A Correlation of

Scott Foresman·Addison Wesley

enVisionMATH™

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to the

INDIANA
Academic Standards
Mathematics

Grade Five

PEARSON

G/M-267_G5

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 5

Indiana Mathematics Standards	Scott Foresman – Addison Wesley enVisionMATH
GRADE 5	
Standard 1	
Number Sense and Computation	
5.1.1 Count, read, write, compare, and plot on a number line decimals to thousandths using words, models and expanded form.	**Topic 1:** 4B, 4-5B, 6B, 6-8, 9A-9B
5.1.2 Compare and order fractions and decimals to thousandths by using the symbols for less than (<), equal to (=), and greater than (>).	**Topic 9:** 12B-13B, 230B-231B
5.1.3 Identify and explain prime and composite numbers.	**Topic 4:** 106A-108, 109A-109B
5.1.4 Use words, models, standard form and expanded form to represent place value of decimal numbers to thousandths	**Topic 1:** 4B, 4-5B, 10B, 10A-11B
5.1.5 Solve problems involving multiplication and division of whole numbers fluently using a standard algorithmic approach and explain how to treat the remainders in division.	**Topic 3:** 56A-56F, 58A-59B, 60A-61B, 64A-65B, 68A-69B, 70A-71B **Topic 4:** 82A-82F, 83, 84A-85B, 90B-91, 94A-95, 97A-97B, 98B-99, 101A-101B **Topic 5:** 120A-120F, 122B-123B, 128A-129B, 130A-131B, 134A-135B, 136A-137B **Topic 9:** 223
5.1.6 Solve problems involving addition and subtraction of	
• decimals, including money;	**Topic 2:** 42A-43B, 44A-45B, 49
• fractions, including fractions with different denominators; and	**Topic 10:** 254A-254F, 256A-257, 259A-259B, 262A-263B, 264A-265B
• mixed numbers using a standard algorithmic approach.	**Topic 5:** 266A-267B, 268A-269B
5.1.7 Solve problems involving the multiplication of fractions using a standard algorithmic approach. Explain the relationship of the product relative to the factors.	**Topic 11:** 276A-276F, 277, 278B-279B, 280A-281B
5.1.8 Construct and analyze line graphs and double bar graphs from data, including data collected through observations, surveys and experiments.	**Topic 18:** 428B, 432A-435B, 436-438, 439, 439A-439B, 454A-455B

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5.1.9 Perform simple experiments gathering data from a large number of trials and use data from experiments to predict the chance of future outcomes.	**Topic 20:** 484A-484F, 486B, 486-487, 488B, 488-489, 491B, 492A-493B
Standard 2	
Algebra and Function	
5.2.1 Write and evaluate simple algebraic expressions.	**Topic 5:** 144A-144F, 146-147B, 148A-151B, 152A-153, 155A-155B, 158A-159
5.2.2 Use two-dimensional coordinate grids to represent points in the first quadrant that fit linear equations and draw the line determined by the points.	**Topic 17:** 410B, 410E, 420A-421B
Standard 3	
Geometry and Measurement	
5.3.1 Measure angles and describe angles in degrees.	**Topic 8:** 198A, 198C, 204A-205B
5.3.2 Identify, classify and draw polygons and triangles (equilateral, isosceles, scalene, right, acute and obtuse triangles).	**Topic 8:** 198B, 198D, 199, 206A-207B, 208A-209B, 210A—211B
5.3.3 Describe the attributes (such as number of edges, vertices, and number of faces) of solids, including cubes, pyramids and cylinders.	**Topic 13:** 320B, 320E, 322A-324, 325A-325B
5.3.4 Identify and describe using words and pictures, transformations such as reflections, rotations and translations and use this knowledge to design and analyze simple tilings and tessellations.	**Topic 19:** 462A-462F, 464A-465, 467, 467A-467B, 468A-469B, 470A-471B, 472A-473B, 477
5.3.5 Develop and use the formulas for the perimeter and area of triangles, parallelograms and trapezoids using appropriate units for measures. Find the area of complex shapes by dividing them into basic shapes.	**Topic 12:** 294B, 294D, 294F, 300A-301, 303A-303B, 304A-305B, 306A-307B, 30A8-309B
5.3.6 Develop and use the formulas for the surface area and volume of rectangular prisms using appropriate units for measures.	**Topic 13:** 320B, 320D, 320F, 328A-329B, 332A-334, 335A-335B

Grade Five

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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* **and** *Problem Solving features.* **The following are some representative examples:** **Topic 1:** 4-5, 10B, 10, 12B, 14B, 14-15 **Topic 4:** 84B, 84, 86B, 86, 88B, 102B **Topic 5:** 122B, 122, 142B, 124-125, 128B **Topic 6:** 146B, 146, 148B, 148-149, 152B **Topic 9:** 220B, 220, 224B, 224, 226B, 246B **Topic 10:** 256B, 256-257, 260B, 260-261 **Topic 11:** 278B, 278-279, 280B, 280-281 **Topic 15:** 376B, 376-377, 378B, 378-379 **Topic 16:** 396B, 396-397, 398-399, 404B **Topic 18:** 430B, 430-431, 432-433, 450B
• 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 2:** 24B, 27, 28B, 31, 33, 34B, 38-39 **Topic 3:** 58B, 59, 61, 62B, 63, 65, 69, 71 **Topic 4:** 90B, 92, 96-97, 99, 102B, 106-107 **Topic 7:** 176B, 177, 179, 182, 184-185, 187 **Topic 9:** 229, 230B, 231, 233, 235, 238B **Topic 10:** 266B, 267, 268B, 269, 270-271 **Topic 13:** 322-324, 327, 329, 331, 340-341 **Topic 14:** 349, 351, 353, 354, 357, 359, 361 **Topic 17:** 413, 415-416, 419, 422-423 **Topic 20:** 487, 490, 492B, 493, 494-495
• Apply and adapt a variety of appropriate strategies to solve problems.	**Topic 1:** 2I-2J, 14A-16, 17A-17B **Topic 2:** 34A-36, 37A-37B, 46A-48, 49A-49B **Topic 3:** 74A-76, 77A-77B **Topic 4:** 86A-88, 89A-89B, 110A-112, 1113A-113B **Topic 5:** 126A-127B, 138A-139B **Topic 6:** 162-163B **Topic 7:** 188A-190, 191A-191B

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continued	**Topic 8:** 212A-213B **Topic 9:** 246A-247B **Topic 10:** 270A-271B **Topic 11:** 288A-289B **Topic 12:** 314A-315B **Topic 13:** 340A-341B **Topic 14:** 366A-367B **Topic 15:** 386A-388, 389A-389B **Topic 16:** 404A-405B **Topic 17:** 422A-423B **Topic 18:** 454A-455B **Topic 19:** 478A-479B **Topic 20:** 494A-495B
• Monitor and reflect on the process of mathematical problem solving.	**Topic 1:** 13 **Topic 2:** 33, 33A-33B, 34A-36, 37, 39 **Topic 3:** 71 **Topic 4:** 88-89 **Topic 9:** 246A-247B **Topic 10:** 270-271
Reasoning and Proof	
• Recognize reasoning and proof as fundamental aspects of mathematics.	**Topic 1:** 13 **Topic 2:** 33, 33A-33B, 34A-36, 37, 39 **Topic 9:** 246A-247B **Topic 10:** 270-271
• Make and investigate mathematical conjectures.	**Topic 6:** 162-163B **Topic 8:** 212A-213B
• Develop and evaluate mathematical arguments and proofs.	**Topic 6:** 162-163B
• Select and use various types of reasoning and methods of proof.	**Topic 10:** 270A-271B **Topic 8:** 212A-213B **Topic 17:** 422A-423B
Communication	
• Organize and consolidate their mathematical thinking through communication.	**Topic 3:** 59, 74-76 **Topic 4:** 110-112 **Topic 6:** 162-163 **Topic 9:** 246-247
• Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.	**Topic 1:** 13 **Topic 2:** 33, 33A-33B, 34A-36, 37, 39 **Topic 9:** 246A-247B **Topic 10:** 270-271
• Analyze and evaluate the mathematical thinking and strategies of others.	**Topic 2:** 37 **Topic 3:** 71 **Topic 4:** 86A-88, 89A-89B,
• 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**

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continued	**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-5, 10A-10 **Topic 4:** 82E-82F, 82-83, 102A-103 **Topic 6:** 144E-144F, 144-145, 156A-157 **Topic 7:** 168E-168F, 168-169 **Topic 8:** 198E-198F, 198-199, 208A-209 **Topic 9:** 218E-218F, 218-219, 228A-228B **Topic 13:** 320E-320F, 320-321, 322A-322 **Topic 14:** 346E-346F, 346-347, 364A-364 **Topic 17:** 410E-410F, 410-411, 420A-421 **Topic 20:** 484E-484F, 484-485, 492A-492
Connections	
• Recognize and use connections among mathematical ideas.	**Topic 3:** 72-73
• Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.	**Topic 3:** 72-73
• Recognize and apply mathematics in contexts outside of mathematics.	**Topic 2:** 35, 40 **Topic 3:** 71 **Topic 6:** 151 **Topic 9:** 246-247
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 1:** 4-5, 6-7, 10-11, 12-13, 14-15 **Topic 3:** 58-59, 60-61, 62-63, 64-65 **Topic 5:** 124-125, 126-127, 128-129 **Topic 7:** 170-171, 172-173, 174-175 **Topic 8:** 200-201, 204-205, 206-207 **Topic 10:** 256-257, 260-261, 262-263 **Topic 12:** 298-299, 300-301, 304-305 **Topic 14:** 350-351, 352-353, 354-355 **Topic 17:** 412-413, 414-415, 418-419 **Topic 20:** 486-487, 488-489, 492-493

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• 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. Additional representations may be found at www.pearsonsuccessnet.com. The following are some representative examples:** **Topic 2:** 24B, 28, 30B, 34A-35, 37A-37B **Topic 3:** 58B, 60B, 68B, 70B, 72B-73 **Topic 6:** 146-147, 148-149, 156-157 **Topic 7:** 178B-179, 180-181, 185 **Topic 9:** 220B, 224-225, 226-227, 229 **Topic 10:** 256B, 256-257, 262-263 **Topic 11:** 278B, 279, 280B, 280-281, 287 **Topic 15:** 376-377, 379, 382B, 382-383 **Topic 16:** 396B, 398B, 398-399, 401 **Topic 19:** 472-473, 474-475, 478-479
• 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 provide additional models or representations. The following are some representative examples:** **Topic 3:** 56A, 58, 60B, 64B, 67B, 68B, 70B **Topic 4:** 88B, 90B, 93B, 102, 106-107 **Topic 8:** 200-201, 203B, 205B, 206-207 **Topic 10:** 254C-254D, 256B, 255B, 268B **Topic 11:** 278B, 279, 280-281, 283B, 585B **Topic 12:** 296B, 296-297, 299, 300B, 310B **Topic 13:** 322-323, 325B, 326B, 328B **Topic 16:** 396B, 397, 397B, 398B, 400 **Topic 17:** 412B, 414-415, 417B, 420 **Topic 19:** 464-465, 468-469, 469B, 472B
Estimation and Mental Computation	
• Know and apply appropriate methods for estimating the results of computations.	**Topic 2:** 22B, 30B-31, 33A-33B **Topic 3:** 62A-63B, 66 **Topic 4:** 85, 86A-87B, 89 **Topic 5:** 130-131 **Topic 6:** 155, 157 **Topic 7:** 174A-175B, 184A-185B **Topic 8:** 209 **Topic 10:** 263, 265 **Topic 12:** 297, 312

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continued	**Topic 14:** 352, 353, 357 **Topic 15:** 381, 385 **Topic 16:** 399 **Topic 18:** 431, 451 **Topic 19:** 479
• Round numbers to a specified place value.	**Topic 2:** 28A-29B **Topic 3:** 57, 63, 63B **Topic 4:** 87, 87B **Topic 7:** 174-175
• Use estimation to decide whether answers are reasonable.	**Topic 2:** 22B, 30B-31, 33A-33B **Topic 3:** 62A-63B, 66 **Topic 4:** 85, 86A-87B, 89 **Topic 5:** 130-131 **Topic 7:** 174A-175B, 184A-185B
• Decide when estimation is an appropriate strategy for solving a problem.	**Topic 2:** 22B, 30B-31, 33A-33B **Topic 3:** 62A-63B, 66 **Topic 4:** 85, 86A-87B, 89 **Topic 5:** 130-131 **Topic 7:** 174A-175B, 184A-185B
• Determine appropriate accuracy and precision of measurement in problem situations.	**Topic 12:** 296A-297B, 298A-299B
• Use properties of numbers and operations to perform mental computation.	**Topic 2:** 24A-26, 27A-27B **Topic 3:** 60A-61B **Topic 7:** 170
• Recognize when the numbers involved in a computation allow for a mental computation strategy.	**Topic 2:** 24A-26, 27A-27B **Topic 3:** 60A-61B **Topic 7:** 170
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 1:** 4B, 4, 5B, 6-7, 10B, 10-11, 11B, 17 **Topic 2:** 24B, 24-25, 27B, 29B, 37, 37B, 49 **Topic 3:** 58B, 58-59, 59B, 60-61, 61B, 77 **Topic 4:** 84B, 84-85, 85B, 101, 109, 113 **Topic 6:** 146-147, 147B, 151, 151B, 155B **Topic 9:** 220B, 220-221, 223B, 227B, 241 **Topic 13:** 325, 325B, 326-327, 327B, 329B

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continued	**Topic 15:** 376-377, 378-379, 380-381, 382B **Topic 16:** 396B, 396-397, 398-399, 400-401 **Topic 19:** 464-465, 468-469, 470-471, 474B
• 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:** 24-25, 28-29, 30-31, 34-35, 37B **Topic 3:** 60-61, 62-63, 64-65, 67B, 68-69 **Topic 6:** 146-147, 148-149, 152-153, 161B **Topic 7:** 170-171, 172-173, 174-175, 175B **Topic 9:** 220-221, 223B, 224-225, 226-227 **Topic 10:** 256B, 256-257, 260-261, 262-263 **Topic 11:** 278-279, 280B, 280-281, 284-285 **Topic 15:** 376-377, 378-379, 380-381, 382B **Topic 16:** 396B, 396-397, 398-399, 400-401 **Topic 19:** 464-465, 468-469, 470-471, 474B
• 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:** 4B, 4-5, 5B, 6B, 9B, 10-11, 11B **Topic 5:** 122B, 122-123, 123B, 135B **Topic 6:** 146-147, 148-149, 152-153, 161B **Topic 8:** 200-201, 203B, 207B, 208, 211B

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continued	**Topic 9:** 220B, 220-221, 223B, 227B, 241 **Topic 10:** 256B, 256-257, 259B, 264B **Topic 13:** 325, 325B, 326-327, 327B, 329B **Topic 16:** 396B, 396-397, 398-399, 400B **Topic 18:** 430-431, 431B, 432B, 435B **Topic 19:** 469B, 4470-471, 471B, 473B **Topic 20:** 486B, 486-487, 487B, 488, 493B
o Elementary students should learn how to perform thoroughly the basic arithmetic operations independent of the use of a calculator.	**Topic 2:** 38A-40, 41A-41B **Topic 3:** 58A-59B, 60A-61B, 64B-65, 67A-67B, 68A-69B, 70A-71B **Topic 4:** 84A-85B, 90A-92, 93A-93B, 94A-95, 97A-97B, 98A-99, 101A-101B, **Topic 5:** 122A-123B, 128A-129B, 130A-131, 133A-133B, 134A-135B, 136A-137B **Topic 7:** 170A-171B **Topic 9:** 223
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 1:** 5B, 6-7, 10B, 10-11, 11B,17 **Topic 5:** 122B, 122-123, 123B, 135B **Topic 6:** 148-149, 152-153, 155B, 161B **Topic 8:** 200-201, 203B, 207B, 208, 211B **Topic 9:** 220-221, 223B, 227B, 232B, 241 **Topic 10:** 264B, 264-265, 265B, 266-267 **Topic 13:** 322-323, 325B, 326-327, 330B **Topic 16:** 400B, 401B, 402-403, 403B **Topic 18:** 432B, 440B, 440-441, 443B **Topic 19:** 469B, 4470-471, 471B, 473B **Topic 20:** 491B, 493B, 494-495, 495B