, 260; Topic 11: 277, 283; Topic 13: 327, 330; Topic 14: 344, 345, 346, 347, 349, 350, 356, 360, 363; Topic 15: 379; Topic 16: 395, 398, 403</p> <p>TE: Topic 1: 6B, 22B; Topic 2: 34B; Topic 3: 68B, 72B; 76B, 80B, 82B; Topic 4: 97B, 100B, 102B; Topic 5: 122B, 126B; Topic 6: 142B; 144B; 146B; 148B; 152B; Topic 7: 172B, 174B, 180B; Topic 8: 200B; Topic 9: 222B, 226B; 228B, 234B; Topic 10: 2346B, 254B; Topic 11: 273B, 276B, 278B, 280B, Topic 12: 304B, 312B; Topic 13: 321B, 324B, 326B, 330B; Topic 14: 339B, 344B, 354B, 358B, 362B; Topic 15: 371B, 382B; Topic 16: 389B, 392B, 396B, 400B, 402B</p>

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<p>6. Attend to precision. Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.</p>	<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> feature, students revisit these key terms or concepts and provide explicit definitions or explanations. In Grades 3–6, the Writing to Explain and <i>Think About the Structure</i> exercises require students to use precise language to provide clear explanations of terms, concepts, or processes.</p> <p>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: 8, 9; Topic 2: 43; Topic 3: 85; Topic 4: 102; Topic 5: 123, 127; Topic 6: 147, 162, 174, 175, 176; Topic 7: 175; Topic 8: 199, 207; Topic 9: 222, 231; Topic 10: 253; Topic 11: 291; Topic 12: 309, 311; Topic 13: 324; Topic 16: 393</p> <p>TE: Topic 1: 2J; Topic 3: 63B, 63D, 66B; Topic 4: 97D; Topic 5: 115D; Topic 6: 156B; Topic 7: 174B, Topic 8: 189D, 200B; Topic 9: 219D, 230B; Topic 10: 243D; Topic 11: 273D; Topic 12: 301D, 308B; Topic 13: 321D, 324B; Topic 14: 339A; Topic 15: 371A, 371D; Topic 16: 389A, 389D</p>

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<p>7. Look for and make use of structure. Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, 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 learning about 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. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.</p>	<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: 18; Topic 2: 33, 48, 52; Topic 3: 78, 86, 90; Topic 4: 109; Topic 5: 119; Topic 6: 143, 144, 145, 146, 147, 152, 153, 155, 156, 162; Topic 7: 177, 179, 183; Topic 8: 193, 203, 212; Topic 10: 252, 260, 263; Topic 11: 285, 288; Topic 12: 307; Topic 14: 356, 358, 363; Topic 15: 379; Topic 16: 392, 402, 403</p> <p>TE: Topic 1: 2G, 2H, 2J, 10B, 12B; Topic 2: 29B, 29D, 54B; Topic 3: 63A, 63D, 86B; Topic 5: 115D, 118B, 126B, 128B; Topic 7: 169D, 176B; Topic 9: 219D, 236B; Topic 10: 243B, 243D; 254B; Topic 11: 273D, 286B; Topic 12: 301D; Topic 13: 330B; Topic 15: 371D; Topic 16: 389D, 392B</p>

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<p>8. Look for and express regularity in repeated reasoning. Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. 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 repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.</p>	<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: 19; Topic 5: 118-120, 126; Topic 7: 183; Topic 10: 255; Topic 11: 282, 293; Topic 13: 331; Topic 14: 353</p> <p>TE: Topic 2: 56B; Topic 3: 74B, 86B; Topic 4: 104B, 108B; Topic 5: 126B, 128B, 130B; Topic 7: 178B, 180B; Topic 8: 198B; Topic 9: 228B; Topic 10: 254B; Topic 11: 276B; Topic 13: 328B</p>

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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
Operations and Algebraic Thinking	
Represent and solve problems involving multiplication and division.	
1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. [3.OA.1]	<p>SE/TE: Topic 4: 100-101, 102-103, 104-105, 106-107, 108-109</p> <p>TE: Topic 4: 100A-100B, 101A-101B, 102A-102B, 103A-103B, 104A-104B, 105A-105B, 106A-106B 107A-107B, 108A-108B-109</p>
2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. [3.OA.2]	<p>SE/TE: Topic 7: 172-173, 174-175</p> <p>TE: Topic 7: 172A-172B, 173A-173B, 174A-174B, 175A-175B</p>
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.1 [3.OA.3]	<p>SE/TE: Topic 4: 100-101, 102-103, 104-105, 106-107, 108-109; Topic 5: 118-121, 122-123, 124-125, 126-127, 128-129, 132-133; Topic 6: 142-143, 144-145, 146-147, 148-151, 152-153, 156-157, 158-159, 160-163; Topic 7: 172-173, 174-175, 180-181, 182-183; Topic 8: 192-193, 194-197, 198-199, 200-201, 202-203, 204-205, 206-207, 208-209, 210-213; Topic 9: 236-237</p> <p>TE: Topic 4: 100A-100B, 101A-101B, 102A-102B, 103A-103B, 104A-104B, 105A-105B, 106A-106B, 107A-107B, 108A-108B, 109A-109B; Topic 5: 118S-118B, 121A-121B, 122A-122B, 123A-123B, 124A-124B, 125A-125B, 126A-126B, 127A-127B, 128A-128B, 129A-129B, 132A-132B, 133A-133B; Topic 6: 142A-142B, 143A-143B, 144A-144B, 145A-145B, 146A-146B, 147A-147B, 148A-148B, 151A-151B, 152A-152B, 153A-153B, 156A-156B 157A-157B, 158A-158A, 159A-159B, 160A-160B, 163A-163B; Topic 7: 172A-172B, 173A-173B, 174A-174B, 175A-175B, 180A-180B, 181A-181B, 182A-182B, 183A-183B; Topic 8: 192A-192B, 193A-193B, 194A-194B, 197A-197B, 198A-198B, 199A-199B, 200A-200B, 201A-201B, 202A-202B, 203A-203B, 204A-204B, 205A-205B, 206A-206B, 207A-207B, 208A-208B, 209A-209B, 210A-201B, 213A-213B; Topic 9: 236A-236B, 237A-237B</p>

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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. [3.OA.4]	<p>SE/TE: Topic 7: 172-173, 174-175, 176-177, 178-179, 180-181, 182-183; Topic 8: 192-193, 194-197, 202-203, 204-205, 206-207, 208-209</p> <p>TE: Topic 7: 172A-172B, 173A-173B, 174A-174B, 175A-175B, 176A-176B, 177A-177B, 178A-178B, 179A-179B, 180A-180B, 181A-181B, 182A-182B, 183A-183B; Topic 8: 192A-192B, 193A-193B, 194A-194B, 197A-197B, 202A-202B, 203A-203B, 204A-204B, 205A-205B, 206A-206B, 207A-207B, 208A-208B, 209A-209B</p>
Understand properties of multiplication and the relationship between multiplication and division.	
5. Apply properties of operations as strategies to multiply and divide. [3.OA.5]	<p>SE/TE: Topic 4: 100-101, 102-103, 104-105, 106-107, 108-109; Topic 6: 142-143, 146-147, 154-155; Topic 8: 206-207</p> <p>TE: Topic 4: 100A-100B, 101A-101B, 102A-102B, 103A-103B, 104A-104B, 105A-105B, 106A-106B, 107A-107B, 108A-108B, 109A-109B; Topic 6: 142A-142B, 143A-143B, 146A-146B, 147A-147B, 154A-154B, 155A-155B; Topic 8: 206A-206B, 207A-207B</p>
6. Understand division as an unknown-factor problem. [3.OA.6]	<p>SE/TE: Topic 7: 176-177, 178-179, 182-183</p> <p>TE: Topic 7: 176A-176B, 177A-177B, 178A-178B, 179A-179B, 182A-182B, 183A-183B</p>
Multiply and divide within 100.	
7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. [3.OA.7]	<p>SE/TE: Topic 5: 122-123; Topic 8: 192-193, 194-197, 198-199, 200-201, 208-209</p> <p>TE: Topic 5: 122A-122B, 123A-123B; Topic 8: 192A-192B, 193A-193B, 194A-194B, 197A-197B, 198A-198B, 199A-199B, 200A-200B, 201A-201B, 208A-208B, 209A-209B</p>

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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
Solve problems involving the four operations, and identify and explain patterns in arithmetic.	
8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. [3.OA.8]	SE/TE: Topic 2: 46-49, 50-53, 56-57; Topic 3: 72-73, 74-75, 76-77, 80-81, 82-85, 88-91; Topic 5: 122-123, 124-125, 126-127, 128-129, 132-133; Topic 6: 144-145, 146-147, 148-151, 152-153, 156-157; Topic 8: 202-203 TE: Topic 2: 46A-46B, 49A-49B, 50A-50B, 53A--53B, 56A-56B, 57A--57B; Topic 3: 72A-72B, 73A-73B, 74A-74B, 75A-75B, 76A-76B, 77A-77B, 80A-80B, 81A-81B, 82A-82B, 85A-85B, 88A-88B, 91A-91B; Topic 5: 122A-122B, 123A-123B, 124A-124B, 125A-125B, 126A-126B, 127A-127B, 128A-128B, 129A-129B, 132A-132B, 133A-133B; Topic 6: 144A-144B, 145A-145B, 146A-146B, 147A-147B, 148A-148B, 151A-151B, 152A-152B, 153A-153B, 156A-156B, 157A-157B; Topic 8: 202A-202B, 203A-203B
9. Identify arithmetic patterns [3.OA.9]	SE/TE: Topic 2: 32-33; Topic 4: 108-109; Topic 5: 118-121, 122-123, 124-125, 126-127, 128-129 TE: Topic 2: 32A-32B, 33A-33B; Topic 4: 108A-108B, 109A-109B; Topic 5: 118A-118B, 121A-121B, 122A-122B, 123A-123B, 124A-124B, 125A-125B, 126A-126B, 127A-127B, 128A-128B, 129A-129B
Number and Operations in Base Ten	
Use place value understanding and properties of operations to perform multi-digit arithmeticⁱ.	
1. Use place value understanding to round whole numbers to the nearest 10 or 100. [3.NBT.1]	SE/TE: Topic 1: 10-11, 12-13, 14-15, 16-19, 20-21; Topic 2: 42-45, 46-49, 50-53; Topic 3: 72-73, 82-85; Topic 6: 156-157; Topic 8: 210-213 TE: Topic 1: 10A-10B, 11A-11B, 12A-12B, 13A-13B, 14A-14B, 15A-15B, 16A-16B, 19A-19B, 20A-20B, 21A-21B; Topic 2: 42A-42B, 45A-45B, 46A-46B, 49A-49B, 50A-50B, 53A-53B; Topic 3: 72A-72B, 73A-73B, 82A-82B, 85A-85B; Topic 6: 156A-156B, 157A-157B; Topic 8: 210A-210B, 213A-213B

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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. [3.NBT.2]	<p>SE/TE: Topic 1: 10-11, 22-23; Topic 2: 32-33, 34-35, 36-39, 40-41, 46-49, 50-53, 54-55, 56-57; Topic 3: 66-67, 68-71, 72-73, 74-75, 76-77, 78-79, 80-81, 82-85, 86-87, 88-91; Topic 6: 156-157</p> <p>TE: Topic 1: 10A-10B, 11A-11B, 22A-22B, 23A-23B; Topic 2: 32A-32B, 33A-33B, 34A-34B, 35A-35B, 36A-36B, 39A-39B, 40A-40B, 41A-41B, 46A-46B, 49A-49B, 50A-50B, 53A-53B, 54A-54B, 55A-55B, 56A-56B, 57A-57B; Topic 3: 66A-66B, 67A-67B, 68A-68B, 71A-71B, 72A-72B, 73A-73B, 74A-74B, 75A-75B, 76A-76B, 77A-77B, 78A-78B, 79A-79B, 80A-80B, 81A-81B, 82A-82B, 85A-85B, 86A-86B, 87A-87B, 88A-88B, 91A-91B; Topic 6: 156A-156B, 157A-157B</p>
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations. [3.NBT.3]	<p>SE/TE: Topic 5: 118-121, 128-129, 130-131</p> <p>TE: Topic 5: 118A-118B, 121A-121B, 128A-128B, 129A-129B, 130A-130B, 131A-131B</p>
Number and Operations–Fractions	
Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.	
Develop understanding of fractions as numbers.	
1. Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$. [3.NF.1]	<p>SE/TE: Topic 9: 222-223, 224-225, 226-227, 228-229</p> <p>TE: Topic 9: 222A-222B, 223A-223B, 224A-224B, 225A-225B, 226A-226B, 227A-227B, 228A-228B, 229A-229B</p>
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram. [3.NF.2]	<p>SE/TE: Topic 9: 230-231; Topic 10: 264-265</p> <p>TE: Topic 9: 230A-230B, 231A-231B; Topic 10: 264A-264B, 265A-265B</p>

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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. [3.NF.2.a]	SE/TE: Topic 9: 230-231, 232-233 TE: Topic 9: 230A-230B, 231A-231B, 232A-232B, 233A-233B
b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. [3.NF.2.b]	SE/TE: Topic 9: 230-231, 234-235 TE: Topic 9: 230A-230B, 231A-231B, 234A-234B, 235A-235B
3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. [3.NF.3]	SE/TE: Topic 10: 262-263 TE: Topic 10: 262A-262B, 263A-263B
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. [3.NF.3.a]	SE/TE: Topic 10: 246-247, 248-249, 252-253, 254-257, 258-259 TE: Topic 10: 246A-246B, 247A-247B, 248A-248B, 249A-249B, 252A-252B, 253A-253B, 254A-254B, 257A-257B, 258A-258B, 259A-259B
b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model. [3.NF.3.b]	SE/TE: Topic 10: 254-257, 258-259 TE: Topic 10: 254A-254B, 257A-257B, 258A-258B, 259A-259B
c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram. [3.NF.3.c]	SE/TE: Topic 10: 258-259, 260-261 TE: Topic 10: 258A-258B, 259A-259B, 260A-260B, 261A-261B
d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. [3.NF.3.d]	SE/TE: Topic 10: 246-247, 248-249, 250-251, 252-253 TE: Topic 10: 246A-246B, 247A-247B, 248A-248B, 249A-249B, 250A-250B, 251A-251B, 252A-252B, 253A-253B

**A Correlation of *enVisionMATH* Common Core
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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
Measurement and Data	
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	
1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. [3.MD.1]	SE/TE: Topic 12: 304-307, 308-309, 310-311, 312-313, 314-315 TE: Topic 12: 304A-304B, 307A-307B, 308A-308B, 309A-309B, 310A-310B, 311A-311B, 312A-312B, 313A-313B, 314A-314B, 315A-315B
2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. [3.MD.2]	SE/TE: Topic 15: 374-375, 376-377, 378-379, 380-381, 382-383 TE: Topic 15: 374A-374B, 375A-375B, 376A-376B, 377A-377B, 378A-378B, 379A-379B, 380A-380B, 391A-381B, 382A-382B, 383A-383B
Represent and interpret data.	
3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. [3.MD.3]	SE/TE: Topic 3: 76-77, 88-91; Topic 16: 396-399, 400-401, 402-403, 404-405 TE: Topic 3: 76A-76B, 77A-77B, 88A-88B, 91A-91B; Topic 16: 396A-396B, 399A-399B, 400A-400B, 401A-401B, 402A-402B, 403A-403B, 404A-404B, 405A-405B
4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. [3.MD.4]	SE/TE: Topic 16: 392-393, 394-395 TE: Topic 16: 392A-392B, 393A-393B, 394A-394B, 395A-395B
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	
5. Recognize area as an attribute of plane figures and understand concepts of area measurement. [3.MD.5]	SE/TE: Topic 14: 342-343, 360-361, 362-363 TE: Topic 14: 342A-342B, 343A--343B, 360A-360B, 361A-361B, 362A-362B, 363A-363B

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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. [3.MD.5.a]	SE/TE: Topic 14: 344-345, 352-353 TE: Topic 14: 344A-344B, 345A-345B, 352A-352B, 353A-353B
b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. [3.MD.5.b]	SE/TE: Topic 14: 344-345 TE: Topic 14: 344A-344B, 345A-345B
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). [3.MD.6]	SE/TE: Topic 14: 342-343, 346-347, 352-353 TE: Topic 14: 342A-342B, 343A-343B, 346A-346B, 347A-347B, 352A-352B, 353A-353B
7. Relate area to the operations of multiplication and addition. [3.MD.7]	SE/TE: Topic 14: 352-353 TE: Topic 14: 352A-352B, 353A-353B
a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. [3.MD.7.a]	SE/TE: Topic 14: 348-349 TE: Topic 14: 348A-348B, 349A-349B
b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. [3.MD.7.b]	SE/TE: Topic 14: 348-349, 358-359 TE: Topic 14: 348A-348B, 349A-349B, 358A-358B, 359A-359B
c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. [3.MD.7.c]	SE/TE: Topic 6: 144-145, 146-147, 148-151, 152-154; Topic 14: 350-351 TE: Topic 6: 144A-144B, 145A-145B, 146A-146B, 147A-147B, 148A-148B, 151A-151B, 152A-152B, 153A-154B; Topic 14: 350A-350B, 351A-351B
d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. [3.MD.7.d]	SE/TE: Topic 14: 354-357 TE: Topic 14: 354A-354B, 357A-357B

**A Correlation of *enVisionMATH* Common Core
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Common Core State Standards for Mathematics Grade 3	enVisionMATH Common Core Grade 3
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	
8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. [3.MD.8]	<p>SE/TE: Topic 6: 160-163; Topic 13: 324-325, 326-327, 328-329, 330-331, 332-333; Topic 14: 358-359</p> <p>TE: Topic 6: 160A-160B, 163A-163B; Topic 13: 324A-324B, 325A-325B, 326A-326B, 327A-327B, 328A-328B, 329A-329B, 330A-330B, 331A-331B, 332A-332B, 333A-333B; Topic 14: 358A-358B, 359A-359B</p>
Geometry	
Reason with shapes and their attributes.	
1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. [3.G.1]	<p>SE/TE: Topic 11: 276-277, 278-279, 280-283, 284-285, 286-287, 288-289, 290-291, 294-295</p> <p>TE: Topic 11: 276A-276B, 277A-277B, 278A-278B, 279A-279B, 280A-280B, 283A-283B, 284A-284B, 285A-285B, 286A-286B, 287A-287B, 288A-288B, 289A-289B, 290A-290B, 291A-291B, 294A-294B, 295A-295B</p>
2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. [3.G.2]	<p>SE/TE: Topic 11: 288-289, 290-291, 292-293; Topic 14: 360-361</p> <p>TE: Topic 11: 288A-288B, 289A-289B, 290A-290B, 291A-291B, 292A-292B, 293A-293B; Topic 14: 360A-360B, 361A-361B</p>