A Correlation of

Scott Foresman · Addison Wesley

enVisionMATH ™

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to the

North Carolina
Essential Standards
(Grade 6)

PEARSON

Introduction

This correlation shows the alignment between **Scott Foresman – Addison Wesley enVisionMATH,** copyright 2011, to North Carolina Essential Standards Draft dated 3/26/09 (Grade 6). 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.

North Carolina Essential Standards Draft dated 3/26/09	Scott Foresman – Addison Wesley enVisionMATH
Mathematics Grade 6 Essential Standards (3/26/09)	
Grade Level / Subject Area: Math Grade 6	
S.6.1 Understand the relationship between simple probability and sample spaces.	
6.S.1.a Recognize for a sample space that the sum of the probabilities of all possible outcomes for single events is equal to 1, and that the probability of a single event can be represented by a fraction less than or equal to 1.	**TE**: 528B, 528–529, 530B, 530–531, 534B, 534-535
6.S.1.b Use multiple strategies to display sample spaces for probability situations, including organized lists, tree diagrams, fundamental counting principle and frequency distribution tables, and use them to determine the probability of a specific event.	**TE**: 520–523, 523B, 528B, 528–529, 530B, 530–533, 534B, 534–535, 535B, 536B, 536–537
S.6.2 Compare experimental and theoretical probabilities of single events	**TE**: 530B, 530–533
S.6.3 Analyze data in terms of their shape, measures of center, variability, clusters, peaks, gaps, symmetry, and the relationships among them.	
6.S.3.a Identify relationship between stem and leaf and histograms.	**TE**: 494–496, 498B, 498–499
6.S.3.b Interpret distributions of data by describing shape, center and variability.	**TE**: 474C, 490B, 490–493, 493B, 498B, 498-499, 499B, 500B, 500-501
6.S.3.c Apply measures of central tendency (mean, median, mode)	**TE**: 490B, 490–493, 493B, 498-499, 500B, 500–501, 501B
6.S.3.d Interpret the mean as a balancing point	**TE**: 490B, 490–493, 493B, 500
6.S.3.e Interpret the relationship between the mean as a fair share and the formula	**TE**: 490B, 490–493, 493B, 500-501
M.6.1 Interpret measures of objects in customary and non-customary systems.	
M.6.1.a Interpret tool-based measurements in terms of their precision and accuracy.	**TE**: 398B, 408B, 408–410, 411B
M.6.1.b Infer the measure of an object in one measurement system, given the measure of that object in another measurement system.	**TE**: 412B, 412–413, 413B
M.6.2 Calculate the perimeter and area of parts of polygons	
M.6.2.a Compose and decompose polygonal figures, including triangles and rectangles.	**TE**: 274B, 274–277, 277B, 278B, 278–281, 281B, 426-428, 429B, 430-432, 433B, 434B, 434–437, 437B
M.6.2.b Interpret the relationship between the areas of triangles, squares, rectangles, rhombi and parallelograms.	**TE**: 430B, 430–433, 433B, 434B, 434–437, 437B
M.6.3 Understand the relationship between area and circumference of a circle to corresponding formulas.	
M.6.3.a Identify the relationships between the radius, diameter, chord, center and circumference of a circle.	**TE**: 282B, 282–283, 283B, 438B, 438-440, 441B
M.6.3.b Develop Π as the ratio of the circumference to the diameter of circles	**TE**: 438B, 438–440, 441B

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M.6.4 Calculate the area and circumference of circles.	
M.6.4.a Use formulas to calculate the area of circles.	**TE**: 442B, 442–443, 443B
M.6.4.b Use formulas to calculate the perimeter of circles.	**TE**: 438B, 438–440, 441B
N.6.1 Compare numbers using exponential notation.	
N.6.1.a Represent numbers using scientific notation.	**TE**: 82B, 82–83, 83B
N.6.1.b Represent numbers in prime factorization with exponents.	**TE**: 124B, 124–125, 125B, 126-127
N.6.1.c Translate between repeated multiplication and exponential notation.	**TE**: 10B, 10–12, 12B, 124B, 124-125, 125B
N.6.1.d Evaluate numeric expressions in exponential form.	**TE**: 10B, 10–12, 12B, 36B, 36-39, 39B, 81
N.6.1.e Identify the relationship between prime factorization and LCMs and GCFs.	**TE**: 126B, 126–127, 127B
N.6.2 Apply the GCF and LCM to solve problems.	**TE**: 126B, 126–127, 127B, 134B, 134–135, 135B, 162-163, 164B, 164-165, 165B, 166B, 166-168, 168B, 304
N.6.3 Understand the relationship between negative and nonnegative decimals and fractions.	
N.6.3.a Order negative and non-negative decimals and fractions.	**TE**: 22–23, 23B, 224B, 224–225, 225B, 226B, 226–228, 229B
N.6.4 Represent percents as decimals, ratios and fractions of a whole.	
N.6.4.a Identify the relationship between percents, decimals, and fractions.	**TE**: 348B, 348–349, 349B, 350-351
N.6.4.b Demonstrate how area models, such as 10 x 10 grids, can be used to illustrate percentages (of 1).	**TE**: 344B, 344-346, 350B, 350–351
N.6.5 Use the relationship between ratios and proportions to solve problems.	
N.6.5.a Use models to represent ratios and proportions.	**TE**: 300B, 300–301, 301B, 302B, 302–305, 305B
N.6.5.b Use ratio tables to solve problems.	**TE**: 301, 320B, 320C, 322B, 322–323, 323B, 324B
N.6.6 Understand the four operations with integers to solve problems.	
N.6.6.a Identify the absolute value of integers in relationship to integer operations.	**TE**: 230B, 230-232, 233B, 234-236
N.6.6.b Apply order of operations in context.	**TE**: 36B, 36–39, 39B, 80B, 80–81, 81B, 245
N.6.7 Understand the use of multiplication and division with non-negative fractions, decimals in context.	
N.6.7.a Demonstrate how area models can be used to illustrate multiplication of two fractions, a/b times c/d.	**TE**: 190B, 190–191, 191B
N.6.7.b Describe multiplication and division of non-negative fractions, decimals, and percents in context.	**TE**: 70B, 70–72, 72B, 78B, 78–79, 79B, 190B, 190–191, 191B, 206B, 206–207, 207B, 354B, 354–357, 357B, 358B, 358–360, 361B
N.6.7.c Estimate the results of all four operations for non-negative fractions and decimals with mental computation.	**TE**: 62B, 62–63, 63B, 66B, 66–68, 69B, 170B, 170–171, 171B, 188B, 188–189, 189B, 208B, 208-209, 209B
N.6.7.d Solve multi-step problems involving combinations of addition, subtraction, multiplication and division for non-negative rational numbers.	**TE**: 84B, 84–85, 87B, 194B, 194–195, 195B

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N.6.7.e Justify the reasonableness of solutions in meaningful contexts.	**TE**: 48, 66, 79, 102, 110, 174, 202, 241, 324, 331, 334, 362–363, 406, 508
A.6.1 Represent words as algebraic expressions and equations in context.	
A.6.1.a Translate words into algebraic expressions and equations.	**TE**: 32B, 32–33, 33B, 102B, 102–104, 105B, 110B, 110–112, 112B, 315
A.6.1.b Translate algebraic expressions and equations into words.	**TE**: 50, 479
A.6.2 Use additive inverses, identities for integers, multiplicative inverses, and identities for positive rational numbers to solve multi-operation first degree equations with integer and non-negative fractional and decimal solutions.	
A.6.2.a Use models to represent multi-operation first-degree equations.	**TE**: 372B, 372-374, 375B, 378-379
A.6.2.b Write multi-operation first-degree equations.	**TE**: 378B, 378-379, 379B
A.6.3 Use number lines and algebraic expression and equations to represent and solve problems involving whole number single and multi-operation inequalities.	
A.6.3.a Write whole number single- and multi-operation inequalities	**TE**: 13, 389
A.6.4 Analyze one-dimensional sequences to identify the pattern that enables accurate predictions of missing numbers.	
A.6.4.a Identify one-dimensional patterns and sequences.	**TE**: 48B, 48–49, 49B, 214B, 214–215, 215B, 29B, 290–291, 291B, 376B, 376–377, 377B, 378B, 378–379, 379B, 527
A.6.4.b Use knowledge of GCF, LCM and prime factorization in context.	**TE**: 125, 126B, 126–127, 127B, 134B, 134–135, 135B, 162-163, 164B, 164-165, 165B, 166B, 166-168, 168B, 304
A.6.4.c Predict the nth term.	This standard can be introduced on these pages. **TE**: 378B, 378–379, 379B, 479
A.6.5 Analyze qualitative graphing in terms of position, time change and rate of change.	**TE**: 474B, 474D, 476B, 476–479, 479B, 487
G.6.1 Apply rules for transformations of points and two-dimensional geometric shapes in the Cartesian Plane.	**TE**: 284B, 284–286, 287B

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