A Correlation of

enVisionMATH
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with Common Core Transition Kit

to the

Common Core State Standards for Mathematics Oregon

Kindergarten

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Common Core State Standards for Mathematics Oregon	enVisionMATH ©2009 with Common Core Transition Kit Kindergarten Topics - Lessons
Mathematical Practices	K.MP
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.	
K.MP.1 Make sense of problems and persevere in solving them.	*enVisionMATH* is built on a foundation of problem-based instruction that has sense-making at its heart. Each topic includes at least one problem-solving lesson in which students focus on honing their sense-making and problem-solving skills. Problem-solving lessons present to students a process that begins with making sense of the problem. *Read and Understand,* the first phase of the process, has students ask themselves, *What am I trying to find?* and *What do I know?,* questions that will help identify the givens and constraints of the problem. In the second phase, *Plan and Solve,* students decide on a solution plan. In the final phase, *Look Back and Check,* students verify that their work is reasonable and reflects the information given. Each lesson begins with Problem-Based Interactive Learning, 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. 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.
K.MP.2 Reason abstractly and quantitatively.	*enVisionMATH* provides scaffolded instruction to help students develop both quantitative and abstract reasoning. In the Visual Learning Bridge, 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. In the Do You Understand? part of the Guided Practice, students gain experiences with quantitative reasoning as they consider the meaning of different parts of an expression or equation. Reasoning problems throughout the exercise sets focus students' attention on the structure or meaning of an operation, for example, rather than merely the solution.

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K.MP.3 Construct viable arguments and critique the reasoning of others.	Consistent with a focus on reasoning and sense-making is a focus on critical reasoning – argumentation and critique of arguments. In Pearson's *enVisionMATH,* the Problem-Based Interactive Learning 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 justify or explain their solutions. Journal activities 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.
K.MP.4 Model with mathematics.	Students in Pearson's *enVisionMATH* 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 Visual Learning Bridge and Visual Learning Animation often present 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.
K.MP.5 Use appropriate tools strategically.	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.
K.MP.6 Attend to precision.	Students are expected to use mathematical terms and symbols with precision. Key terms and concepts are highlighted in each lesson. The Problem-Based Interactive Learning activity provides repeated opportunities for children to use precise language to explain their solution paths while solving problems. In the Do You Understand? feature, students revisit these key terms or concepts and provide explicit definitions or explanations.

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K.MP.7 Look for and make use of structure.	Students are encouraged to look for structure as they develop solution plans. In the Look for a Pattern 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.
K.MP.8 Look for and express regularity in repeated reasoning.	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 Problem-Based Interactive Learning activities offer students opportunities to look for regularity in the way operations behave.
Counting and Cardinality	K.CC
A. Know number names and the count sequence.	
K.CC.1 Count to 100 by ones and by tens.	12-6, 12-7, 12-8
K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	5-10, 12-6, 12-10
K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	4-2, 4-4, 4-5, 5-3, 5-6, 5-9, 12-1, 12-2, 12-3, 12-4
B. Count to tell the number of objects.	
K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.	4-1, 4-2, 4-3, 4-4, 4-5, 5-1, 5-3, 5-4, 5-6, 5-7, 5-9

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a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	3-6, 4-1, 4-2, 4-3, 4-4, 4-5, 5-1, 5-3, 5-4, 5-6, 5-7, 5-9, 12-1, 12-2, 12-3, 12-4, 12-6
b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	3-6, 4-1, 4-2, 4-3, 4-4, 4-5, 4-10, 5-1, 5-3, 5-4, 5-6, 5-7, 5-9, 12-1, 12-2, 12-3, 12-4, 12-6 **CC:** 4-2A, 4-4A
c. Understand that each successive number name refers to a quantity that is one larger.	3-6, 4-1, 4-2, 4-3, 4-4, 4-5, 5-1, 5-3, 5-4, 5-6, 5-7, 5-9, 12-1, 12-2, 12-3, 12-4, 12-6
K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	4-1, 4-2, 4-3, 4-4A, 4-4, 4-5, 4-10, 5-1, 5-3, 5-4, 5-6, 5-7, 5-9, 12-1, 12-2, 12-3, 12-4 **CC:** 4-2A
C. Compare numbers.	
K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies (include groups with up to ten objects).	4-7, 4-8, 4-9, 6-1, 6-2, 6-3, 6-4, 6-5, 16-1
K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.	6-1, 6-2, 6-3, 6-4
Operations and Algebraic Thinking	K.OA
D. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	
K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings (Drawings need not show details, but should show the mathematics in the problem.(This applies wherever drawings are mentioned in the Standards.)), sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	2-6, 6-4, 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7

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K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	2-6, 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7
K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).	4-6, 5-2, 5-5, 5-8 **CC:** 4-7A, 5-4A, 5-7A, 5-10A
K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	5-8
K.OA.5 Fluently add and subtract within 5.	10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7
Number and Operations in Base Ten	K.NBT
E. Work with numbers 11–19 to gain foundations for place value.	
K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	**CC:** 12-3A, 12-4A, 12-5A 12-5B, 12-5C, 12-5D, 12-5E
F. Describe and compare measurable attributes.	
K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	9-1, 9-2, 9-3, 9-4, 9-5, 9-6, 9-7, 9-8, 9-9, 9-10
K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*	9-1, 9-2, 9-3, 9-5, 9-6, 9-8

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G. Classify objects and count the number of objects in each category.	
K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)	1-1, 1-2, 1-3, 1-4, 1-5, 5-11, 16-3, 16-4, 16-5, 16-7
Geometry	K.G
H. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	
K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.	1-5, 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 7-1, 7-2, 7-6
K.G.2 Correctly name shapes regardless of their orientations or overall size.	7-1, 7-2, 7-4, 7-6 **CC:** 7-7A
K.G.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	7-1, 7-2, 7-6, 7-8
I. Analyze, compare, create, and compose shapes.	
K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	7-1, 7-2, 7-7, 7-8 **CC:** 7-4A, 7-7A
K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	7-8
K.G.6 Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*	**CC:** 7-4A