A Correlation of

Scott Foresman • Addison Wesley

enVisionMATH™

to the

INDIANA Academic Standards Mathematics

Grade Six

PEARSON

G/M-267_G6

Introduction

This correlation shows the alignment between **Scott Foresman – Addison Wesley enVisionMATH,** copyright 2011, to Indiana's Academic Standards – Mathematics, Final Draft March 12, 2009. Correlation page references are to the Teacher's Edition. Lessons in the Teacher's Edition include facsimile pages of the Student Edition.

The en**Vision**MATH™ program is based around scientific research on how children learn mathematics as well as on classroom-based evidence that validates proven reliability.

Personalized Curriculum
en**Vision**MATH™ provides 20 (16 in Kindergarten) focused topics that are coherent, digestible groups of lessons focusing on one or a few related content areas. A flexible sequence of topics is small enough for a district to rearrange into a personalized curriculum that matches the sequence preferred by the district. The curriculum is designed so that all standards can be taught before the major mathematics testing.

Instructional Design
en**Vision**MATH™ teaches for deep conceptual understanding using research-based best practices. Essential understandings connected by Big Ideas are explicitly stated in the Teacher's Edition. Daily Spiral Review and the Problem of the Day focus foundational skills and allow for ongoing practice with a variety of problem types. Daily interactive concept development encourages students to interact with teachers and other students to develop conceptual understanding.

Visual Learning allows students to benefit from seeing math ideas portrayed pictorially as well as being able to see connections between ideas. en**Vision**MATH™ created a Visual Learning Bridge which is a step-by-step bridge between the interactive learning activity and the lesson exercises to help students focus on one idea at a time and see the connections within the sequence of ideas. The strong sequential visual/verbal connections deepen conceptual understanding for students of all learning modalities and are particularly effective with English language learners and struggling readers. Guiding questions in blue type help the teacher guide students through the examples, ask probing questions to stimulate higher order thinking, and allow for checking of understanding.

Differentiated Instruction
en**Vision**MATH™ engages and interests all students with leveled activities for ongoing differentiated instruction. A Teacher-Directed Intervention activity at the end of every lesson provides immediate opportunities to get students on track. In addition, ready made leveled learning centers for each lesson allow different students to do the same activity at different levels at the same time giving the teacher uninterrupted time to focus on reteaching students who require intervention. All centers can be used repeatedly due to the inclusion of a "Try Again" at the end. They can also be used for ongoing review and they can be used year after year. Topic-specific considerations for EL, Special Education, At-Risk, and Advanced students enable the teacher to accommodate the diverse learners in the classroom.

Scott Foresman-Addison Wesley enVisionMATH
to the
Indiana Academic Standards – Mathematics

Grade 6

Indiana Mathematics Standards	Scott Foresman – Addison Wesley enVisionMATH
GRADE 6	
Standard 1	
Number Sense and Computation	
6.1.1 Compare, order, and represent on a number line positive and negative integers, fractions, decimals (to hundredths), and mixed numbers.	**Topic 1:** 8B-9B, 14-15, 22B-23 **Topic 10:** 222B-223B, 224B-225B, 226B-227, 229A-229B
6.1.2 Interpret the absolute value of a number as the distance from zero on a number line, find the absolute value of real numbers, and know that the distance between two numbers on the number line is the absolute value of their difference.	**Topic 10:** 222-223
6.1.3 Use percents to represent parts of a whole and find the percentage part of a whole.	**Topic 14:** 432A, 344B-346, 347A-347B, 354A-355, 357A-357B
6.1.4 Recognize commonly used fractions, decimals, and percents and their equivalents and convert between any two representations of any non-negative rational number without the use of a calculator.	**Topic 6:** 146A-147B **Topic 14:** 342A-342B, 348A-349B
6.1.5 Solve problems involving addition, subtraction, multiplication and division of integers and represent computation with integers on a number line. Describe the effect of operations with numbers less than zero.	**Topic 10:** 220A-220F, 230B-231, 233A-233B, 234A-237B, 238A-239B, 240A-241B
6.1.6 Solve problems involving addition, subtraction, multiplication and division of positive fractions and decimals and explain why a particular operation was used for a given situation.	**Topic 3:** 64A-65B, 70-71, 73A-73B, 74A-75B, 76A-77B, 78A-79B **Topic 5:** 120 **Topic 6:** 144A-145B **Topic 7:** 162A-163B, 166A-167, 169A-169B, 172A-173B, 174A-175, 177A-177B **Topic 8:** 186A-187B, 190A-191B, 192A-193B **Topic 9:** 204A-205B, 206A-207B, 210A-211B
6.1.7 Interpret ratios, model ratios, and use ratios to show the relative sizes of two quantities.	**Topic 12:** 298A, 300A-301B
• Use the notations: a/b, a to b and a:b.	**Topic 12:** 298A, 300A-301B
• Write equivalent ratios,	**Topic 12:** 302A-304, 305A-305B
• Express a ratio in its simplest form.	**Topic 12:** 302A-304, 305A-305B
• Find the ratio of two given quantities.	**Topic 12:** 302A-304, 305A-305B

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6.1.8 Recognize proportional relationships and solve problems involving proportional relationships. Find the missing term in a pair of equivalent ratios and find one quantity given the other quantity and their ratio.	**Topic 12:** 302A-304, 305A-305B, 306B-6-7B, 308A-309, 310A-312, 313A-313B **Topic 13:** 324A-325B, 32A6-327B, 330A-332, 333A-333B
6.1.9 Solve simple percent, ratio and proportion problems, including problems involving discounts at sales, interest earned and tips.	**Topic 12:** 302A-304, 305A-305B, 306B-6-7B **Topic 13:** 324A-325B, 32A6-327B, 330A-332, 333A-333B **Topic 14:** 343, 358A-360, 361A-361B **Topic 17:** 429
Standard 2	
Algebra and Functions	
6.2.1 Write and solve one-step linear equations and inequalities in one variable.	**Topic 4:** 94A-94F, 98A-101B, 102A-105B, 106A-108, 109A-109B, 110-113B **Topic 12:** 315 **Topic 13:** 337
6.2.2 Write and use formulas with up to three variables to solve problems.	**Topic 12:** 310A-311, 313-313B **Topic 14:** 358-359, 361A-361B **Topic 17:** 426A-427, 429A-429B, 430A-433B, 434A-437B **Topic 18:** 462A-463B
6.2.3 Apply the correct order of operations and the properties of real numbers [identity, inverse, commutative, associative and distributive properties] to evaluate numerical expressions, including those that use grouping symbols such as parentheses. Justify each step in the process.	**Topic 2:** 30B, 36A-39B **Topic 3:** 80B-81B
6.2.4 Identify and graph ordered pairs in all four quadrants of the coordinate plane.	**Topic 10:** 246A-249B **Topic 15:** 382A-385B
6.2.5 Solve problems involving linear functions with integer values. Create a table and graph the resulting ordered pairs of integers on a grid. Look for patterns in how a change in one variable relates to a change in the second variable and write the equation.	**Topic 15:** 380A-381B **Topic 19:** 479
Standard 3	
Geometry and Measurement	
6.3.1 Identify, draw and use the properties of vertical, adjacent, complementary, and supplementary angles, and properties of triangles and quadrilaterals, to solve problems involving a missing angle.	**Topic 11:** 270A-273B, 274A-275, 277A-277B, 278A-281B

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6.3.2 Recognize that the sum of the interior angles of any triangle is 180º and that the sum of the interior angles of any quadrilateral is 360º. Use this information to solve problems.	**Topic 11:** 274A-275, 277A-277B, 278A-281B
6.3.3 Develop and use the formulas for the circumference and area of a circle.	**Topic 17:** 438A-441B, 442A-443B
6.3.4 Recognize that real-world measurements are approximations. Identify appropriate instruments and units for a given measurement situation, taking into account the precision of the measurement desired.	**Topic 16:** 398B, 400-401, 404-405, 408A-411B
6.3.5 Develop and use the formulas for the surface area and volume of a cylinder and find the surface area and volume of three-dimensional objects built from rectangular solids and cylinders.	**Topic 18:** 452B, 458A-460, 461A-461B, 462A-463B, 464A-465B
Standard 4	
Data Analysis and Probability	
6.4.1 Construct and analyze circle graphs and stem-and-leaf plots.	**Topic 14:** 349, 354 **Topic 19:** 480A-483B, 484A-486, 498A-499B
6.4.2 Choose the appropriate display for a single variable set of data from bar graphs, line graphs, circle graphs and stem-and-leaf plots. Justify the choice of data display.	**Topic 19:** 484A-487B
6.4.3 Compare the mean, median and mode for a set of data and explain which measure is most appropriate in a given context.	**Topic 19:** 490A-493B, 500B, 500-501, 501B
6.4.4 Solve problems involving probability as a measure of chance and verify that the probabilities computed are reasonable.	**Topic 20:** 518A, 528A-529B, 530A-533B, 534A-535B
6.4.5. Recognize and represent probabilities as ratios, measures of relative frequency, decimals between 0 and 1, and percentages between 0 and 100.	**Topic 20:** 518A, 528A-529B, 530A-533B, 534A-535B
Process Standards	
Problem Solving	
• Build new mathematical knowledge through problem solving.	**Problem solving is taught throughout the curriculum, especially in the *Interactive Learning, Guided Practice, Independent Practice* and *Problem Solving* features. The following are some representative examples:** **Topic 1:** 2G-2L, 4B, 6, 7, 8B, 9, 10B, 14B **Topic 4:** 96B, 98B, 102B, 106B, 110B **Topic 5:** 124B, 126B, 128B, 132B, 134B **Topic 6:** 144B, 144, 146B, 146, 148B, 150

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continued	**Topic 7:** 164B, 164, 166B, 166-167, 172B **Topic 9:** 202B, 202-203, 204-205, 206B **Topic 11:** 262B, 262-263, 266B, 266, 270B **Topic 15:** 372-373, 376B, 376-377, 390-391 **Topic 16:** 400-401, 404B, 404-405, 408B **Topic 17:** 426B, 426-427, 403B, 403, 430B
• Solve problems that arise in mathematics and in other contexts.	**This objective is taught throughout the curriculum, especially in the *Interactive Learning, Problem Solving* and *Guided Practice* features. The following are some representative examples:** **Topic 1:** 7, 8B, 9, 10-11, 13, 14, 17, 18-19 **Topic 5:** 124B, 126B, 128B, 132-133, 134B **Topic 6:** 148-149, 150B, 150-151, 154B **Topic 8:** 187, 189, 191, 192B, 193, 195 **Topic 9:** 207, 209, 210B, 211, 2113, 214B **Topic 10:** 237, 238B, 239, 240B, 241, 243 **Topic 13:** 323, 325, 326B, 327, 328B, 329 **Topic 16:** 401, 403, 404B, 405, 407, 409 **Topic 18:** 454B, 457, 459, 461, 463, 465 **Topic 19:** 481, 486, 488B, 489, 492, 496 **Topic 20:** 522, 523, 526, 529, 536-537
• Apply and adapt a variety of appropriate strategies to solve problems.	**Topic 1:** 2I-2J, 24A-24B **Topic 2:** 50A-51, 53A-53B **Topic 3:** 84A-86, 87A-87B **Topic 4:** 102A-104, 105A-105B **Topic 5:** 136A-137B **Topic 6:** 154A-155B **Topic 7:** 178A-179B **Topic 8:** 194A-195B **Topic 9:** 214A-215B **Topic 10:** 250A-252, 253A-253B **Topic 11:** 290A-291B **Topic 12:** 314A-315B **Topic 13:** 328A-329B **Topic 14:** 362A-363B **Topic 15:** 390A-391B **Topic 16:** 418A-419B **Topic 17:** 444A-445, 447A-447B **Topic 18:** 466A-467, 469A-469B **Topic 19:** 488A-489B, 510A-411B **Topic 20:** 536A-537B

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• Monitor and reflect on the process of mathematical problem solving.	**Topic 13:** 328A-329B
Reasoning and Proof	
• Recognize reasoning and proof as fundamental aspects of mathematics.	**Topic 13:** 328A-329B
• Make and investigate mathematical conjectures.	**Topic 5:** 136A-137B **Topic 15:** 390A-391B
• Develop and evaluate mathematical arguments and proofs.	**Topic 13:** 328A-329B
• Select and use various types of reasoning and methods of proof.	**Topic 13:** 328A-329B
Communication	
• Organize and consolidate their mathematical thinking through communication.	**Topic 2:** 123, 124, 127, 130 **Topic 13:** 328A-329B **Topic 15:** 390A-391B
• Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.	**Topic 2:** 123, 124, 127, 130 **Topic 13:** 328A-329B **Topic 15:** 390A-391B
• Analyze and evaluate the mathematical thinking and strategies of others.	**Topic 3:** 87 **Topic 4:** 110-112 **Topic 14:** 362-363
• Use the language of mathematics to express mathematical ideas precisely.	**In the beginning of each topic, the curriculum provides *Vocabulary Cards, Vocabulary Activities, Written and Oral Language in Math* and *Vocabulary*. In lesson notes in Teacher's Edition, *New Vocabulary* feature appears in student text and new vocabulary is highlighted. www.pearsonsuccessnet.com supplies an *Animated Glossary*. The following are some representative examples:** **Topic 1:** 2E-2F, 2-3, 4A-4, 10A-11, 14 **Topic 2:** 30E-30F, 30-31, 32A-33, 40A-40 **Topic 5:** 118E-118F, 118-119, 134A-134 **Topic 6:** 142E-142F, 142-143, 148A-149 **Topic 8:** 184E-184F, 184-185 **Topic 10:** 220E-220F, 220-221, 226A-226 **Topic 14:** 342E-342F, 342-343, 344A-344 **Topic 15:** 370E-370F, 370-371, 381, 386 **Topic 18:** 352E-352F, 352-353, 362A-362 **Topic 20:** 518E-518F, 518-519, 534A-535

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Connections	
• Recognize and use connections among mathematical ideas.	**Topic 1:** 13 **Topic 3:** 73 **Topic 4:** 109 **Topic 5:** 123, 131 **Topic 6:** 153 **Topic 7:** 169 **Topic 18:** 461
• Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.	**Topic 1:** 13 **Topic 3:** 73 **Topic 4:** 109 **Topic 5:** 123, 131 **Topic 6:** 153 **Topic 7:** 169 **Topic 18:** 461
• Recognize and apply mathematics in contexts outside of mathematics.	**Topic 1:** 21 **Topic 2:** 45 **Topic 5:** 131 **Topic 11:** 277, 287 **Topic 12:** 305 **Topic 13:** 337 **Topic 14:** 347 **Topic 16:** 403, 407
Representation	
• Create and use representations to organize, record, and communicate mathematical ideas.	**Each lesson contains a Visual Learning Bridge and related *Visual Learning Animation* on CD or www.pearsonsuccessnet.com. The following are representative examples:** **Topic 2:** 32-33, 36-37, 40-41, 42-43, 46-47 **Topic 3:** 62-63, 64-65, 66-67, 70-71, 74-75 **Topic 5:** 1120-121, 124-125, 126-127 **Topic 6:** 144-145, 146-147, 148-149 **Topic 8:** 188-189, 190-191, 192-193 **Topic 10:** 224-225, 226-227, 230-231 **Topic 14:** 348-349, 350-351, 352-353, **Topic 15:** 376-377, 378-379, 380-381 **Topic 18:** 454-455, 458-459, 462-463 **Topic 20:** 524-525, 528-529, 530-531
• Select, apply, and translate among mathematical representations to solve problems.	**Multiple representations are presented in *Interactive learning, Visual Learning, Guided Practice* and *Independent Practice* exercises. Differentiated Instruction and Leveled Homework provide additional models or**

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continued	**representations. Additional representations may be found at www.pearsonsuccessnet.com. The following are some representative examples:** **Topic 1:** 4B, 4-5, 7B, 8B, 9B, 10B, 10-11 **Topic 3:** 64B, 70B, 70-71, 74B, 74-75 **Topic 4:** 96, 97B, 98-99, 102-103, 109 **Topic 7:** 164B, 164, 166B, 166-167, 171 **Topic 9:** 204B, 206B, 207B, 209, 210B **Topic 10:** 222-223, 223B, 224B, 231 **Topic 12:** 302B, 303, 307, 307B, 314B **Topic 16:** 401, 405, 409, 415, 418-419 **Topic 18:** 454-455, 457B, 458-459, 462B **Topic 19:** 476-477, 479B, 480-481, 484-485 **Topic 20:** 520-521, 523B, 528-529, 536-537
• Use representations to model and interpret physical, social, and mathematical phenomena.	**Each lesson uses Modeling or presents the use of Manipulatives. Differentiated Instruction and Leveled Homework provides additional models or representations. The following are some representative examples:** **Topic 2:** 40-41, 41B, 45B, 48B, 48-49 **Topic 4:** 98-99, 102B, 102-103, 105B, 107 **Topic 5:** 124-125, 127, 128B, 128-129 **Topic 6:** 144-145, 145B, 146-147, 148B **Topic 8:** 188-189, 190B, 190-191, 191B **Topic 9:** 202-203, 203B, 204B, 206B, 207 **Topic 11:** 270-271, 275, 277B, 278-279 **Topic 15:** 372B, 376-377, 377B, 382-383 **Topic 17:** 426-427, 430B, 430-431, 434B **Topic 18:** 454-455, 457B, 458-459, 461B
Estimation and Mental Computation	
• Know and apply appropriate methods for estimating the results of computations.	**Topic 1:** 25 **Topic 2:** 62A-63B, 66A-68, 69A-69B **Topic 3:** 74, 77, 81, 87 **Topic 4:** 108, 113 **Topic 5:** 123, 130, **Topic 7:** 170A-171B,179, **Topic 8:** 186A-187B **Topic 9:** 209, 211 **Topic 10:** 244 **Topic 11:** 268

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continued	**Topic 12:** 309, 312 **Topic 13:** 325, 327, 332, 334 **Topic 14:** 346, 349, 356, 360 **Topic 16:** 413 **Topic 17:** 436, 440 **Topic 18:** 469 **Topic 19:** 482 **Topic 20:** 523
• Use estimation to decide whether answers are reasonable.	**Topic 2:** 62A-63B, 66A-68, 69A-69B **Topic 7:** 170A-171B **Topic 8:** 186A-187B
• Decide when estimation is an appropriate strategy for solving a problem.	**Topic 2:** 62A-63B, 66A-68, 69A-69B **Topic 7:** 170A-171B **Topic 8:** 186A-187B
• Determine appropriate accuracy and precision of measurement in problem situations.	**Topic 16:** 400A-401, 403A-403B, 404A-405, 407A-407B
• Use properties of numbers and operations to perform mental computation.	**Topic 2:** 42A-43B **Topic 16:** 411
• Recognize when the numbers involved in a computation allow for a mental computation strategy.	**Topic 2:** 42A-43B **Topic 16:** 411
Technology	
• Technology should be used as a tool in mathematics education to support and extend the mathematics curriculum.	**Technology is fully integrated into the curriculum.** **www.pearsonsuccessnet.com features *eTools, Visual Learning Animation* and an *Animated Glossary* to support and extend the curriculum as does the *Going Digital* feature. The following are representative examples:** **Topic 2:** 32, 33B, 35B, 39, 39B, 41B, 45B **Topic 4:** 97, 99, 101B, 105, 105B, 109B **Topic 10:** 223B, 225B, 229, 229B, 233 **Topic 11:** 262B, 263, 265B, 267, 273 **Topic 12:** 300, 301B, 303, 305B, 313 **Topic 13:** 327B, 328-329, 329B, 333 **Topic 14:** 344-345, 347B, 349B, 361 **Topic 15:** 372-373, 375B, 377B, 385 **Topic 17:** 426B, 427, 429B, 430-431, 447
• Technology can contribute to concept development, simulation, representation, communication, and problem solving.	**There is *Visual Learning Animation* In every lesson related to animated learning bridges.** **www.pearsonsuccessnet.com eTools digital activities are found throughout the program. The following are some representative examples:** **Topic 2:** 34-35, 36-37, 40-41, 42-43

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continued	**Topic 3:** 62-63, 64-65, 66-67, 70-71 **Topic 5:** 120-121, 124-125, 126-127 **Topic 6:** 144-145, 146-147, 148-149 **Topic 8:** 1186-187, 188-189, 190-191 **Topic 10:** 224-225, 226-227, 230-231 **Topic 12:** 300-301, 302-303, 306-307 **Topic 13:** 322-323, 324-325, 326-327 **Topic 17:** 426-427, 430-431, 434-435 **Topic 20:** 520-521, 514-525, 528-529
• The challenge is to ensure that technology supports-but is not a substitute for- the development of skills with basic operations, quantitative reasoning, and problem solving skills.	**The technology that is integrated into the curriculum supports but is not a substitute for development of basic skills. www.pearsonsuccessnet.com features *eTools, Visual Learning Animation, Going Digital* and *Animated Glossary* to support the development of skills. The following are representative examples:** **Topic 1:** 4-5, 7B, 9B, 10-11, 13B, 17B, 23B **Topic 3:** 62-63, 63B, 64-65, 65B, 69B, 79B **Topic 4:** 96-97, 97B, 101B, 105, 105B **Topic 7:** 162-163, 164-165, 165B, 171B **Topic 8:** 187B, 189B, 191B, 192-193, 193B **Topic 9:** 202-203, 203B, 205B, 207B, 213B **Topic 10:** 222-223, 223B, 224-225, 246B **Topic 13:** 324-325, 325B, 326-327, 327B **Topic 16:** 407B, 408B, 408-409, 411B **Topic 19:** 483, 483B, 484-485, 488B
o Graphing calculators should be used to enhance middle school and high school students' understanding and skills.	**Calculator Activities:** **Topic 1:** 7 **Topic 3:** 71 **Topic 8:** 191
o The focus must be on learning mathematics, using technology as a tool rather than as an end in itself.	**Technology features *eTools, Visual Learning Animation* and *Animated Glossary* to support the curriculum as skills are presented to the student. (www.pearsonsuccessnet.com) The following are representative examples:** **Topic 2:** 34-35, 36-37, 40-41, 45B, 47B **Topic 3:** 63B, 64-65, 66-67, 69B, 70-71 **Topic 5:** 120-121, 124-125, 125B, 126-127 **Topic 6:** 144-145, 145B, 146-147, 148-

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