Correlation of Common Core State Standards Grade 1

Scott Foresman • Addison Wesley enVisionMATH

The following is an alignment of the Common Core State Standards for Mathematics (June 2, 2010 release) to Pearson's *Scott Foresman • Addison Wesley enVisionMATH,* Grade 1. In this document, you will find some Standards Activities that can give you ideas for adapting or augmenting lessons in the program as you prepare your students for learning in the Common Core classroom. For selected standards, we offer you additional activities with detailed teacher notes that often highlight the Standards for Mathematical Practices, a key component of these Standards. The additional activities are available from your Pearson Account Representative.

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
Standards for Mathematical Practice	
1. Make sense of problems and persevere in solving them.	Throughout the program; for examples, see Lessons 1-6, 2-4, 3-7, 4-8, 5-5, 6-6, 7-5, 8-8, 9-4, 10-9, 11-6, 12-8, 13-6, 14-3, 15-6, 16-8, 17-5, 18-8, 19-5, 20-8 *Scott Foresman • Addison Wesley enVisionMATH,* Grade 1 is built on a foundation of problem-based instruction. Every lesson begins with Interactive Learning, a problem-based activity in which children interact with their peers and the teacher to make sense of problems and persevere in developing their problem-solving strategies. Problem Solving lessons in every topic further focus and clarify the problem-solving process. The Quick Check provides daily opportunities for children to demonstrate problem-solving skills and strategies.
2. Reason abstractly and quantitatively.	Throughout the program; for examples, see Lessons 4-3, 4-7, 5-3, 14-3, 16-5, 17-2, as well as (Reasoning exercises) 2-2, 10-8, 13-2, 17-3, 18-5; (Number sense exercises) 10-3, 11-3, 12-3, 14-3; (Do You Understand? exercises) 8-4, 9-1, 15-3, 17-5 Many lessons include reasoning and number sense exercises that require children to engage in abstract reasoning about quantities. Do You Understand? Exercises require children to look for and explain generalizations about quantities. Children use part-part-whole models and bar diagrams.

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
3. Construct viable arguments and critique the reasoning of others.	Throughout the program; for examples, see Lessons 2-3, 4-7, 7-4, 8-1, 8-7, 12-3, 14-3, 18-2, 20-1 Interactive Learning in every lesson provides daily opportunities for children to use models and diagrams to construct and defend arguments. In small and large group settings children evaluate the logic of others and provide feedback.
4. Model with mathematics.	Throughout the program; for examples, see Lessons 1-5, 2-1, 3-7, 4-4, 5-2, 6-6, 7-4, 8-9, 9-2, 10-1, 11-4, 12-5, 16-2, 17-2, 18-6, 19-3, 20-3 In Interactive Learning in every lesson, children use objects, diagrams, tables, expressions, and number sentences to model the relationships suggested by one or more problems. They use ten-frames, part-part-whole models, and bar diagrams throughout the program. Modeling is reinforced in the Visual Learning Bridge at the top of the student pages. Many exercises require children to model problems.
5. Use appropriate tools strategically.	Throughout the program; for examples, see Lessons 8-6, 14-4, 14-5, 14-8, 14-11, 15-3 as well as the Going Digital features in Lessons 1-6, 3-7, 5-5, 7-5, 8-8, 9-4, 13-6, 16-8, 20-8 Children use manipulatives in the Interactive Learning in most lessons and a calculator or eTools in the Going Digital features. Children use appropriate tools to solve measurement and geometry problems.
6. Attend to precision.	Throughout the program; for examples, see Lessons 1-3, 3-2, 7-3, 8-2, 11-1, 15-3, 16-7, 18-3 Every lesson requires children to communicate with precision. Most lessons include a Journal exercise in which children communicate mathematical concepts through writing and representations. The Glossary in the student book and the online Animated Glossary present concise terminology that can help children attend to precision in their mathematical communication.
7. Look for and make use of structure.	Throughout the program; for examples, see Lessons 1-4, 5-1, 6-3, 7-4, 10-6, 12-3, 16-1, 17-3, 18-4, 20-2 The progression within every lesson and from lesson to lesson helps children to work from the concrete to the abstract, from numerical patterns to general representations. Mathematical concepts are presented in concrete numerical forms as well in more general representations. Children are given support and opportunities to discover, conjecture, and apply generalizations about geometry and number properties.

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
8. Look for and express regularity in repeated reasoning.	Throughout the program; for examples, see Lessons 3-6, 8-7, 13-5, 16-7, 17-1, 20-3 Interactive Learning in every lesson encourages children to explore and apply various strategies for solving problems. Through repeated application of various strategies and algorithms, children develop an understanding of which method is efficient for a particular type of problem.
Operations and Algebraic Thinking	
Represent and solve problems involving addition and subtraction.	
1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	**Lesson coverage** 3-1, 3-2, 3-3, 3-4, 3-5, 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7, 4-8, 6-6, 7-1, 7-2, 7-3, 7-4, 7-5, 16-1, 16-2, 16-3, 16-4, 16-5, 16-6, 17-5 **Standards Activity:** After Lesson 17-5, have children work on solving addition and subtraction word problems by using number sentences that include a symbol to represent the unknown. Use Activity 1, *Addition and Subtraction Word Problems*.
1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	**Lesson coverage** 16-7 **Standards Activity:** After Lesson 17-5, give children more practice solving addition word problems, including those that involve three addends, and more practice using number sentences that include a symbol to represent the unknown. Use Activity 1, *Addition and Subtraction Word Problems*.
Understand and apply properties of operations and the relationship between addition and subtraction.	
1.OA.3 Apply properties of operations as strategies to add and subtract. *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)* NOTE: Students need not use formal terms for these properties.	**Lesson coverage** 3-6, 6-1, 16-7
1.OA.4 Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*	**Lesson coverage** 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7, 5-4, 7-2, 7-3, 7-4, 17-2, 17-3, 17-4
Add and subtract within 20.	
1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	**Lesson coverage** 6-1, 7-1

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	**Lesson coverage** 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7, 5-4, 6-1, 6-2, 6-3, 6-4, 6-5, 7-1, 7-2, 7-3, 7-4, 16-1, 16-2, 16-3, 16-5, 16-6, 17-1, 17-2, 17-3, 17-4 **Standards Activity:** After Lesson 17-4, introduce the subtraction strategy, subtract to ten, which involves decomposing a number. Write 13 – 7 on the board. Have children model this problem using counters and a double ten-frame mat (Teaching Tool 7). Tell children that they will remove the 7 counters in two steps. First, have them remove the counters from the partially-filled ten-frame to get to 10. Ask, "How many counters did you remove?" [3 counters] Then ask children how many more counters they should remove so that 7 are removed all together. [4 counters] Have children remove the 4 counters. Discuss the results and record the answer on the board. Repeat with several other examples, such as 15 – 8, 14 – 6, and 16 – 9. Then work with children to use this strategy without counters. Write 17 – 9 on the board. Ask, "How many of the 9 should be subtracted from 17 to get to 10?" [7] Write 17 – 7 = 10. Then ask how many more still need to be subtracted. [2] Write 10 – 2 = 8. Have children use this strategy to find 15 – 6, 13 – 8, and 14 – 9.
Work with addition and subtraction equations.	
1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*	**Lesson coverage** 3-4, 4-4, 6-1, 11-4 **Standards Activity:** After Lesson 4-4, discuss with children the idea that the equal sign means that the amount on the left side of the equal sign is equal to the amount on the right side of the equal sign. Present the following examples: 7 = 7; 7 = 4 + 3; 7 = 8 – 1. Have children write other examples using the equal sign and showing that the amount on the left is equal to the amount on the right side of the equal sign. Then present the following number sentences and have children decide whether they are true or false: 5 = 4 + 1; 3 = 2; 4 = 8 – 4; 2 + 6 = 4; 2 = 1 + 1; 3 + 1 = 1 + 3; 7 – 2 = 1 + 4.

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.*	**Lesson coverage** 3-4, 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7, 5-4, 6-2, 6-3, 6-4, 6-5, 7-2, 7-3, 7-4, 16-3, 16-5, 16-6, 17-2, 17-3, 17-4 **Standards Activity:** In Lesson 7-4, as you discuss the Visual Learning Bridge at the top of the page, point out that when you know two of the three numbers in a part-part-whole model, you can find the third number. If you know both parts, you can find the whole; if you know the whole and one part, you can find the other part. Have children use counters to model and complete the exercises in this lesson. Check that they understand that in any addition or subtraction equation, if they know two of the three numbers, they can find the third number.
Number and Operations in Base Ten	
Extend the counting sequence.	
1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	**Lesson coverage** 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 10-3, 10-4, 11-1, 11-2, 11-3, 11-4 **Standards Activity:** Before Lesson 10-3, help children practice counting to 120 by 1s starting at any number. Use Activity 2, *Counting to 120 and Beyond*.
Understand place value.	
1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:	**Lesson coverage** 1-3, 10-1, 11-1, 11-2, 11-3, 11-4
1.NBT.2.a 10 can be thought of as a bundle of ten ones — called a "ten."	**Lesson coverage** 11-2, 11-3
1.NBT.2.b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	**Lesson coverage** 1-3, 11-3
1.NBT.2.c The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	**Lesson coverage** 11-2, 11-3
1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	**Lesson coverage** 12-3, 12-4, 12-5, 12-6, 12-7, 12-8

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
Use place value understand and properties of operations to add and subtract.	
1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	**Lesson coverage** 12-1, 20-1, 20-2, 20-3, 20-4 **Standards Activity:** After Lesson 20-4, help children add two-digit numbers. Use Activity 3, *Adding Two-Digit Numbers*.
1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	**Lesson coverage** 12-1, 20-5, 20-6 **Standards Activity:** After Lesson 20-5 and after Lesson 20-6, have children mentally find the number that is 10 more or 10 less than a given two-digit number without having to count. Have children explain their reasoning.
1.NBT.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	**Lesson coverage** 12-1, 20-1, 20-2, 20-3, 20-4, 20-5, 20-6
Measurement and Data	
Measure lengths indirectly and by iterating length units.	
1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	**Lesson coverage** 14-1 **Standards Activity:** During Interactive Learning in Lesson 14-1, ask each child to take a small item out of his or her desk. Tape a crayon or marker to the board. One by one, have each child compare his or her item to the crayon and return the item to their desk. Ask, "Who has an item that is longer than the crayon?" Have one of those children stand. Ask, "Who has an item that is shorter than the crayon?" Have one of those children stand. Then, ask "Whose item is longer? How do you know?" Finally, ask "Did anyone have an item that is the same length as the crayon?" If two or more children have such an item, discuss how their items compare in length.

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*	**Lesson coverage** 14-2, 14-3, 14-4, 14-5
Tell and write time.	
1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.	**Lesson coverage** 15-1, 15-2, 15-3
Represent and interpret data.	
1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	**Lesson coverage** 18-1, 18-2, 18-3, 18-5, 18-6, 18-7, 18-8 **Standards Activities:** In Topic 18, as you discuss the various data displays, question children about how many more or less are in one category than in another. For example: • Lesson 18-2, page 546: How many more children chose cat than dog? How many fewer children chose fish than dog? • Lesson 18-3, page 549: How many more children chose giraffe than elephant? How many fewer children chose elephant than zebra? • Lesson 18-5, page 558: How many more green socks are there than orange socks? How many fewer green socks are there than blue socks?

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
Geometry	
Reason with shapes and their attributes.	
1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	**Lesson coverage** 8-1, 8-2, 8-9, 8-10, 8-11 **Standards Activity:** In Lesson 8-2, help children distinguish between using defining attributes versus non-defining attributes to sort shapes. Divide children into pairs. Give one child in each pair a set of plane shape cards (Teaching Tool 54) and the other child a set of more plane shape cards (Teaching Tool 55). Have children color each shape red, blue, or green. Tell them to use just one color per shape, but use each of the three colors at least once. When children are done with this task, have pairs mix all the cards, sort them into two or more groups, and describe how they sorted the shapes. Then have pairs mix the cards, sort them in a different way, and describe their sorting rule. Compare two sorting rules, such as number of sides and color. Ask, "If you sort by the number of sides, does that help you find all the triangles? If you sort by color, does that help you find all the triangles?" Help children understand that sorting by color does not help to determine the type of shape.
1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. NOTE: Students do not need to learn formal names such as "right rectangular prism."	**Lesson coverage** 8-3 **Standards Activities:** After Lesson 8-3, help children create a two-dimensional shape using rectangles, squares, trapezoids, triangles, half-circles, or quarter circles. Then have children compose new shapes from the composite shape. Use Activity 4, *Putting Shapes Together* to provide additional practice in composing shapes. After Lesson 8-3, help children create a three-dimensional shape taping together any combination of rectangles, squares, trapezoids, triangles, half-circles, or quarter circles and then folding to form a three-dimensional shape. Use Activity 5, *Putting Solid Figures Together* to have children compose new shapes from a composite shape such as their taped model.

Common Core State Standards Grade 1	Meeting the Common Core State Standards with *Scott Foresman • Addison Wesley enVisionMATH*
1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	**Lesson coverage** 19-1, 19-2 **Standards Activities:** During Interactive Learning in Lesson 19-2, distribute index cards. Help children fold one card into two equal parts, and the other card into four equal parts. Ask, "As you make more equal parts, what happens to the size of each part?" Discuss each card, using the terms *halves*, *fourths*, and *quarters*. Describe the whole as *two of the two shares* and *two halves*, or *four of the four shares* and *four fourths* and *four quarters*. Ask children to repeat these terms as you draw samples on the board. Next, have children shade one equal part on each card. Use the phrases *half of*, *fourth of*, and *quarter of* to describe the shaded portions. Again, ask children to repeat these terms as you point to samples on the board. Repeat the activity with a circle shape. As you discuss page 590 and go on to the exercises in the lesson, continue to use this terminology and ask children to do the same.