

A Correlation of

Scott Foresman • Addison Wesley

en**Vision**MATH™

to the

Kansas
Curricular Standards for Mathematics
Knowledge Base & Application Indicators
Kindergarten

PEARSON

G/M-258_K

INTRODUCTION

This correlation is designed to show the close alignment between Scott Foresman-Addison Wesley enVisionMATH and the Kansas Curricular Standards for Mathematics. Correlation page references are to the Teacher's Edition and 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
Kansas Curricular Standards for Mathematics**

Knowledge Base Indicators

KINDERGARTEN

Standard 1: Number and Computation – The student uses numerical and computational concepts and procedures in a variety of situations.

Benchmark 1: Number Sense – The student demonstrates number sense for whole numbers, fractions, and money using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. establishes a one-to-one correspondence with whole numbers from 0 through 20 using concrete objects and identifies, states, and writes the appropriate cardinal number (2.4.K1a) (\$).</p>	<p>Topic 4: 51A-52C, 53A-54C, 55A-56C, 57A-58C, 70-70A Topic 5: 75A-76C, 79A-80C, 81A-82C, 85A-86C, 87A-88C Topic 12: 213A-214C, 215A-216C, 217A-218C, 219A-220C, 223A-224C</p>
<p>2. compares and orders whole numbers from 0 through 20 using concrete objects (2.4.K1a) (\$).</p>	<p>Topic 4: 63A-64C, 65A-66C, 67A-68C, 71 Topic 5: 93A-94C, 97-97A, 97C Topic 6: 101A-102C, 103A-104C, 105A-106C, 107A-108C, 111-112A Topic 11: 199A-200C Topic 16: 289-290C, 304B-304C</p>
<p>3. recognizes a whole, a half, and parts of a whole using concrete objects (2.4.K1a,c) (\$), e.g., half a pizza, part of a cookie, or the whole school.</p>	<p>Topic 8: 135A, 135C, 135E-G, 135, 137A-138C, 139A-140C, 141-142C, 143A, 149, 150-150C</p>

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
4. identifies positions as first and last (2.4.K1a).	Topic 8: 143A-144C, 145A-146C, 147A-148C, 149-150C
5. identifies pennies and dimes and states the value of the coins using money models (2.4.K1d) (\$).	Topic 13: 235A-235J, 235-236, 237A-238C, 239A-240C, 241A-242C, 243A-244C, 245A-246C, 247-248C, 249-250A Topic 16: 297A (Problem of the Day)

Benchmark 2: Number Systems and Their Properties – The student demonstrates an understanding of whole numbers with a special emphasis on place value in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
The student... 1. reads and writes whole numbers from 0 through 20 in numerical form (\$).	Topic 4: 53A-54C, 57A-58C, 59A-60C Topic 5: 79A-80C, 85A-86C, 91A-92C Topic 6: 101-102C, 103-104C Topic 10: 177-178C, 179-180C Topic 11: 195-196C, 197-198C Topic 12: 213A-214C, 215A-215C, 217A-218C
2. represents whole numbers from 0 through 20 using place value models (2.4.K1b) (\$), e.g., ten frames, unifix cubes, straws bundled in 10s, or base ten blocks.	Topic 12: 211B, 211I-J, 211, 216, 218, 220, 220C, 225, 226B, 234, 234B
3. counts (2.4.K1a) (\$):	
a. whole numbers from 0 through 20,	Topic 4: 49E, 49I-J, 51A-52C, 55A-56C Topic 5: 73E, 73I-J, 73, 75A-76C, 81A-82C, 87A-88C Topic 12: 213A-214C, 215A-216C, 217A-218C, 219A-220C, 223A-224C

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
b. whole numbers from 10 to 0 backwards,	Topic 4: 67A-68C Topic 6: 107-108A, 108C Topic 12: 211F, 231-232C
c. subsets of whole numbers from 0 through 20.	Topic 4: 49E, 49I-J, 51A-52C, 55A-56C Topic 5: 73E, 73I-J, 75A-76C, 81A-82C, 87A-88C Topic 12: 213A-214C, 215A-216C, 217A-218C, 219A-220C, 223A-224C, 225A-226C
4. groups objects by 5s and by 10s (2.4.K1a).	Topic 12: 225A-226C, 227-228C, 229A-230C, 233, 233B, 234B
5. uses the concept of the zero property of addition (additive identity) with whole numbers from 0 through 20 and demonstrates its meaning using concrete objects (2.4.K1a) (\$), e.g., 4 apples and no (zero) other apples are 4 apples.	Students explore the concept of the number zero representing no objects, none, or nothing. Topic 4: 59A-60C, 70-70C, 71-71B

Benchmark 3: Estimation – The student uses computational estimation with whole numbers in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
The student... 1. determines if a group of 20 concrete objects or less has more, less, or about the same number of concrete objects as a second set of the same kind of objects (2.4.K1a).	Topic 4: 63A-64C, 65A-66C, 67A-68C, 71 Topic 5: 93A-94C, 97-97A, 97C Topic 6: 101A-102C, 103A-104C, 105A-106C, 107A-108C, 111-112A Topic 11: 199A-200C Topic 16: 289-290C, 304B-304C

Benchmark 4: Computation – The student models, performs, and explains computation with whole numbers using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. adds and subtracts using whole numbers from 0 through 10 and various mathematical models (2.4.K1a) (\$), e.g., concrete objects, number lines, or unifix cubes.</p>	<p>Topic 5: 84C (Enrichment Master) Topic 10: 177A-178C, 179A-180C, 181A-182C, 183A-184C, 185A-186C, 187A-188C, 189A-190C Topic 11: 195A-196C, 197A-198C, 199A-200C, 201A-202C, 203A-204C, 205A-206C, 207A-208C</p>
<p>2. uses repeated addition (multiplication) with whole numbers to find the sum when given the number of groups (three or less) and given the same number of concrete objects in each group (five or less) (2.4.K1a), e.g., two nests with three eggs in each nest means $3 + 3 = 6$ or 2 groups of 3 makes 6.</p>	<p>Topic 10: 175F, 175I-J, 178A, 178C, 180-180A, 182, 184A, 185, 186A, 186C, 187, 188-188A, 188B-188C, 190-190A, 190C (Enrichment Master)</p>
<p>3. uses repeated subtraction (division) with whole numbers when given the total number of concrete objects in each group to find the number of groups (2.4.K1a), e.g., there are 9 pencils. If each student gets 2 pencils, how many students get pencils? $9 - 2 - 2 - 2 - 2$ or 9 minus 2 four times means four students get 2 pencils each and there is 1 pencil left over. or There are eight cookies to be shared equally among four people, how many cookies will each person receive?</p>	<p>Kindergarten students are introduced to the concepts of subtraction and skip counting. Topic 11: 195A-196C, 197A-198C, 199A-200C, 201A-202C, 203A-204C, 205A-206C, 207A-208C Topic 12: 225A-226C, 227A-228C, 229A-230C</p>

Standard 2: Algebra – The student uses algebraic concepts and procedures in a variety of situations.

Benchmark 1: Patterns – The student recognizes, describes, extends, develops, and explains relationships in patterns using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. uses concrete objects, drawings, and other representations to work with types of patterns (2.4.K1a):</p> <p>a. repeating patterns, e.g., an AB pattern is like red-blue, red-blue, ...; an ABC pattern is like dog-horse-pig, dog-horse-pig, ...; or an AAB pattern is like Δ-Δ-O, Δ-Δ-O, ...;</p>	<p>Topic 3: 31A-31J, 31-32, 33A-34C, 35A-36C, 37A-38C, 39A-40C, 41A-42C, 43A, 44C (Enrichment Master), 45A-46C, 47-48B</p>
<p>b. growing (extending) patterns, e.g., 5, 6, 7, ... is an example of a pattern that adds one to the previous number to continue the pattern.</p>	<p>Topic 3: 43-44C Topic 12: 225A-226C, 227A-228C, 229A-230C, 233, 233B, 234B</p>
<p>2. uses these attributes to generate patterns:</p> <p>a. whole numbers (2.4.K1a), e.g., 2, 4, 6, ...;</p>	<p>Topic 12: 211B-D, 211F, 223A-224C, 225A-226C, 227A-228C, 229A-230C, 231-231C, 233, 233B, 234B</p>
<p>b. geometric shapes with one attribute change (2.4.K1e), e.g., Δ, O, Δ, O, Δ, O, ...;</p>	<p>Topic 3: 31A-31J, 31-32, 33A, 36A, 36C, 37A-38C, 39A-40C, 41A-42C, 45A-46C, 48</p>
<p>c. things related to daily life (2.4.K1a), e.g., breakfast, lunch, and dinner.</p>	<p>Topic 3: 31, 48B</p>

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
3. identifies and continues a pattern presented in various formats including numeric (list or table), visual (picture, table, or graph), verbal (oral description), and kinesthetic (action) (2.4.K1a) (\$).	Topic 3: 31A-31J, 31-32, 33A-34C, 35A-36C, 37A-38C, 39A-40C, 41A-42C, 43A-44C, 45A-46C, 47-48B Topic 12: 225A-226C, 227A-228C, 229A-230C
4. generates (2.4.K1a): a. repeating patterns for the AB pattern, the ABC pattern, and the AAB pattern;	Topic 3: 31A-31J, 31-32, 33A-34C, 35A-36C, 37A-38C, 39A-40C, 41A-42C, 43A, 44C (Enrichment Master), 45A-46C, 47-48B
b. growing (extending) patterns that add 1, 2, or 10 to continue the pattern.	Topic 3: 43-44C Topic 12: 225A-226C, 227A-228C, 229A-230C, 233, 233B, 234B
5. classifies and sorts concrete objects by similar attributes (2.4.K1a) (\$).	Topic 1: 1A-1J, 1-2, 3A-4C, 5A-6C, 7A-8C, 9A-10C, 11A-12C, 13-14A Topic 3: 33A (Problem of the Day)

Benchmark 2: Variables, Equations, and Inequalities – The student solves addition equations using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
The student... 1. finds the unknown sum using the basic facts with sums through 10 using concrete objects and pictures (2.4.K1a) (\$), e.g., 5 marbles + 5 marbles = ∇.	Topic 10: 175A-J, 175-176, 177A-178C, 179A-180C, 181A-182C, 183A-184C, 185A-186C, 187A-188C, 189A-190C, 191-192A

Benchmark 3: Functions – The student recognizes and describes whole number relationships using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. locates whole numbers from 0 through 20 on a number line (2.4.K1a).</p>	<p>Topic 5: 93A-94C, 97-97A Topic 8: 150B</p>

Benchmark 4: Models – The student uses mathematical models including concrete objects to represent, show, and communicate mathematical relationships in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include:</p> <p>a. process models (concrete objects, pictures, number lines, unifix cubes, measurement tools, or calendars) to model computational procedures and mathematical relationships, to compare and order numerical quantities, and to represent fractional parts (1.1.K1-4, 1.2.K3-5, 1.3.K1, 1.4.K1-3, 2.1.K1, 2.1.K2a, 2.1.K2c, 2.1.K3-5, 2.2.K1, 2.3.K1, 3.1.K2, 3.2.K1-3, 3.3.K1-2, 3.4.K1-2) (\$);</p>	<p>Topic 1: 9-10A Topic 2: 21-22A Topic 3: 43-44A Topic 4: 65-66A Topic 5: 93-94A Topic 6: 101-102A Topic 7: 127-128A Topic 8: 141-142A Topic 9: 161-162A Topic 10: 197-180A Topic 11: 207-208A Topic 12: 221-222A Topic 13: 237-238A Topic 14: 259-260A Topic 15: 277-288A</p>

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
b. place value models (ten frames, unifix cubes, bundles of straws, or base ten blocks) to represent numerical quantities (1.2.K2) (\$);	Topic 12: 211B, 211I-J, 211, 216, 218, 220, 220C, 225, 226B, 234, 234B
c. fraction models (fraction strips or pattern blocks) to represent numerical quantities (1.1.K3) (\$);	Topic 8: 135A, 135C, 135E-G, 135, 137A-138C, 139A-140C, 141-142C, 143A, 149, 150-150C
d. money models (base ten blocks or coins) to represent numerical quantities (1.1.K5) (\$);	Topic 13: 235A-235J, 235-236, 237A-238C, 239A-240C, 241A-242C, 243A-244C, 245A-246C, 247-248C, 249-250A
e. two-dimensional geometric models (geoboards, dot paper, or attribute blocks), three-dimensional geometric models (solids), and real-world objects to compare size and to model attributes of geometric shapes (2.1.K1a, 3.1.K3);	Topic 7: 113A-J, 113-114, 115A-116C, 117A-118C, 119A-120C, 121A-122C, 123A-124C, 125A-126C, 127A-128C, 129A-130C, 131A-132C, 133-134B
f. two-dimensional geometric models (spinners), three-dimensional geometric models (number cubes), and concrete objects to model probability (4.1.K1-2) (\$);	Topic 16: 288, 299A-300C, 303, 303B, 304, 304B
g. graphs using concrete objects, pictographs, and frequency tables to organize and display data (4.2.K1-3) (\$).	Topic 16: 287C-D, 287F-J, 287, 290-290A, 290C, 291A-292C, 293A-294C, 295A-296C, 297A-298C, 299A Problem of the Day), 301A-302C, 303-304C
2. uses concrete objects, pictures, drawings, diagrams, or dramatizations to show the relationship between two or more things (\$).	Topic 4: 63A-64C, 65A-66C, 67A-68C, 71 Topic 5: 93A-94C, 97-97A, 97C Topic 6: 101A-102C, 103A-104C, 105A-106C, 107A-108C, 111-112A Topic 11: 199A-200C Topic 16: 289-290C, 304B-304C

Standard 3: Geometry – The student uses geometric concepts and procedures in a variety of situations.

Benchmark 1: Geometric Figures and Their Properties – The student recognizes geometric shapes and their attributes using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. recognizes circles, squares, rectangles, triangles, and ellipses (ovals) (plane figures/ two-dimensional figures) (2.4.K1e).</p>	<p>Topic 7: 113A-H, 113-114, 115A-116C, 117A-118C, 119A-120C, 121A-122C, 123A-124C, 131A-132C, 133-134B</p>
<p>2. recognizes and investigates attributes of circles, squares, rectangles, triangles, and ellipses using concrete objects, drawings, and/or appropriate technology (2.4.K1a,e).</p>	<p>Topic 7: 113A-H, 113-114, 115A-116C, 117A-118C, 119A-120C, 121A-122C, 123A-124C, 131A-132C, 133-134B</p>
<p>3. sorts cubes, rectangular prisms, cylinders, cones, and spheres (solids/three-dimensional figures) by their attributes using concrete objects (2.4.K1e).</p>	<p>Topic 7: 113B, 113D-113E, 113G, 113I-113J, 113, 125A-126C, 127A-128C, 129A-130C, 131A-131, 133-134B</p>

Benchmark 2: Measurement and Estimation – The student estimates and measures using standard and nonstandard units of measure with concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. uses whole number approximations (estimations) for length using nonstandard units of measure (2.4.K1a) (\$), e.g., the classroom door is about two kindergartners high or this paper is about two pencils long.</p>	<p>Topic 9: 151D, 151G-H, 151-152, 159A-160C, 161A-162C, 173, 173B, 174</p>
<p>2. compares two measurements using these attributes (2.4.K1a) (\$):</p> <p>a. longer, shorter (length);</p>	<p>Topic 9: 151A-151H, 151J, 152, 155A-156C, 157A-158C, 159A-160C, 161A-162C, 173, 173B, 174</p>
<p>b. taller, shorter (height);</p>	<p>Topic 9: 151A-151H, 151, 155A-156C, 157A-158C, 159A-160C, 161A-162C, 173, 173B</p>
<p>c. heavier, lighter (weight).</p>	<p>Topic 9: 151F, 167A-168C, 169A-170C, 171A-172A, 172C, 173, 173B, 174</p>
<p>d. hotter, colder (temperature).</p>	<p>Topic 15: 269H, 281A-282C, 283A-284C, 285, 285C Topic 16: 289A (Problem of the Day), 293A (Problem of the Day)</p>
<p>3. reads and tells time at the hour using analog and digital clocks (2.4.K1a).</p>	<p>Topic 14: 251, 259A-260C, 261A-262C, 264A, 264B (Quick Check Master), 264C, 267-267B, 268-268A</p>

Benchmark 3: Transformational Geometry – The student develops the foundation for spatial sense using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. describes the spatial relationship between two concrete objects using appropriate vocabulary (2.4.K1a), e.g., behind, above, below, on, or under.</p>	<p>Topic 2: 15A-15J, 15-16, 17A-18C, 19A-20C, 21A-22C, 23A-23C, 25A-26C, 27A-28C, 29-30A</p>
<p>2. identifies two like objects or shapes from a set of four objects or shapes (2.4.K1a).</p>	<p>Topic 1: 1A-1J, 1-2, 3A-4C, 5A-6C, 7A-8C, 9A-10C, 11A-12C, 13-14A Topic 3: 33A (Problem of the Day) Topic 7: 113A-H, 113-114, 115A-116C, 117A-118C, 119A-120C, 121A-122C, 123A-124C, 131A-132C, 133-134B</p>

Benchmark 4: Geometry From An Algebraic Perspective – The student identifies one or more points on a number line in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. locates and plots whole numbers from 0 through 20 on a horizontal number line (2.4.K1a).</p>	<p>Topic 5: 93A-94C, 97-97A Topic 8: 150B</p>
<p>2. counts forwards and backwards from a given whole number from 0 through 10 on a number line (2.4.K1a).</p>	<p>Topic 5: 93A-94C, 97-97A Topic 8: 150B</p>

Standard 4: Data – The student uses concepts and procedures of data analysis in a variety of situations.

Benchmark 1: Probability – The student applies the concepts of probability using concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. recognizes whether an event is impossible or possible (2.4.K1f) (\$), e.g., the possibility of a person having ten heads is impossible, while the possibility of a person having red hair is possible.</p>	<p>Topic 16: 299A-300C, 303, 303B, 304, 304B</p>
<p>2. recognizes and states whether a simple event in an experiment or simulation including the use of concrete objects can have more than one outcome (2.4.K1a,f).</p>	<p>Topic 16: 288, 299, 300A, 300C</p>

Benchmark 2: Statistics – The student collects, records, and explains numerical (whole numbers) and non-numerical data sets including the use of concrete objects in a variety of situations.

Kindergarten Knowledge Base Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. records numerical (quantitative) and non-numerical (qualitative) data including concrete objects, graphs, and tables using these data displays (2.4.K1a,g) (\$):</p> <p>a. graphs using concrete objects,</p>	<p>Topic 16: 287A, 287C-D, 287G-H, 287, 293A-294C</p>
<p>b. pictographs with a whole symbol or picture representing one (no partial symbols or pictures),</p>	<p>Topic 16: 287A, 287C-D, 287F-H, 287, 291-292C, 295A-296C, 301A-302C, 303-304C</p>
<p>c. frequency tables (tally marks).</p>	<p>Topic 16: 287G</p>
<p>2. collects data related to familiar everyday experiences by counting and tallying (2.4.K1a,g) (\$).</p>	<p>Topic 16: 287F, 287G, 287I-J, 291A-292C</p>
<p>3. determines the mode (most) after sorting by one attribute (2.4.K1a,g) (\$), e.g., color, shape, or size.</p>	<p>Topic 16: 287F, 287G, 287J, 289-290C, 292-292A, 293, 294A, 294C (Enrichment Master), 295A-296C, 301A-302C, 303, 303B</p>

**Scott Foresman – Addison Wesley enVisionMATH
to the
Kansas Curricular Standards for Mathematics**

Application Indicators

KINDERGARTEN

Standard 1: Number and Computation – The student uses numerical and computational concepts and procedures in a variety of situations.

Benchmark 1: Number Sense – The student demonstrates number sense for whole numbers, fractions, and money using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
The student...	
1. solves real-world problems using equivalent representations and concrete objects to compare and order whole numbers from 0 through 10 (2.4.A1a) (\$)	Topic 4: 63A-64C, 65A-66C, 67A-68C, 71 Topic 5: 93A-94C, 97-97A, 97C Topic 6: 101A-102C, 103A-104C, 105A-106C, 107A-108C, 111-112A Topic 11: 199A-200C Topic 16: 289-290C, 304B-304C

Benchmark 2: Number Systems and Their Properties – The student demonstrates an understanding of whole numbers with a special emphasis on place value in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. solves real-world problems with whole numbers from 0 through 20 using place value models (2.4.A1b) (\$), e.g., group the class into tens, count by tens; then continue counting by ones to find the total.</p>	<p>Topic 12: 211B, 211I-J, 211, 216, 218, 220, 220C, 225, 226B, 234, 234B</p>
<p>2. counts forwards and backwards from a specific whole number using a number line from 0 through 10 (2.4.A1a).</p>	<p>Topic 5: 93A-94C, 97-97A Topic 8: 150B</p>

Benchmark 3: Estimation – The student uses computational estimation with whole numbers in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. compares two randomly arranged groups of 10 concrete objects or less and states the comparison using the terms: more, less, about the same (2.4.A1a).</p>	<p>Topic 4: 63A-64C, 71 Topic 6: 101A-102C, 103A-104C, 105A-106C, 111-112A Topic 11: 199A-200C Topic 16: 289-290C, 304B-304C</p>

Benchmark 4: Computation – The student models, performs, and explains computation with whole numbers using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. solves one-step real-world addition or subtraction problems with whole numbers from 0 through 10 using concrete objects in various groupings and explains reasoning (2.4.A1a) (\$), e.g., seven apples are in a basket and five students each take an apple; how many apples are left in the basket?</p>	<p>Topic 10: 177A-178C, 179A-180C, 181A-182C, 183A-184C, 185A-186C, 187A-188C, 189A-190C Topic 11: 195A-196C, 197A-198C, 199A-200C, 201A-202C, 203A-204C, 205A-206C, 207A-208C</p>

Standard 2: Algebra – The student uses algebraic concepts and procedures in a variety of situations.

Benchmark 1: Patterns – The student recognizes, describes, extends, develops, and explains relationships in patterns using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. generalizes the following patterns using pictorial, and/or oral descriptions including the use of concrete objects:</p> <p>a. repeating patterns for the AB pattern, the ABC pattern, and the AAB pattern (2.4.A1a) (\$);</p> <p>b. patterns using geometric shapes with one attribute change (2.4.A1c).</p>	<p>Topic 3: 31A-31J, 31-32, 33A-34C, 35A-36C, 37A-38C, 39A-40C, 41A-42C, 43A, 44C (Enrichment Master), 45A-46C, 47-48B</p> <p>Topic 3: 31A-31J, 31-32, 33A, 36A, 36C, 37A-38C, 39A-40C, 41A-42C, 45A-46C, 48</p>

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>2. recognizes multiple representations of the AB pattern (2.4.A1a), e.g., big-little, big-little, big-little, ... and 1-2, 1-2, 1-2, ..., or AB, AB, AB,</p>	<p>Topic 3: 31A-31J, 31-32, 33A-34C, 35A-36C, 37A-38C, 39A-40C, 41A-42C, 43A, 44C (Enrichment Master), 45A-46C, 47-48B</p>
<p>3. uses concrete objects to model a whole number pattern (2.4.A1a):</p> <p>a. counting by ones: * ,** , *** , ...;</p>	<p>Topic 4: 49E, 49I-J, 51A-52C, 55A-56C Topic 5: 73E, 73I-J, 73, 75A-76C, 81A-82C, 87A-88C Topic 12: 213A-214C, 215A-216C, 217A-218C, 219A-220C, 223A-224C, 231-232A</p>
<p>b. counting by twos: ●●, ●● ●● ●●, ●● ●●, ...;</p>	<p>Topic 12: 227-228A, 229-230C, 233</p>
<p>c. counting by tens: ■■■■■■■■■■, ■■■■■■■■■■, ■■■■■■■■■■, ■■■■■■■■■■, ■■■■■■■■■■, ■■■■■■■■■■,</p>	<p>Topic 12: 225A-226C, 227A-228C, 233, 233B, 234B</p>

Benchmark 2: Variables, Equations, and Inequalities – The student solves addition equations using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. describes real-world problems using concrete objects and pictures and the basic facts with sums through 10 (2.4.A1a) (\$), e.g., given some marbles, Sue says: There are 3 red marbles and 3 blue marbles. Altogether, there are 6 marbles.</p>	<p>Topic 5: 84C (Enrichment Master) Topic 10: 175A-J, 175-176, 177A-178C, 179A-180C, 181A-182C, 183A-184C, 185A-186C, 187A-188C, 189A-190C, 191-192A</p>

Benchmark 3: Functions – The student recognizes and describes whole number relationships using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. represents and describes mathematical relationships for whole numbers from 0 through 10 using concrete objects, pictures, and oral descriptions (2.4.A1a) (\$).</p>	<p>Mathematical relationships are used to generate patterns of whole numbers. Topic 12: 211B-D, 211F, 223A-224C, 225A-226C, 227A-228C, 229A-230C, 231-231C, 233, 233B, 234B</p>

Benchmark 4: Models – The student uses mathematical models including concrete objects to represent, show, and communicate mathematical relationships in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. recognizes that various mathematical models can be used to represent the same problem situation. Mathematical models include:</p> <p>a. process models (concrete objects, pictures, number lines, unifix cubes, measurement tools, or calendars) to model computational procedures and mathematical relationships, to compare and order numerical quantities, and to model problem situations (1.1.A1, 1.2.A2, 1.3.A1, 1.4.A1, 2.1.A1a, 2.1.A2-3, 2.2.A1, 2.3.A1, 3.1.A3, 3.2.A1-2, 3.3.A1-2, 3.4.A1) (\$);</p>	<p>Topic 1: 9-10A Topic 2: 21-22A Topic 3: 43-44A Topic 4: 65-66A Topic 5: 93-94A Topic 6: 101-102A Topic 7: 127-128A Topic 8: 141-142A Topic 9: 161-162A Topic 10: 197-180A Topic 11: 207-208A Topic 12: 221-222A Topic 13: 237-238A Topic 14: 259-260A Topic 15: 277-288A</p>
<p>b. place value models (ten frames, unifix cubes, bundles of straws, or base ten blocks) to represent numerical quantities (1.2.A1) (\$);</p>	<p>Topic 12: 211B, 211I-J, 211, 216, 218, 220, 220C, 225, 226B, 234, 234B</p>
<p>c. two-dimensional geometric models (geoboards, dot paper, or attribute blocks), three-dimensional geometric models (solids), and real-world objects to compare size and to model attributes of geometric shapes (3.1.A1-2);</p>	<p>Topic 7: 113A-J, 113-114, 115A-116C, 117A-118C, 119A-120C, 121A-122C, 123A-124C, 125A-126C, 127A-128C, 129A-130C, 131A-132C, 133-134B</p>

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
d. two-dimensional geometric models (spinners), three-dimensional geometric models (number cubes), and concrete objects to model probability (4.1.A1);	Topic 16: 288, 299A-300C, 303, 303B, 304, 304B
e. graphs using concrete objects, pictographs, and frequency tables to organize and display data (4.1.A1, 4.2.A1) (\$).	Topic 16: 287C-D, 287F-J, 287, 290-290A, 290C, 291A-292C, 293A-294C, 295A-296C, 297A-298C, 299A Problem of the Day), 301A-302C, 303-304C

Standard 3: Geometry – The student uses geometric concepts and procedures in a variety of situations.

Benchmark 1: Geometric Figures and Their Properties – The student recognizes geometric shapes and their attributes using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. demonstrates how several plane figures (circles, squares, rectangles, triangles, ellipses) can be combined to make a new shape (2.4.A1c).</p>	Topic 7: 113D, 113H, 119A-120C, 123-124C, 130-130A, 130C, 133, 133B, 134
<p>2. sorts by one attribute real-world geometric shapes that are representations of the solids (cubes, rectangular prisms, cylinders, cones, spheres) (2.4.A1c), e.g., boxes can be sorted as rectangular prisms, cans can be sorted as cylinders, some ice cream cones can be sorted as cones, and some balls can be sorted as spheres.</p>	Topic 7: 113I-J, 113-114, 125A-126C, 127A-128C, 129A-130C, 131A, 1132C, 133, 133B, 134

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
3. recognizes (2.4.A1a): a. circles, squares, rectangles, triangles, and ellipses (plane figures) within a picture;	Topic 7: 113A-H, 113-114, 115-116C, 117-118C, 123, 124A, 124C, 132-132A, 132C, 133, 133B
b. cubes, rectangular prisms, cylinders, cones, and spheres (solids) within a picture.	Topic 7: 113B-F, 113I-J, 113, 125A-126C, 127A-128C, 129A-130C, 132C, 133, 133B, 134

Benchmark 2: Measurement and Estimation – The student estimates and measures using standard and nonstandard units of measure with concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
The student... 1. compares and orders concrete objects by length or weight (2.4.A1a) (\$).	Topic 9: 151A-151H, 151J, 152, 155A-156C, 157A-158C, 159A-160C, 161A-162C, 167A-168C, 169A-170C, 171A-172A, 172C, 173, 173B, 174
2. locates and names concrete objects that are about the same length or weight as a given concrete object (2.4.A1a) (\$).	Topic 9: 155, 156-156A, 167-168C, 172A, 172C

Benchmark 3: Transformational Geometry – The student develops the foundation for spatial sense using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. shows two concrete objects or shapes are congruent by physically fitting one object or shape on top of the other (2.4.A1a).</p>	<p>Topic 7: 121A-122C</p>
<p>2. follows directions to move concrete objects from one location to another using appropriate vocabulary (2.4.A1a), e.g., up, down, behind, or above.</p>	<p>Topic 2: 15A-15J, 15-16, 17A-18C, 19A-20C, 21A-22C, 23A-23C, 25A-26C, 27A-28C, 29-30A</p>

Benchmark 4: Geometry From An Algebraic Perspective – The student identifies one or more points on a number line in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. solves real-world problems involving counting whole numbers from 0 through 20 using a number line (2.4.A1a) (\$), e.g., if Bill has 8 pieces of candy and his dad gives him 4 more pieces, how many pieces of candy does he have now?</p>	<p>Topic 5: 93A-94C, 97-97A Topic 8: 150B</p>

Standard 4: Data – The student uses concepts and procedures of data analysis in a variety of situations.

Benchmark 1: Probability – The student applies the concepts of probability using concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. conducts an experiment or simulation with a simple event and records the results in a graph using concrete objects or frequency tables (tally marks) (2.4.A1a,d-e).</p>	<p>Topic 16: 288, 299, 300A, 300C</p>

Benchmark 2: Statistics – The student collects, records, and explains numerical (whole numbers) and non-numerical data sets including the use of concrete objects in a variety of situations.

Kindergarten Application Indicators	Scott Foresman – Addison Wesley enVisionMATH
<p>The student...</p> <p>1. communicates the results of data collection from graphs using concrete objects and frequency tables (2.4.A1e) (\$), e.g., there are sixteen kindergartners. Using themselves as concrete objects, the six students wearing tennis shoes line up in a row. The ten students wearing sandals line up in a row. The kindergartners become the bar graph. Then someone says: There are less kids wearing tennis shoes than kids wearing sandals.</p>	<p>Topic 16: 287F, 287G, 287I-J, 291A-292C</p>